

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



College of Engineering - King Khalid University
Department of Architecture & Planning

Study Plan
Bachelor of Architecture
(B.Arch.)

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KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
King Khalid University



المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك خالد

Study plan for Architecture

Introduction:

Architecture program suggested study plan have been prepared in preparation for the start of the study, Department of Architecture & Planning at the College of Engineering in the academic year 1439/1440, during the preparation of the plan has been benefiting from the experiences of similar sections plans at many prestigious universities inside and outside the Kingdom of Saudi Arabia and international universities. This plan has been prepared which contains coherent and sequential curriculum provides the student scientific foundations and skills required in the basic sciences and engineering sciences, basic engineering and Architecture sciences specialities and applied science University requirements add Islamic and human and cultural rights, taking into account the national framework of qualifications and requirements of the National Accreditation and Quality NCAAA and National Architectural Accrediting Board NAAB.

The proposed plan is focused on scientific and research developments and develop students' technical aspects for the efficient work practice in various areas of work of architecture in the public and private sectors, it also provides scientific background that fit and able to pursue graduate studies in the areas of different architecture.

General information(FORM 0)

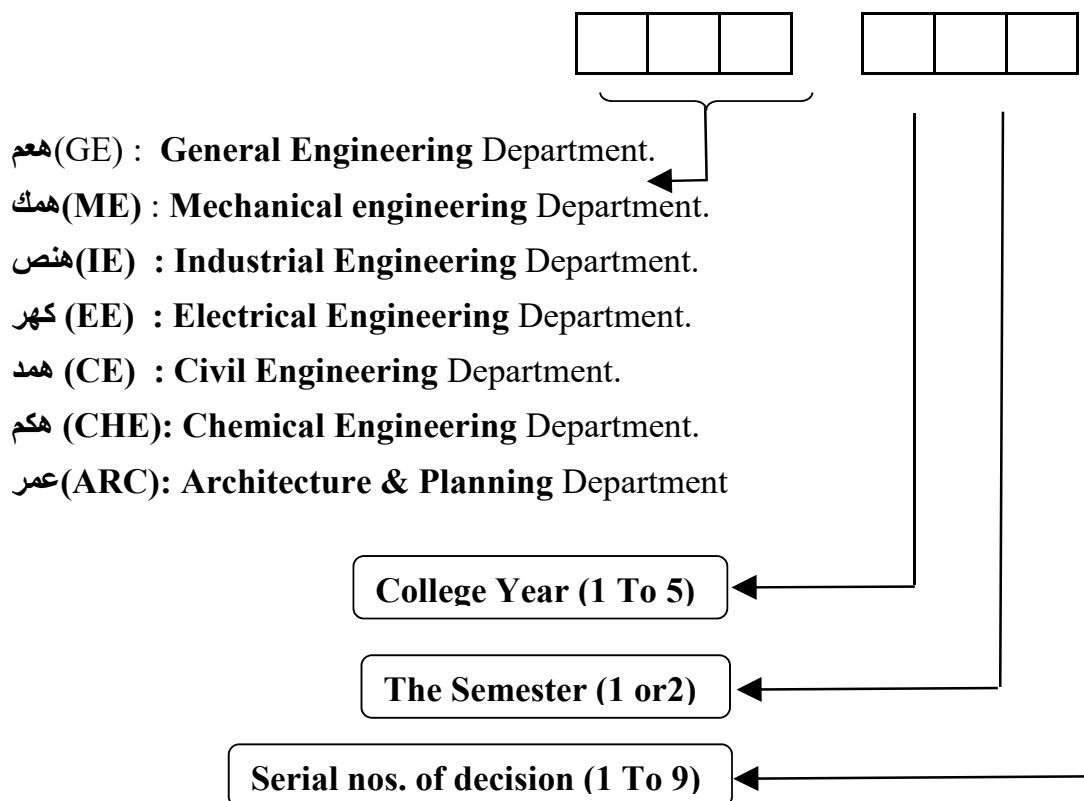
University	King Khalid University		
College	College of Engineering	Department	
Synopsis about the college	<p>The Royal Decree Order No. (7 / B / 4096) was issued on 14/03/1420 H to establish the College of Engineering. The establishment of this college was decided to keep pace with the renaissance of the Kingdom in many areas as the engineering is a profession that employs science to serve the welfare of society as well as to follow the scientific progress and technology in the twenty-first century, to meet the engineering labor market needs in the southern and south-western regions of the kingdom. The college started its activities and functions on the academic year 1422/1423 H where 110 students were accepted in the first semester, they were distributed in the departments of Mechanical Engineering and Industrial Engineering.</p> <p>Aware of the university to keep up with the prospects of scientific and technical development and the contribution of the university in filling manpower needs in the fields of engineering with highly qualified engineering staff. Aligning with the development plans of the Kingdom. It has been approved in 08/05/1426 H to create the departments of Electrical Engineering, Chemical Engineering, Civil Engineering departments as well as the department of Architecture and Planning</p> <p>The study started in three academic programs in the academic year 1428/1429 in the following disciplines of civil, chemical and electrical, bringing the number of academic programs offered by five College Bachelor's degree programs in engineering in five disciplines. The study will begin in architecture and planning in the academic year 1439/1440.</p> <p>Study system engineering quarterly academic system (levels) and duration of study in College five years spread over ten semesters. During the first year student studying intensive English program over two semesters and a number of engineering courses and Arabic and Islamic courses. The other eight levels are student studies which specialized theoretical and practical materials in the field of academic specialization in recent (fifth) year student conducting graduate work as an application to the school over the past four years and rooting through efficiency and breadth of theoretical and practical study.</p>		
College Vision	To meet the international standards as a source of excellence engineering learning and center of scientific research in the university and serving the community.		
College Mission	To prepare a qualified engineering staff equipped with essential knowledge and skills in dealing with modern engineering technologies, in order to develop and improve our country's future plans.		
College Goals	<ol style="list-style-type: none"> 1. Development and innovation of engineering curricula studied to the changing needs in this field. 2. Configuration of strategic relationship with local and world-wide universities for research partnership and technology transfer. 3. Encourage and support professional development for staff members and students. 4. Support education and scientific research by academic services and effective management and technology. 5. Contributing into the development of the community by preparing and organizing educational programs and training in engineering continuously. 		

College Departments	Mechanical engineering-industrial engineering-electrical engineering-civil engineering-Chemical Engineering-Department of Architecture & Planning.
Synopsis of the Program Department	Department of Architecture & Planning and is under construction section Royal Decree (9683/m b) dated 5/8/1426 created and will begin study in the academic year 1439/1440 from the architecture program.
Program Vision	Local, regional and international leadership in the construction, education and development of mental, practical and professional skills in the fields of architecture, construction, management and development of real estate to achieve the rooting of cultural heritage.
Program Mission	Applying and developing the knowledge of architectural education and professional practice for the construction of sustainable architecture and urbanization that carries all the cultural and environmental dimensions of the place as well as modern technologies, in addition to providing world-class scientific research that fulfills the aspirations of the Saudi society and meets the needs of future generations.
Program Goals	<ol style="list-style-type: none"> 1. To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate. 2. To provide the best educational environment to prepare an efficient graduate who has the knowledge, understanding, skills and abilities to produce his tasks in practical and professional directions with contemporary technologies to meet the needs of the labour market. 3. Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations. 4. Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world. 5. Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively. 6. Integrating the educational process with the society to achieve the role of related sciences in the construction and development of the surrounding environment to promote enhancement at all local and international levels. 7. Supporting and developing relevant fields of science locally, regionally and globally by supporting faculty members and researchers to disseminate their scientific production through specialized publishing houses and conferences. 8. Supporting scientific research establishments and academic agreements with international universities and research canterers.
Program Rationale	The growing requirement for cadres of national competencies in the field of architecture in the Kingdom, particularly in the southern region as a result of the enormous expansion in construction projects in the public and private sectors in the Kingdom and to highlight the architectural style of southern region. This program will enrich the society by providing architects and planners of the highest quality, comparable to the very best in the world, who would take leadership to promote, disseminate, develop and transfer technology for the overall development of the society.

The degree Awarded by the program	BACHELOR OF ARCHITECTURE
Admission Conditions at the Bachelor stage	<ol style="list-style-type: none"> 1. Secondary School Certificate 2. Score of entrance examinations 3. Character certificate 4. Appearance in interviews required by the university council 5. Physical fitness certificate 6. No Objection certificate <p>If this all complete, Applicants are offered admission on the basis of merit list. All freshly admitted students to the college of engineering seeking acceptance to the bachelor concern program spend their first academic year in the PYP.</p>

A coding system decisions in the plan* .

Decision number Course code (code section)



So,

The figure represents 8 courses of study of other engineering departments‘

The figure represents 9 courses taught in other colleges.

*Except:

1. Courses taught out of College — the content is not changed-will retain their current Symbols (examples: decisions handed son and Arabs.)
2. The courses taught in other departments retain the numbers contained in the plans of these Departments (examples: 101 case)

INTRODUCTION

The Bachelor of Architecture (B.Arch.) at King Khalid University is a full-time study program lasting for five years. It is designed to produce a well-trained contemporary architect with strong basic knowledge, who can utilize both conceptual and practical skills in a holistic approach. Throughout the course, an emphasis is given to the development of individual students' personal growth, self-reflection, and knowledge of architectural design issues. Over the course of the five years of study, students are equipped to deal with architectural design issues and participate in the discussion of architectural practices. The course will prepare students to join the workforce in specified sectors of the economy and growth of the Kingdom of Saudi Arabia. This course will enrich the society by providing architects and planners of the highest quality, comparable to the very best in the world, who would take leadership to promote, disseminate, develop and transfer technology for the overall development of the society. The students will be cognizant to various subjects in five-year duration which will cover numerous topics such as architecture design, building construction, economic and social features of particular region and philosophies of science in architecture and engineering in context with the provincial environment.

The proposed plan is focused on scientific and research developments and improve student's technical aspects for the efficient work practice in various areas of work of architecture in the public and private sectors, it also provides scientific background that fit and able to pursue graduate studies in the areas of different architecture.

VISION STATEMENT:

Local, regional and international leadership in the construction, education and development of mental, practical and professional skills in the fields of architecture, construction, management and development of real estate to achieve the rooting of cultural heritage.

MISSION STATEMENT:

Applying and developing the knowledge of architectural education and professional practice for the construction of sustainable architecture and urbanization that carries all the cultural and environmental dimensions of the place as well as modern technologies, in addition to providing world-class scientific research that fulfils the aspirations of the Saudi society and meets the needs of future generations.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's):

The Architecture department seeks to achieve its vision and mission through several channels, the most prominent of which are the educational, research, societal, and practical aspects. The objectives are as follows:

1. To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate.
2. To provide the best educational environment to prepare an efficient graduate who has the knowledge, understanding, skills and abilities to produce his tasks in practical and professional directions with contemporary technologies to meet the needs of the labour market.
3. Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations.
4. Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world.
5. Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively.
6. Integrating the educational process with the society to achieve the role of related sciences in the construction and development of the surrounding environment to promote enhancement at all local and international levels.
7. Supporting and developing relevant fields of science locally, regionally and globally by supporting faculty members and researchers to disseminate their scientific production through specialized publishing houses and conferences.
8. Supporting scientific research establishments and academic agreements with international universities and research canterers.

PROGRAM'S LEARNING OUTCOMES (PLO's)

The program, bachelor of Architecture skills includes the understanding, knowledge and application of various architectural subjects. Architectural graduates should be able to perform after being graduate/practice as per their acquired skills. Graduated student should have understanding and ability (Proficiency in using specific information to accomplish a task, correctly recognize the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.) accordingly about the core, allied or associative subjects. Student's skills should include the various levels i.e. general, engineering, discipline LO's and sub-discipline LO's. Graduates should be able to build on their acquired skills pertaining to basic and engineering sciences, engineering analysis, engineering design, investigation and practice skills, and consequently acquire architectural engineering discipline-level skills.

The following is the list of learning outcomes -

1. Define the fundamentals of the architecture and contemporary issues related to architecture and its practice.
2. Describe the values of environmental conservation and sustainability in Architectural design.
3. Recognize the Architectural characteristics of buildings, minarets, social cultural environment components, and awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.
4. Describe the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc.
5. State the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.
6. Solving problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.
7. Evaluate the built and unbuilt spaces based on architecture design, plan and style with their impact on environment.
8. Develop the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.
9. Identify the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.
10. Explain the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment.
11. Illustrate the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.

12. Show the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.
13. Analyse the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.
14. Evaluate different ideas and concepts to select the appropriate alternatives in architectural & urban design projects along with technological aspects of architecture.
15. Demonstrate with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.
16. Illustrate the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect's responsibilities.
17. Draw all type of building drawings with 2D or 3D conceptual diagram and produce neat sketches by manually using individual art skills and imagination based on design problems.

FORM (OA)

THE PROGRAM ACADEMIC PLAN

First: The general framework of the Academic plan:

The academic plan for a bachelor program College of Engineering Department Architecture and Planning

(**168**) credit hours distributed as follows:

No	Requirements	Number of Courses	Number of credit hours	%
1	University Courses	6	12	7.1
2	College+ Soft skill Courses	9	28	16.5
3	Department Courses	37	118	70.4
4	Elective Courses	4	10	6
Total		56	168	

These requirements are distributed over 10 semesters as follows:

- **General Preparation:** includes (**40** credit hours) that are taught from levels **1st Level** to **10th Level**.
- **Specialization:** includes (...**118**... credit hours) that are taught from levels **1st Level** to the **10th Level**.
- **Elective courses:** includes (...**10**... credit hours) that are taught from levels **7th Level** to the **10th Level**.
- **Sum = 40 + 118 + 10 = 168** Credit hours

Second: A scheme of distributing the credit hours on the program academic levels:

1. A table of distributing the university, college, and the program requirements

(Courses) over the program academic levels

Requirements	Academic Year	Level	Number of Courses	Number of credit hours
University Requirements	First	First	1	2
		Second	2	4
	Second	Third	1	2
		Fourth	1	2
	Third	Fifth	1	2
		Sixth	--	--
	Fourth	Seventh	--	--
		Eighth	--	--
	Total credit hours of University courses		6	12
College Requirements	First	First	3	11
		Second	1	6
	Second	Third	2	5
		Fourth	0	0
	Third	Fifth	0	0
		Sixth	1	2
	Fourth	Seventh	1	2
		Eighth	0	0
	Fifth	Nine	1	2
		Ten	0	0
	Total credit hours of College courses		9	28
Specialization Requirements	First	First	1	4
		Second	3	8
	Second	Third	3	11

	Third	Fourth	5	16
		Fifth	5	15
		Sixth	5	15
	Fourth	Seventh	4	13
		Eighth	5	15
	Fifth	Nine	3	11
		Ten	2	10
	Total credit hours of specialization		36	118
	Project/ Field training		1	0
	Elective credit hours		4	10
	Total credit hours for the program		56	168

- This table is used in reviewing the balance between the program credit hours and their distribution with respect to the program mission and goals.
- For academic programs that extend for more than four years, more rows can be added to the table and more rows can be deleted if the program is less than four years.

2. A table of distributing courses and credit hours over the program academic levels:

رمز المقرر	اسم المقرر	الساعات المعتمدة				متطلب سابق (إن وجد)	المتطلب المتزامن (إن وجد)
		نظري	عملي	مجموع	اتصال		
السنة الأولى - المستوى الأول							
011-نجل-6	برنامج اللغة الإنجليزية المكثف - 1	-	6	6	12	--	--
	Intensive English Program-1						
201-عرب-2	المهارات اللغوية	2	-	2	2	--	--
	Language Skills						
118-رياض-2	رياضيات معمارية	2	-	2	2	--	--
	Math for Architecture						
118-فيز-3	فيزياء معمارية	2	1	3	4	--	--
	Physics for Architecture						
110-عمر-4	الاتصال البصري - 1	-	4	4	8	--	--
	Visual Communication-1						
المجموع		6	11	17	28		
السنة الأولى - المستوى الثاني							
111-سلم-2	المدخل إلى الثقافة الإسلامية	2	-	2	2	--	--
	The Entrance to the Islamic Culture						
012-نجل-6	برنامج اللغة الإنجليزية المكثف - 2	-	6	6	12	011-نجل-6	
	Intensive English Program-2						
202-عرب-2	التحرير العربي	2	-	2	2	--	--
	Arabic Editing						
122-عمر-2	الرسم الحر	-	2	2	4	--	--
	Freehand Drawing						
121-عمر-2	رسومات الفكرة التصميمية	-	2	2	4	--	--
	Design Sketching						
120-عمر-4	الاتصال البصري - 2	-	4	4	8	110-عمر-4	
	Visual Communication-2						
المجموع		4	14	18	32		



رمز المقرر	اسم المقرر	الساعات المعتمدة				متطلب سابق (إن وجد)	المتطلب المتزامن (إن وجد)
		نظري	عملي	مجموع	اتصال		
السنة الثانية - المستوى الثالث							
112-سلم-2	الثقافة الإسلامية - 2	2	-	2	2	--	--
112-IC1-2	Islamic Culture-2						
221-همم-2	الإبداع والابتكار	2	-	2	2	--	--
221-GE-2	Creativity and Innovation						
213-عمر-3	مبادئ التصميم المعماري	2	1	3	4	--	--
213-ARC-3	Principles of Architectural Design						
212-همد-3	مقدمة في علوم دراسات المواقع	2	1	3	4	--	--
212-CE-3	Introduction to Geo-Sciences						
211-عمر-3	تاريخ العمارة	3	-	3	3	--	--
211-ARC-3	History of Architecture						
210-عمر-5	تصميم معماري - 1	-	5	5	10	120-عمر-4	--
210-ARC-5	Architectural Design - 1						
المجموع		11	7	18	25		
السنة الثانية - المستوى الرابع							
113-سلم-2	الثقافة الإسلامية - 3	2	-	2	2	--	--
113-IC1-2	Islamic Culture-3						
228-همد - 3	تصميم إنشائي - 1	2	1	3	4	--	--
228-CE-3	Structural Design -1						
223-عمر - 3	مواد البناء ومبادئ التشييد	3	-	3	3	--	--
223-ARC-3	Building Materials & Construction Principles						
222-عمر - 2	تطبيقات الحاسب في العمارة - 1	-	2	2	4	--	--
222-ARC-2	Computer Applications in Architecture -1						
221-عمر - 3	العمارة الإسلامية	3	-	3	3	--	--
221-ARC-3	Islamic Architecture						
220-عمر - 5	تصميم معماري - 2	-	5	5	10	210-عمر-5	--
220-ARC-5	Architectural Design -2						
المجموع		10	8	18	26		



رمز المقرر	اسم المقرر	الساعات المعتمدة				متطلب سابق (إن وجد)	المتطلب المتزامن (إن وجد)
		نظري	عملي	مجموع	اتصال		
السنة الثالثة - المستوى الخامس							
114-سلم-2	الثقافة الإسلامية - 4	2	-	2	2	--	---
114-IC1-2	Islamic Culture-4						
318-همد - 3	تصميم انشائي - 2	2	1	3	4	228-همد-3	--
318-CE-3	Structural Design -2						
313-عمر - 2	كودات ومواصفات البناء	2	-	2	2	--	--
313-ARC-2	Building Codes & Specifications						
312-عمر - 2	تطبيقات الحاسب في العمارة – 2	-	2	2	4	222-عمر-2	--
312-ARC-2	Computer Applications in Architecture -2						
311-عمر - 3	التخطيط الإقليمي والحضري	2	1	3	4	--	--
311-ARC-3	Regional and Urban Planning						
310-عمر - 5	تصميم معماري - 3	-	5	5	10	220-عمر-5	--
310-ARC-5	Architectural Design -3						
المجموع		8	9	17	26		
السنة الثالثة - المستوى السادس							
324-عمر - 3	نظام التحكم البيئي	3	-	3	3	--	--
324-ARC-3	Environmental Control System						
323-عمر - 2	تقنية التشييد	2	-	2	2	--	--
323-ARC-2	Construction Technology						
322-عمر - 3	تنسيق المواقع	1	2	3	5	--	--
322-ARC-3	Landscape Design						
321-عمر - 2	نظريات العمارة	2	-	2	2	--	--
321-ARC-2	Architectural Theories						
322-همم -2	التفكير التصميمي	2	-	2	2	--	--
322-GE-2	Design Thinking						
320-عمر - 5	تصميم معماري - 4	-	5	5	10	310-عمر-5	--
320-ARC-5	Architectural Design -4						
المجموع		10	7	17	24		



رمز المقرر	اسم المقرر	الساعات المعتمدة				متطلب سابق (إن وجد)	المتطلب المتزامن (إن وجد)
		نظري	عملي	مجموع	اتصال		
السنة الرابعة - المستوى السابع							
411-هـم - 2	أخلاقيات وممارسة المهنة	2	-	2	2	--	--
411-GE-2	Professional Ethics and Practice						
415-عمر - 3	تصميم داخلي	-	3	3	6	--	--
415-ARC-3	Interior Design						
41X-عمر - 3	مقرر اختياري - 1	3	-	3	3	--	--
41X-ARC-3	Elective Course - 1						
412-عمر - 3	رسومات تنفيذية - 1	-	3	3	6	--	--
412-ARC-3	Construction Drawings-1						
413-عمر - 2	التراث المعماري الوطني - منطقة عسير	2	-	2	2	--	--
413-ARC-2	National Architectural Heritage -Asir Region						
410-عمر - 5	تصميم معماري - 5	-	5	5	10	320-عمر-5	--
410-ARC-5	Architectural Design -5						
المجموع		7	11	18	29		
السنة الرابعة - المستوى الثامن							
42X-عمر - 3	مقرر اختياري - 2	3	-	3	3	--	--
42X-ARC-3	Elective Course - 2						
428-عمر - 3	أنظمة وتقنيات المباني	2	1	3	4	--	--
428-ARC-3	Building Systems and Technologies						
423-عمر - 2	إسكان	2	-	2	2	--	--
423-ARC-2	Housing						
422-عمر - 3	رسومات تنفيذية - 2	-	3	3	6	412-عمر-3	--
422-ARC-3	Construction Drawings-2						
421-عمر - 2	صوتيات وضوئيات	1	1	2	3	--	--
421-ARC-2	Acoustics & Lighting						
420-عمر - 5	تصميم معماري - 6	-	5	5	10	410-عمر-5	--
420-ARC-5	Architectural Design -6						
المجموع		8	10	18	28		



التدريب الميداني							
431-عمر - 0	التدريب الميداني	-	-	-	-	اجتياز 120 ساعة	--
431-ARC-0	Field Training	-	-	-	-	معتمدة	

رمز المقرر	اسم المقرر	الساعات المعتمدة				متطلب سابق (إن وجد)	المتطلب المتزامن (إن وجد)
		نظري	عملي	مجموع	اتصال		
السنة الخامسة - المستوى التاسع							
518-عمر - 2	إدارة مشاريع	2	-	2	2	--	--
518-ARC-2	Project Management						
511-عمر - 2	ريادة الأعمال الهندسية	2	-	2	2	--	--
511-GE-2	Entrepreneurship and Venture Engineering						
51X-عمر - 2	مقرر اختياري - 3	2	-	2	2	--	--
51X-ARC-2	Elective Course - 3						
511-عمر - 3	بحث مشروع التخرج	3	-	3	3	5-عمر-420	--
511-ARC-3	Graduation Project Thesis						
510-عمر - 6	تصميم معماري - 7	-	6	6	12	5-عمر-420	--
510-ARC-6	Architectural Design-7						
المجموع		9	6	15	21		
السنة الخامسة - المستوى العاشر							
52X-عمر-2	مقرر اختياري - 3	2	-	2	2	--	--
52X-ARC-2	Elective Course - 4						
521-عمر - 3	الممارسة المهنية	3	-	3	3	--	--
521-ARC-3	Professional Practice						
520-عمر - 7	تصميم معماري - 8 (مشروع التخرج)	-	7	7	14	510-عمر-6 511-عمر-3	--
520-ARC-7	Architectural Design -8: (Graduation Project)						
المجموع		5	7	12	19		



B.Arch Program Courses Distribution

1. SOCIAL SCIENCE COURSES

S.No.	Course Code	Course Title	Credit /Contact Hrs
1.	011-ENG-6	Intensive English Program-1	6/12
2.	012-ENG-6	Intensive English Program-2	6/12
3.	111-IC1-2	The Entrance to the Islamic Culture	2/2
4.	112-IC1-2	Islamic Culture-2	2/2
5.	113-IC1-2	Islamic Culture-3	2/2
6.	114-IC1-2	Islamic Culture-4	2/2
7.	201-ARAB-2	Language Skills	2/2
8.	202-ARAB-2	Arabic Editing	2/2
9.	411-GE-2	Professional Ethics and Practice	2/2
10.	322-GE-2	Design Thinking	2/2
Total			28/40

2. BASIC SCIENCE & ENGINEERING COURSES

S.No.	Course Code	Course Title	Credit /Contact hrs
1.	118-MATH-2	Math for Architecture	2/2
2.	118-PHYS-3	Physics for Architecture	3/4
3.	221-GE-2	Creativity and Innovation	2/2
4.	212-CE-3	Introduction to Geo-Sciences	3/4
5.	511-GE-2	Entrepreneurship and Venture Engineering	2/2
6.	223-ARC-3	Building Materials & Construction Principles	3/3
7.	313-ARC-2	Building Codes & Specifications	2/2
8.	323-ARC-2	Construction Technology	2/2
9.	228-CE-3	Structure Design-1	3/4
10.	318-CE-3	Structure Design-2	3/4
11.	428-ARC-3	Building Systems and Technologies	3/4
12.	518-ARC-2	Project Management	2/2
Total			30/35

Note: -General component including University requirements +college requirements + soft skills requirements are 23.8 % with 40 credit hour of total program credit hour 168.

(Also please see the attached chart for academic plan distribution of all courses at page no 25&26

3. DEPARTMENT ARCHITECTURE COURSES

Sl. No.	Course Code	Course Title	Credit /Contact Hrs.
1	110-ARC-4	Visual Communication-1	4/8
2	120-ARC-4	Visual Communication-2	4/8
3	121-ARC-2	Design Sketching	2/4
4	122-ARC-2	Free Hand Drawing	2/4
5	210-ARC-5	Architectural Design - 1**	5/10
6	211-ARC-3	History of Architecture	3/3
7	213-ARC-3	Principles of Architectural Design	3/4
8	220-ARC-5	Architectural Design - 2**	5/10
9	221-ARC-3	Islamic Architecture	3/3
10	222-ARC-2	Computer Applications in Architecture-1	2/4
11	310-ARC-5	Architectural Design - 3**	5/10
12	311-ARC-3	Regional and Urban Planning	3/4
13	312-ARC-2	Computer Applications in Architectue-2	2/4
14	320-ARC-5	Architectural Design - 4**	5/10
15	321-ARC-2	Architectural Theories	2/2
16	322-ARC-3	Landscape Design	3/5
17	324-ARC-3	Environmental Control System	3/3
18	410-ARC-5	Architectural Design-5**	5/10
19	412-ARC-3	Construction Drawings-1	3/6
20	413-ARC-3	National Architectural Heritage – Asir Region	2/2
21	41X-ARC-3	Elective Course-1*	3/3
22	415-ARC-3	Interior Design	3/6
23	420-ARC-5	Architectural Design-6**	5/10
24	421-ARC-2	Acoustics & Lighting	2/3
25	422-ARC-3	Construction Drawings-2	3/6
26	423-ARC-2	Housing	2/2
27	42X-ARC-3	Elective Course-2*	3/3
28	431-ARC-0	Field Training	0/0
29	510-ARC-6	Architectural Design-7**	6/12
30	511-ARC-3	Graduation Project Thesis	3/3
31	51X-ARC-2	Elective Course-3*	2/2
32	520-ARC-7	Architectural Design-8: Graduation Project**	7/14
33	521-ARC-3	Professional Practice	3/3
34	52X-ARC-2	Elective Course-4*	2/2
Total			110/183

***Architectural Design courses are on an annual basis, i.e. architecture design courses 210; 310; 410 and 510 will be available every year during the first semester. Architecture studio courses 220; 320; 420 and 520 will be available every year during the second semester.*

4. ARCHITECTURE ELECTIVE COURSES*

رمز المقرر (Course Code)	اسم المقرر (Course Name)	الوحدات الدراسية (Credit Hours)
مواد اختيارية للمستوى السابع – السنة الرابعة Elective Courses for the 7 th Level – Fourth Year		
3-416	نمذجة معلومات المباني	3/3
416-ARC-3	Building Information Modelling	
3-418	تصميم المباني الخضراء	3/3
418-ARC-3	Green Building Design	
مواد اختيارية للمستوى الثامن – السنة الرابعة Elective Courses for the 8 th Level – Fourth Year		
3-424	التخطيط العمراني	3/3
424-ARC-3	Urban Planning	
3-425	أداء المباني	3/3
425-ARC-3	Building Performance	
مواد اختيارية للمستوى التاسع – السنة الخامسة Elective Courses for the 9 th Level– Fifth Year		
2-513	الحفاظ والحماية المعمارية	2/2
513-ARC-2	Architectural Conservation and Preservation	
2-517	التصميم الهندسي والبارامتري	2/2
517-ARC-2	Geometrical & Parametric Design	
مواد اختيارية للمستوى العاشر – السنة الخامسة Elective Courses for the 10 th Level – Fifth Year		
2-525	المباني الذكية	2/2
525-ARC-2	Intelligent Buildings	
2-524	المناقصات والعقود في المشاريع	2/2
524-ARC-2	Project Tendering & Contracting	

ملاحظة: يجب أن يأخذ الطالب ما مجموعه 10 ساعات في المستويات الأربعة الأخيرة من 7 إلى 10 من السنة الرابعة والخامسة. بحيث تكون عدد الساعات لأي من المقررات الاختيارية 1 أو 2 أو 3 ساعات. بينما عدد الساعات لأي من المقررات الاختيارية 3 أو 4 أو 2 ساعتين. ويشترط ضرورة موافقة القسم على تسجيل المقررات الاختيارية.

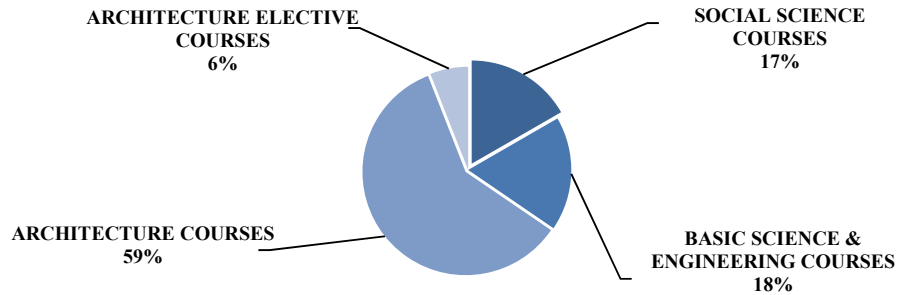
Note: A total of four electives of 10 credit hrs. must be taken. As Elective-1 & Elective-2, courses contain 3-credit hr in each semester (Level-7 & Level-8) and Elective-3 & Elective-4 contain 2-credit hr in each semester (Level-9 & Level-10). It is necessary for registering any elective course to be approved from the department.

THE GENERAL FRAMEWORK TABLE OF THE ACADEMIC PLAN:

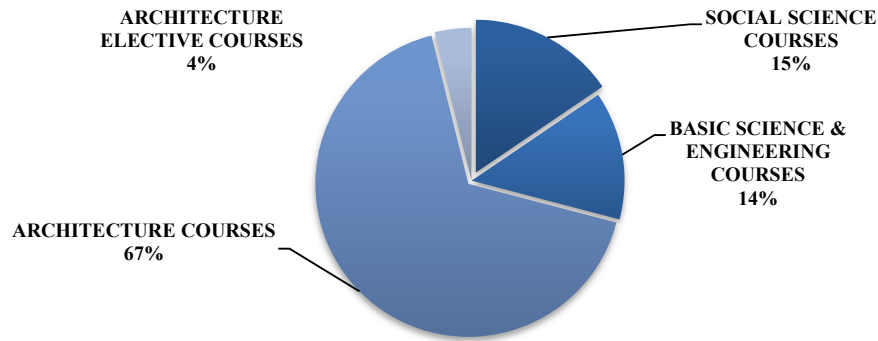
Sl. No.	Requirements	Number of Courses	Number of Credit hours	% (of total prog. CR)
1.	Social Science Courses	10	28	16.7
2.	Basic Science & Engineering Courses	12	30	17.8
3.	Architecture Courses	34	110	65.5
Total		56	168	100 %



Course Credit Hours



Course Contact Hours



Courses	Course Credit Hours	Course Contact hours	%age(CR)	%age(Cont)
Social Science Courses	28	40	17	15
Basic Science & Engineering Courses	30	35	18	14
Architecture Courses (Department)	100	173	59	67
Architecture Courses (Elective)	10	10	6	4
TOTAL	168	258	100	100

DISTRIBUTION OF CORE ARCHITECTURAL, ENGINEERING&PLANNING

COURSES





Core Architectural Courses

Building Engineering Courses

Introduction to Geo-sciences
Building Materials & Construction
Principles
Building code & Specification
Construction Technology
Structure Design - 1
Structure Design - 2
Building Systems and
Technologies
Project Management

12.5% / 9.68%

Visual Communication – 1 & 2
Free Hand Drawings
Design Sketching
Architectural Design 1, 2, 3, 4, 5, 6 & 7
History of Architecture
Environment Control System
Principles of Architectural Design
Islamic Architecture
Interior Design
Computer Applications in Architecture-1
Computer Applications in Architecture-2
National Architectural Heritage – Asir Region
Construction Drawings -1 & 2
Elective Course 1, 2, 3 & 4
Acoustics & Lighting
Professional Internship
Graduation Project Thesis
Architectural Theories
Professional Practice
Architectural Design-8: Graduation Project

60.71% / 66.66%

Urban Design & Planning Courses

Housing
Regional and Urban Planning
Landscape Design

4.76% / 4.26%

%
Credit Hour

%
Contact Hour





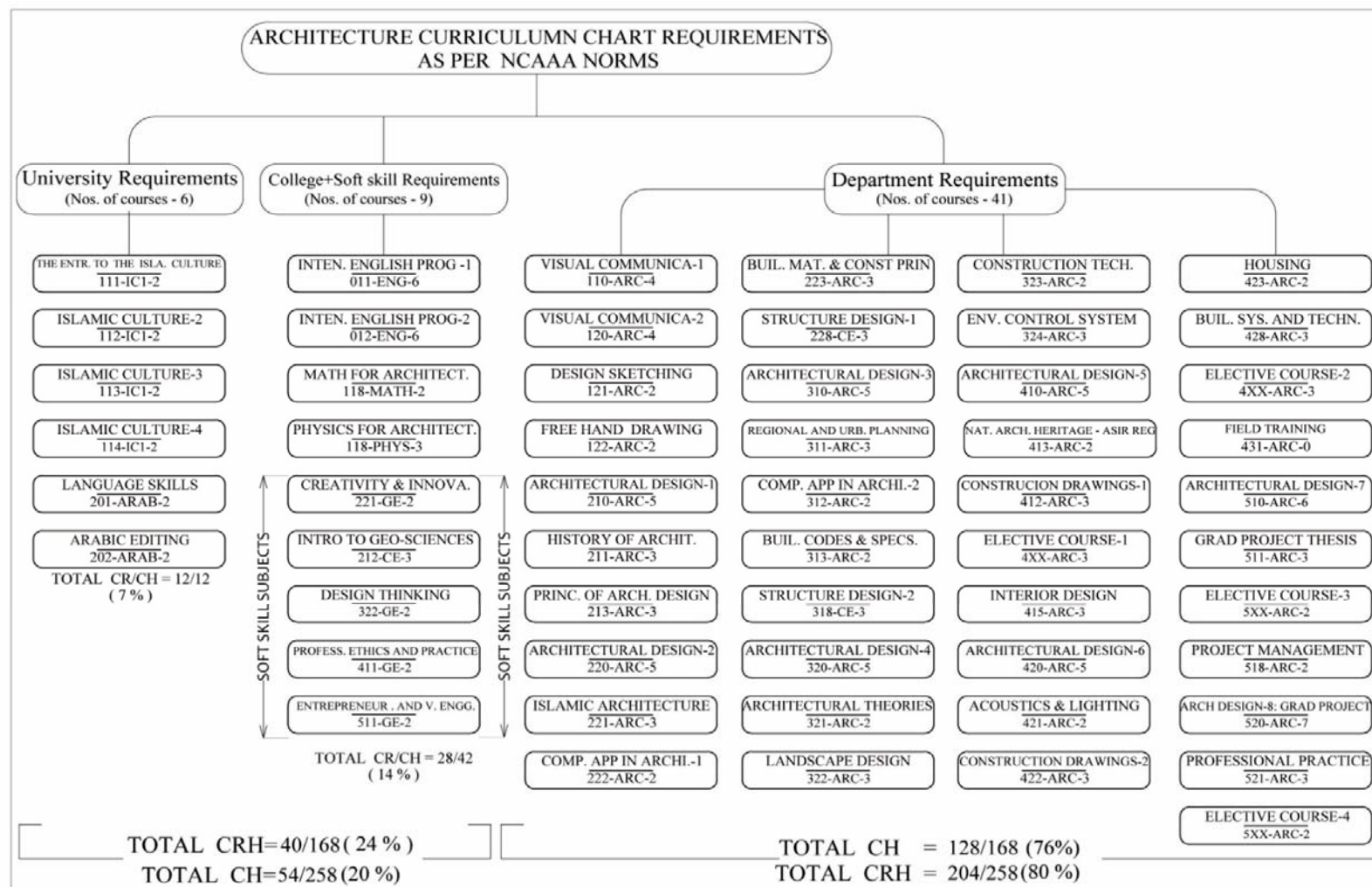
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ARCHITECTURE CURRICULUM CHART, KING KHALID UNIVERSITY, ABHA, KSA

	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR		FIFTH YEAR		
LEVEL/ SEM	1	2	3	4	5	6	7	8	9	10	TOTAL
Credit Hrs	17	18	18	18	17	17	18	18	15	12	168
Contact Hrs	28	32	25	26	26	24	29	28	21	19	258
Nos. of Courses	5	6	6	6	6	6	6	6	5	3	60
SOCIAL SCIENCES		THE ENTRANCE TO THE ISLA. CULTURE 111-IC1-2 2 2	ISLAMIC CULTURE-2 112-IC1-2 2 2	ISLAMIC CULTURE-3 113-IC1-2 2 2	ISLAMIC CULTURE-4 114-IC1-2 2 2	DESIGN THINKING 322-GE-2 2 2					TOTAL 28 CR 40 CH
	LANGUAGE SKILLS 201-ARAB-2 2 2	ARABIC WRITING 202-ARAB-2 2 2					PROFESSIONAL ETHICS AND PRACTICE 411-GE-2 2 2				NOS. OF COURSES 10
BASIC SCIENCE & ENGINEERING	PHYSICS FOR ARCHITECTURE 118-PHYS-3 3 4		CREATIVITY AND INNOVATION 221-GE-2 2 2					BUILDING SYSTEMS AND TECHNOLOGIES 428-ARC-3 3 4	ENTREPRENEURSHIP AND BUSINESS ENGINEERING 511-GE-2 2 2		TOTAL 30 CR 35 CH
	MATH FOR ARCHITECTURE 118-MATH-2 2 2		INTRODUCTION TO GEO-SCIENCES 212-CE-3 3 4	STRUCTURE DESIGN - 1 228-CE-3 3 4	STRUCTURE DESIGN - 2 318-CE-3 3 4	BUILDING CODES & SPECIFICATIONS 313-ARC-2 2 2	CONSTRUCTION TECHNOLOGY 323-ARC-2 2 2		PROJECT MANAGEMENT 518-ARC-2 2 2		NOS. OF COURSES 12
ARCHITECTURE		FREE HAND DRAWING 122-ARC-2 2 4	HISTORY OF ARCHITECTURE 211-ARC-3 3 3	ISLAMIC ARCHITECTURE 221-ARC-3 3 3	COMPUTER APPIN ARCHITECTURE-1 222-ARC-2 2 4	COMPUTER APPIN ARCHITECTURE-2 312-ARC-2 2 4	ENVIR. CONTROL SYSTEM 324-ARC-3 3 3	ELECTIVE COURSE - 1 41X-ARC-3 3 3	ELECTIVE COURSE - 2 42X-ARC-3 3 3	ELECTIVE COURSE - 3 51X-ARC-2 2 2	TOTAL 110 CR 183 CH
	VISUAL COMMUNICA-1 110-ARC-4 4 8	DESIGN SKETCHING 121-ARC-2 2 4	PRINCIPLES OF ARCH DESIGN 213-ARC-3 3 4	ARCHITECTURAL DESIGN - 1 210-ARC-5 5 10	ARCHITECTURAL DESIGN - 2 220-ARC-5 5 10	ARCHITECTURAL DESIGN - 3 310-ARC-5 5 10	ARCHITECTURAL DESIGN - 4 320-ARC-5 5 10	CONSTRUCTION DRAWING- 1 412-ARC-3 3 6	CONSTRUCTION DRAWING- 2 422-ARC-3 3 6	GRADUATION PROJECT DESIGN 511-ARC-3 3 3	NOS. OF COURSES 34
								INTERIOR DESIGN 415-ARC-3 3 6	HOUSING 423-ARC-2 2 2	PROFESSIONAL PRACTICE 521-ARC-3 3 3	
								NATURAL ARCH. HERITAGE - ARCH RES. 413-ARC-2 2 2	ACCOUNTING & LIGHTING 421-ARC-2 2 3		
								ARCHITECTURAL DESIGN - 5 410-ARC-5 5 10	ARCHITECTURAL DESIGN - 6 420-ARC-5 5 10	ARCHITECTURAL DESIGN - 7 510-ARC-6 6 12	
										ARCH DESIGN & GRAPHIC PROJECT 520-ARC-7 7 14	

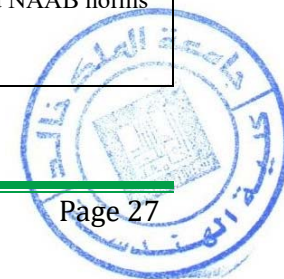
SOCIAL SCIENCE COURSES
BASIC SCIENCE COURSES
ENGINEERING COURSES
ARCHITECTURE COURSES
ELECTIVE COURSES





Comparison table of two Accredited Programs for requirements, NCAAA and NAAB for Program – Bachelor of Architecture

COMPARISON		NCAAA	NAAB	KKU (2017-18)
University		King Khalid University (KSA)		
College		College of Engineering		
Department		Department of Architecture & Planning		
Program		Bachelor of Architecture		
The number of the Hour Study	Minimum Credit Hours for Program	150-180 (As per KKU Guidebook for developing plan for 5 year)	150 CRH	168 (As per current syllabus Design)
	Minimum General Req. (University + College)	(25%-30% of total program)	45 CRH	40 CRH (23.80% of total program)
	University Requirements	12 CRH		12 CRH
	College Requirement	34 (or decided by college)		17 CRH
	Soft Skill Subjects	10 (or decided by college)		11 CRH
	Architecture Courses by Arch Department	(70%-75% of total program)	105 CRH (including 10 CRH minimum for elective)	128 CRH (76% of total program)
	Elective courses			10 CRH (included in Arch department)
	Summer Internship	--	--	8 (weeks)- after 8 th Level, 0 CRH/CH
General Studies Courses		University and College courses (it contains basic science, humanity, Math & communication subjects)	Subjects based on communications, history, humanities, social sciences, natural sciences, foreign languages, and mathematic. These subjects should not have any Architecture content.	As per NCAAA and NAAB norms



Learning Domains and Program Learning Outcomes	<p>NQF learning outcomes for NCAAA has been described with 5 types of domains of learning which is applicable for all the learning outcomes of program and all the courses and it should be related to each other's. All the courses are shown in matrix for these NCAAA learning outcomes.</p>	<p>NAAB has been divided Learning domains and outcomes in 4 Realm to study the bachelor program for its learning outcomes for all courses. Its described as students' performance criteria (SPC) It is given in course matrix for all Realm along with their educational outputs.</p>	
	<p>NQF learning outcomes for Knowledge (list, name, record, define, label, outline etc.)</p> <ol style="list-style-type: none"> 1. The ability to recall, understand, and present information, including: <ol style="list-style-type: none"> 1.1. Knowledge of specific facts and details 1.2. Knowledge of concepts, principles and theories 1.3. Knowledge of procedures; steps in a process. 	<p>Realm A: Critical Thinking and Representation. Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the study and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. Graduates must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling. The accredited degree program must demonstrate that each graduate possesses the following: A.1 Professional Communication Skills: A.2 Design Thinking Skills: A.3 Investigative Skills A.4 Architectural Design Skills: A.5 Ordering Systems A.6 Use of Precedents: A.7 History and Global Culture: A.8 Cultural Diversity and Social Equity:</p>	<p>As per NCAAA and NAAB norms</p>



	<p>NQF learning outcomes for Cognitive Skills(estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate etc)</p> <p>2. The ability to....</p> <p>2.1 Apply conceptual understanding of concepts, principles, and theories,</p> <p>2.2 Apply procedures involved in critical thinking and creative problem solving, both when asked to do so, and when faced with unanticipated new situations,</p> <p>2.3 Investigate issues and problems in a field of study using a range of sources and draw valid conclusions.</p>	<p>Realm B: Building Practices, Technical Skills, and Knowledge.</p> <p>Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.</p> <p>The accredited degree program must demonstrate that each graduate possesses skills in the following areas</p> <p>B.1 Pre-Design: B.2 Site Design B.3. Codes and Regulations: B.4 Technical Documentation B.5 Structural Systems B.6 Environmental Systems B.7 Building Envelope Systems and Assemblies: B.8 Building Materials and Assemblies: B.9 Building Service Systems: B.10 Financial Considerations:</p>	<p>As per NCAAA and NAAB norms</p>
	<p>Interpersonal Skills & Responsibility- demonstrate, judge, choose, illustrate, modify, show, use, appraise etc.</p> <p>3. The ability to:</p> <p>3.1 Take responsibility for their own learning and continuing personal and professional development,</p>	<p>Realm C: Integrated Architectural Solutions. Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.</p> <p>The accredited degree program must demonstrate that each graduate</p>	<p>As per NCAAA and NAAB norms</p>





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	<p>3.2 Work effectively in groups and exercise leadership when appropriate,</p> <p>3.3 Act responsibly in personal and professional relationships,</p> <p>3.4 Act ethically and consistently with high moral standards in personal and public forums.</p>	<p>possesses skills in the following areas:</p> <p>C.1 Research:</p> <p>C.2 Integrated Evaluations and Decision-Making Design Process:</p> <p>C.3 Integrative Design:</p>	
	<p>Communication, Information Technology & Numerical- demonstrate, calculate, illustrate, interpret, research, question, operate etc.</p> <p>4. The ability to:</p> <p>4.1 Communicate effectively in oral and written form,</p> <p>4.2 Use information and communications technology, and</p> <p>4.3 Use basic mathematical and statistical techniques.</p>	<p>Realm D: Professional Practice.</p> <p>Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public. The accredited degree program must demonstrate that each graduate possesses skills in the following areas:</p> <p>D.1 Stakeholder Roles in Architecture:</p> <p>D.2 Project Management:</p> <p>D.3 Business Practices</p> <p>D.4 Legal Responsibilities</p> <p>D.5 Professional Conduct:</p>	As per NCAAA and NAAB norms
	<p>Psychomotor- perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct etc.</p>	NA	





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Assessment Levels in PLO Mapping Matrix	<p>I = Introduction P = Proficient A = Advanced</p> <p>(please see the attached matrix)</p>	<p>U – Understanding-The capacity to classify, compare, summarize, explain, and/or interpret information</p> <p>A – Ability-Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.</p> <p>(please see the attached matrix)</p>	<p>As per NCAAA and NAAB norms</p>
Total Documentation	<ul style="list-style-type: none"> • Introduction and study plan • Program Specification • Course Specification • Field Experience Specification • Program benchmarking Matrix, facilities and evaluation form. 	<p>Five documents are referenced with accreditation.</p> <ol style="list-style-type: none"> 1. NAAB 2014 Conditions for Accreditation 2. NAAB Procedures for Accreditation 3. NAAB Guide to the 2014 Conditions for Accreditation and Preparation of Architecture Program Reports 4. Architecture Program Reports (APRs) 5. Visiting Team Reports (VTRs) 	





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FORM-3
Program Specifications
(PS)
Bachelor of Architecture (B. Arch)
(New Program)



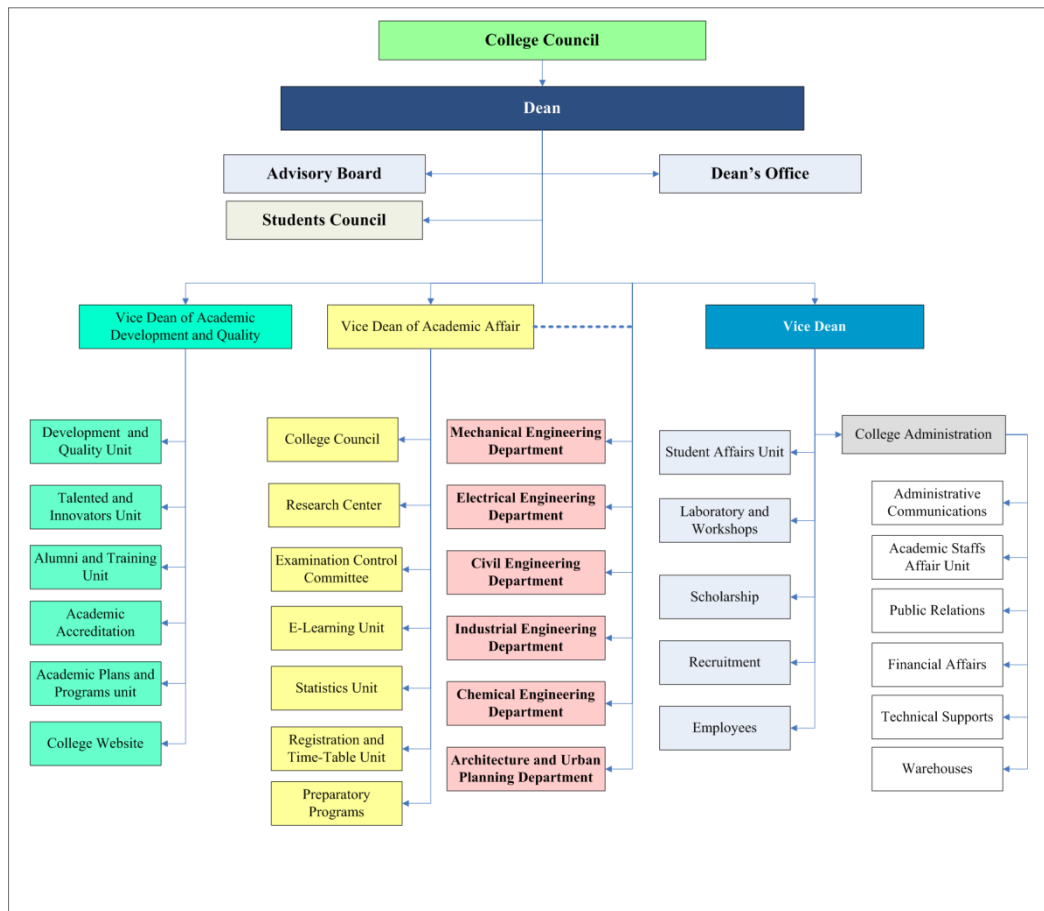
1. Institution: **King Khalid University**

Date of Report:

2. College/Department: **College of Engineering/Department of Architecture & Planning.**

3. Dean/Department Head: **Dr. Ibrahim Falqi/ Dr. Ahmad Ali Shohan**

4. Insert program and college administrative flowchart



5. List all branches offering this program

The program is offered in the main campus of King Khalid university, Guraiger. The program comprised the basic courses (preparatory first year courses) along with the architecture courses. The program at this location will follow the same university curriculum scheduled as utilization a single admission process, and share all the resource and services of the university, including the administrative support etc.



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Main Branch/ Location: **Main Campus, King Khalid University, Abha, KSA**

A. Program Identification and General Information

1. Program title and code: Bachelor of Architecture/ARC			
2. Total credit hours needed for completion of the program: 168			
3. Award granted on completion of the program: Bachelor of Architecture			
4. Major tracks/pathways or specializations within the program (e.g. transportation or structural engineering within a civil engineering program or counseling or school psychology within a psychology program): Form 1 st LVL to 10 th LVL One Track (only Bachelor of Architecture)			
5. Intermediate Exit Points and Awards (if any) (e.g. associate degree within a bachelor degree program) N.A			
6. Professional occupations (licensed occupations, if any) for which graduates are prepared. (If there is an early exit point from the program (e.g. diploma or associate degree) include professions or occupations at each exit point) Most of the professional occupations in architecture come up in government organizations such as:- <ul style="list-style-type: none">• Ministry of Municipal & Rural Affairs.• Ministry of Education• Ministry of Defense• The Archaeological Department• National Building Organization• Town and Country Planning Organization• Departments of Railways & Airport• Public Sector Undertakings• Housing and Urban Development Corporation• National Building Construction Corporation Ltd., etc.• Construction Contractors• Architecture Firms/ Consultants• Engineering Firms			
7. (a) New Program	<input checked="" type="checkbox"/> YES	Planned starting date	<input type="text" value="1439-1440"/>
(b) Continuing Program	<input type="checkbox"/> NO	Year of most recent major program review	<input type="text" value="N.A"/>
Organization involved in recent major review (e.g. internal within the institution),			



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Accreditation review by _____? Other _____?

8. Name of program chair or coordinator. If a program chair or coordinator has been appointed for the female section as well as the male section, include names of both.

Dr. Ahmad Ali Shohan (Department of Architecture & Planning)

E mail – asohan@kku.edu.sa

9. Date of approval by the authorized body (by MoE). **Under Process**

Campus Location	Approval By	Date
Main Campus:		
Branch 1:	MoE/9683	05/08/1426
Branch 2:		
Branch 3:		
Branch 4:		

B. Program Context



1. Explain why the program was established.

a. Summarize economic reasons, social or cultural reasons, technological developments, national policy developments or other reasons.

The growth in the building and urban development sector, which is one of the largest sectors in the kingdom of Saudi Arabia and surrounding Middle East region, has created a pressing demand for architects, and urban planner with specialized training design, plan, and direct the activities of the construction industry. Responding to these demands, a newly proposed academic unit, the Department of Architecture & Planning is established at college of engineering, King Khalid University. It offers innovative undergraduate program committed to graduating professional capable of creating and managing sustainable built environment and the exposure to a broad spectrum of architectural modeling to compete in the global marketplace.

b. Explain the relevance of the program to the mission and goals of the institution.

The mission of the university emphasizes the teaching of programs to support the economic & social development of Saudi Arabia and the skills needed by graduates for useful employment. This program is very important:

- *To overcome the demands of architects and urban planners and to produce innovations in architectural curricula for professionals diverse, highly technological, knowledge based society.*
- *To graduate architects for future who are creative and valuable designers, with awareness in technological aspects with encourage and support for professional development & knowledge.*
- *To developed knowledge and increase awareness on cultural, social and environmental aspects of architecture for the built and the un-built environment & also configure a strategic relationship with local and world-wide universities for research & technology.*
- *To support other scientific research in various disciplines with the basic knowledge needed for their professions with effective management & technology.*
- *To Provide manpower needed to contribute in to the development plans of the community in the Kingdom.*

2. Relationship (if any) to other programs offered by the institution/college/department.

a. Does this program offer courses that students in other programs are required to take? Yes ☒ No ☐

If yes, what has been done to make sure those courses meet the needs of students in the other programs?

- *As this program is new, so courses are offered as per the learning outcomes oriented towards architectural study. Later on, joint committees will be formed to review the course requirements and learning outcomes periodically (Review meeting each year, and a major review once every three years). The offering subjects in other program are as follows: Structural Engineering; Surveying; Building Construction; Remote sensing and GIS, Engineering Drawings, Mechanical system in Architecture, Building services, Ecology & Environment, Building material & science & Project management.*
- *Student surveys.*

b. Does the program require students to take courses taught by other departments?

Yes
No

☒
☐

If yes, what has been done to make sure those courses in other departments meet the needs of students in this program?

- *Students enrolled in the B. Arch Programs are required to take some courses (Common engineering courses level 1 and level 2) from other departments. In this way, the department remains in touch with other departments of the college i.e. Engineering drawing (GE-111) structure analysis I (CE-328) & II (CE-418), building services, building material & science and project management (ARC-518) etc.*
- *Student surveys.*

3. Do students who are likely to be enrolled in the program have any special needs or characteristics? (e.g. Part time evening students, physical and academic disabilities, limited IT or language skills).

☒

Yes

☐

If yes, what are they?

- *Students enrolling in the Program must have enough knowledge of basic mathematics; have a reasonable proficiency in the English language, both spoken and written and Knowledge of computer skills.*

4. What modifications or services are you providing for special needs applicants?

Students are directed to take some pre-requisite courses by studying the first two semesters that contain all basic courses needed (i.e. engineering drawing, physics, chemistry, math, English & computer). These courses will strengthen the student to meet the challenges for upcoming courses in this program as these courses will be directed towards architecture with their application and examples in relation with this program.

These pre-requisite courses are compulsory and provision has been made as per college requirement in other program. Apart from this, there are other courses in architecture at basic level before proceeding towards advanced study courses in next semester. These basic courses have been designed as per the domain of required teaching-learning outcomes according to NCAAA. Program planning has been intended to a general course to advanced course as per the knowledge level of students including core architecture or engineering courses in the form of pre-requisite course.

Apart from this more workshop, Group discussion and faculty advising must be implemented as special need.





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Consistency statements between University, College and Department.

A. Mission Statement

Applying and developing the knowledge of architectural education and professional practice for the construction of sustainable architecture and urbanization that carries all the cultural and environmental dimensions of the place as well as modern technologies, in addition to providing world-class scientific research that fulfils the aspirations of the society and meets the needs of future generations.



B. Program Educational Objectives (PEO)

The Table 3.1 shows the educational objectives of the mechanical engineering B.Sc. program.

Table for Educational objectives of the Architecture program

Code	
PEO-1	To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate.
PEO-2	To provide the best educational environment to prepare an efficient graduate who has the knowledge, understanding, skills and abilities to produce his tasks in practical and professional directions with contemporary technologies to meet the needs of the labor market.
PEO-3	Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations
PEO-4	Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world.
PEO-5	Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively.
PEO-6	Integrating the educational process with the society to achieve the role of related sciences in the construction and development of the surrounding environment to promote enhancement at all local and international levels.
PEO-7	Supporting and developing relevant fields of science locally, regionally and globally by supporting faculty members and researchers to disseminate their scientific production through specialized publishing houses and conferences.
PEO-8	Supporting scientific research establishments and academic agreements with international universities and research canterers.

C. Consistency of the Program Educational Objectives with the Mission of the Institution

The mission statement of Department of Architecture & Planning is aligned with the mission statements of the Architecture Engineering Faculty and King Khalid University as follows:

“King Khalid University commits to providing relevant academic environments for high-quality education, conducting innovative scientific research, providing constructive community services, and maximizing the employment of knowledge techniques.”

Table below shows the consistency of university mission to college mission

Table for Mapping between university mission and college mission

College Mission Keywords	University mission
↓	<i>King Khalid University commits to providing relevant academic environments for high-quality education, conducting innovative scientific research, providing constructive community services, and maximizing the employment of knowledge techniques.</i>



University Mission Keywords		Quality Education	Scientific research	Community services	Knowledge techniques
College Mission	Knowledge and skills	√			
	Scientific research		√		
	Modern engineering technology				√
	Development of Community services			√	

College Mission:

“To prepare a qualified engineering staff equipped with essential knowledge and skills in dealing with modern engineering technologies, in order to develop and improve our country’s future plans.”

From the mission it can be, clearly, seen from the underlined words that the mission of all constitutes (department, college university) have emphasized on the main three criteria which are: providing the basic knowledge, scientific research and community services.

Table below Shows the consistency of college mission to program mission.

Table for Mapping between college mission and program mission

Program Mission Keywords		College Mission <i>To prepare a qualified engineering staff equipped with essential knowledge and skills in dealing with modern engineering technologies, in order to develop and improve our country's future plans.</i>			
		Knowledge & skills	Scientific research	Modern engineering technology	Development of community services.
Program Mission	Architecture Education, Knowledge	√			
	Scientific research		√		



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	Modern Technologies			√	
	Society & need of future generation				√

Table for Mapping between Program Mission to Program Educational Objectives



Program objectives Codes 		Program Mission <i>Applying and developing architectural education and professional practice knowledge for sustainable construction that carries all the cultural and environmental dimensions as well as modern technologies, in addition to provide pioneering and global scientific research that fulfils the aspirations of the Saudi society and meets the future generation's needs.</i>			
		 Program Mission Keywords			
		Architecture Education , Knowledge	Scientific research	Modern Technologies	Saudi society & future generation's needs
Program Objectives	PEO-1	√		√	
	PEO-2	√		√	
	PEO-3	√			√
	PEO-4		√		
	PEO-5	√		√	
	PEO-6	√	√		√

Table for Mapping between program educational objectives to program learning outcomes

Program Learning Outcomes





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Codes									
		PEO1	PEO2	PEO3	PEO4	PEO5	PEO6	PEO7	PEO8
Program Educational Objectives									
Program Learning Outcomes	PLO-1	√				√	√		
	PLO-2			√		√		√	
	PLO-3		√			√			√
	PLO-4	√		√		√			
	PLO-5	√			√		√	√	
	PLO-6	√					√		
	PLO-7	√		√				√	
	PLO-8			√					
	PLO-9		√		√		√		√
	PLO10		√	√	√				√
	PLO11		√					√	
	PLO12				√		√	√	√
	PLO13		√				√		
	PLO14			√					√
	PLO15	√			√			√	
	PLO16			√		√	√		
	PLO17		√						√

C. Mission, Goals and Objectives

Program Mission Statement (insert).

Applying and developing the knowledge of architectural education and professional practice for the construction of sustainable architecture and urbanization that carries all the cultural and environmental dimensions of the place as well as modern technologies, in addition to providing world-class scientific research that fulfils the aspirations of the society and meets the needs of future generations.



1. List Program Goals (e.g. long term, broad based initiatives for the program, if any)

- *To overcome the demands of architects and urban planners and to produce architectural professionals for diverse, highly technological, knowledge based society*
- *To graduate architects for future who are creative and valuable designers, with awareness in technological aspects and practice with professional knowledge*
- *To developed knowledge of building technologies and increase awareness on cultural, social and environmental aspects of architecture for the built and the un-built environment for its inhabitants.*
- *To prepare future architects to make involvement to improving the built environment through leadership, personal engagement and professional practice with ethics of society respect.*

2. List major objectives of the program within to help achieve the mission. For each measurable objective describe the measurable performance indicators to be followed and list the major strategies taken to achieve the objectives.

Measurable Objectives	Measurable Performance Indicators	Major Strategies
To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate.	<ol style="list-style-type: none"> 1. Ratio of students to teaching staff. 2. Students overall rating on the quality of their courses. 3. Proportion of teaching staff with verified doctoral qualifications. 4. Average Teaching Load For Faculty Member 	<ol style="list-style-type: none"> 1. Revision and development of the program education plan within every five years. 2. Revision of each course content to make that they conform with the international level of the architecture within the next four years. 3. Development of the skills of the university staff members. 4. Review and assess the program periodically. 5. Review the program requirements in consultation with industry and solicit their feedback.
To provide the best educational environment to prepare an efficient graduate who has the knowledge, understanding, skills and abilities to produce his tasks in practical and professional directions with contemporary technologies to meet the needs of the labour market.	<ol style="list-style-type: none"> 1. Proportion of courses in which student evaluations were conducted during the year. 2. Evaluate the number of continuing education activities. 3. Students overall rating on the quality of their courses. 4. Proportion of teaching staff with verified doctoral qualifications. 	<ol style="list-style-type: none"> 6. Link the courses with the technological innovative industries and practical training. 7. Ask students to prepare intellectual reports, technical studies, and researches related to the development of courses.



	5. Presentation and work load distribution.	8. Design new courses that support the artistic sensitivity and growth.
Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations	<ol style="list-style-type: none"> 1. Number of projects relate to Number of community education programs provided as a proportion of the number of departments 2. Proportion of full time teaching and other staff actively engaged in community service activities 	<ol style="list-style-type: none"> 1. Linking graduation project with community problems for sustainable development. 2. Increasing number of field trip to recognize the community problems of Saudi southern region.
Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world.	<ol style="list-style-type: none"> 1. Number of refereed publications in the previous year per full time equivalent member of teaching staff. 2. Research income from external sources in the past year as a proportion of the number of full time teaching staff members. 3. Student Evaluation of Library Services. 	<ol style="list-style-type: none"> 1. Ask students to prepare reports, studies, and researches related to the environmental and energy courses. 2. Participating student in scientific research projects 3. Increasing research from graduated projects
Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively.	<ol style="list-style-type: none"> 1. Number of accessible computer terminals per student. 2. Average overall rating of adequacy of facilities and equipment in a survey of teaching staff. 3. Stakeholder evaluation of websites, web-based electronic data management system or electronic resources (for example: institutional website provides resource sharing, networking & relevant information, including e-learning inter-active learning & teaching between students & faculty on a five point scale of an annual survey). 	<ol style="list-style-type: none"> 1. Participating student in various digital design models. 2. Linking computational training with the professional industries for practical training after 8th and 10th semester. 3. Involve students in real life project model with the introduced software in course.





Integrating the educational process with the society to achieve the role of related sciences in the construction and development of the surrounding environment to promote enhancement at all local and international levels.	<ol style="list-style-type: none"> 1. Proportion of courses in which student evaluations were conducted during the year for professional community. 2. Students' academic evaluation and career counseling for justifying knowledge of professional services. 	<ol style="list-style-type: none"> 1. Evaluate and selection of the premier architectural institutional in locally/abroad 2. Facilitating the interaction with distinguished architects 3. Facilitates the mentoring program with locally/abroad students 4. Developing ability to use the techniques, skills and modern Architecture tools necessary for imparting architecture education at local & global level.
Supporting and developing relevant fields of science locally, regionally and globally by supporting faculty members and researchers to disseminate their scientific production through specialized publishing houses and conferences	<ol style="list-style-type: none"> 1. Stakeholder evaluation of websites, web-based electronic data management system or electronic resources (for example: institutional website provides resource sharing, networking & relevant information, including e-learning inter-active learning & teaching between students & faculty on a five point scale of an annual survey). 	<ol style="list-style-type: none"> 1. Participating student in various digital design models.
Supporting scientific research establishments and academic agreements with international universities and research centres.	<ol style="list-style-type: none"> 1. Number of accessible computer terminals per student. 2. Average overall rating of adequacy of facilities and equipment in a survey of teaching staff. <p>Participation in professional and technical societies.</p>	<ol style="list-style-type: none"> 1. Involve students in real life project model with the introduced software in course.

D. Program Structure and Organization

1. Program Description: List the core and elective program courses offered each semester from Prep Year to graduation using the below Curriculum Study Plan Table (A separate table is required for each branch IF a given branch offers a different study plan).

A program or department manual should be available for students or other stakeholders and a copy of the information relating to this program should be attached to the program specification. This information should include required and elective courses, credit hour requirements and department/college and institution requirements, and details of courses to be taken in each year or semester.

Curriculum Study Plan Table





* Prerequisite– list course code numbers that are required prior to taking this course.

Level	Course Code	Course Title	Required or Elective	* Pre-Requisite Courses	Credit Hours	University, College or Department
1 st Year						
Level 1	011-ENG-6	Intensive English Program-1	Required	--	6	English
	201-ARAB-2	Language Skills		--	2	Shariah
	118-MATH-2	Math for Architecture		--	2	Mathematic
	118-PHYS-3	Physics for Architecture		--	3	Physics
	110-ARC-4	Visual Communication-1		--	4	Architecture
Level 2	111-IC1-2	The Entrance to the Islamic Culture	Required	--	2	Shariah and Fundamental of Religion
	012-ENG-6	Intensive English Program-2		011-ENG-6	6	English
	202-ARAB-2	Arabic Editing		--	2	Shariah
	122-ARC-2	Freehand Drawing		--	2	Architecture
	121-ARC-2	Design Sketching		--	2	Architecture
	120-ARC-4	Visual Communication-2		110-ARC-4	4	Architecture
2 nd Year						
Level 3	112-IC1-2	Islamic Culture-2	Required	--	2	Shariah
	221-GE-2	Creativity and Innovation		--	2	Basic Science
	213-ARC-3	Principles of Architectural Design		--	3	Architecture
	212-CE-3	Introduction to Geo-Sciences		--	3	Architecture
	211-ARC-3	History of Architecture		--	3	Architecture
	210-ARC-5	Architectural Design-1		120-ARC-4	5	Architecture
Level 4	113-IC1-2	Islamic Culture-3	Required	--	2	Shariah
	228-CE-3	Structure Design-1		--	3	Civil
	223-ARC-3	Building Materials & Construction Principles		--	3	Arch/Engg
	222-ARC-2	Computer Applications in Architecture-1		--	2	Architecture



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	221-ARC-3	Islamic Architecture		--	3	Architecture
	220-ARC-5	Architectural Design-2		210-ARC-5	5	Architecture
3 rd Year						
Level 5	114-IC1-2	Islamic Culture-4	Required	--	2	Shariah
	318-CE-3	Structure Design-2		228-CE-3	3	Civil
	313-ARC-2	Building Codes & Specifications		--	2	Arch/Engg
	312-ARC-2	Computer Applications in Architecture-2		222-ARC-2	2	Architecture
	311-ARC-3	Regional and Urban Planning		--	2	Architecture
	310-ARC-5	Architectural Design-3		220-ARC-5	5	Architecture
Level 6	324-ARC-3	Environmental Control System	Required	--	3	Architecture
	323-ARC-2	Construction Technology		--	2	Architecture
	322-ARC-3	Landscape Design		--	3	Architecture
	321-ARC-2	Architecture Theories		--	2	Architecture
	322-GE-2	Design Thinking		--	2	Humanities
	320-ARC-5	Architectural Design-4		310-ARC-5	5	Architecture
4 th Year						
Level 7	411-GE-2	Professional Ethics and Practice	Required	--	2	Humanities
	415-ARC-3	Interior Design		--	3	Architecture
	41X-ARC-3	Elective Course-1		--	3	Architecture
	412-ARC-3	Construction Drawings-1		--	3	Architecture
	413-ARC-2	National Architectural Heritage-Asir Region		--	2	Architecture
	410-ARC-5	Architectural Design-5		320-ARC-5	5	Architecture
Level 8	42X-ARC-3	Elective Course-2	Required	--	3	Architecture
	428-ARC-3	Building Systems and Technologies		--	3	Arch/Engg
	423-ARC-2	Housing		--	2	Architecture
	422-ARC-3	Construction Drawings-2		412-ARC-3	3	Architecture
	421-ARC-2	Acoustics &Lighting		--	2	Architecture
	420-ARC-5	Architectural Design-6		410ARC-5	5	Architecture



Professional Internship (Full time summer training)						
(Full time field Training)	431-ARC-0	Field Training	Required	After completi on of 120 CRH	0	Architecture
5 th Year						
Level 9	518-ARC-2	Project Management	Required	--	2	Arch/Engg
	511-GE-2	Entrepreneurship and Venture Engineering		--	2	
	51X-ARC-2	Elective Course-3		--	2	Architecture
	511-ARC-3	Graduation Project Thesis		420-ARC-5	3	Architecture
	510-ARC-6	Architectural Design-7		420-ARC-5	6	Architecture
Level 10	52X-ARC-2	Elective Course-4	Required	--	2	Architecture
	521-ARC-3	Professional Practice		--	3	Architecture
	520-ARC-7	Architectural Design-8: (Graduation Project)		510ARC-6	7	Architecture
	Include additional levels if needed (i.e. summer courses). N.A.					
*Elective Courses						
Architectural Elective courses	416-ARC-3	Building Information Modelling	Electives	--	3	Architecture
	418-ARC-3	Green Building Design		--	3	Architecture
	424-ARC-3	Urban Planning		--	3	Architecture
	425-ARC-3	Building Performance		--	3	Architecture
	513-ARC-2	Architectural Conservation and Preservation		--	2	Architecture
	517-ARC-2	Geometrical & Parametric Design		--	2	Architecture
	525-ARC-2	Intelligent Buildings		--	2	Architecture
	524-ARC-2	Project Tendering & Contracting		--	2	Architecture

Selection of Architecture Elective courses-

A total of four electives must be taken, one each semester, starting at the 7th level and ending at the 10th. Each elective subject has its importance. Students are allowed to choose any electives in 7th, 8th, 9th, & 10th level as per their convenience and interest. Where every elective has been given with brief discussion, it will support student to understand the role of electives at particular level, and can choose easily.

Note: A total of four electives of 10 credit hrs. must be taken. As Elective-1 & Elective-2, courses contain 3-credit hr in each semester (Level-7 & Level-8) and Elective-3 & Elective-4 contain 2-credit hr in each semester (Level-9 & Level-10). It is necessary for registering any elective course to be approved from the department.

2. Required Field Experience Component (if any) (e.g. internship, cooperative program, work experience)

Summary of practical, clinical or internship component required in the program. Note: see Field Experience Specification
<p>a. Brief description of field experience activity</p> <p><i>A summer internship/training program will be decided for students after the completion of 8th level (according to the study plan) for period of 8 weeks as per the graduation requirements. Students will be allowed for the field training, if they successfully achieved the minimum 120 CRH requirements of the program. Students are directed to companies and industries according to their wishes. There is mechanism for assessment by allotted one credit for the training. Every student will create the work portfolio & personal profile of their work to show in various architectural firms to ensure their level of work during their study program.</i></p>
<p>b. At what stage or stages in the program does the field experience occur? (e.g. year, semester)</p> <p><i>After the successfully completion of 8th level (120 program CRH), student has directed to attend a compulsory full time summer field training in any architecture/ commercial institution.</i></p>
<p>c. Time allocation and scheduling arrangement. (e.g. 3 days per week for 4 weeks, full time for one semester)</p> <p><i>Five (5) days per week for 8 week</i></p>
<p>d. Number of credit hours (if any)</p> <p><i>No</i></p>
<p>e. List the major intended learning outcomes for the program to be developed through the field experience.</p> <ul style="list-style-type: none"> <i>a. Ability to <u>demonstrate</u> the use, analysis and application of an appropriate international architecture standard in a specific situation.</i> <i>b. Ability to <u>analyse</u> a given architecture problem, recognize a suitable problem solving methodology; apply the methodology with a meaningful proposal.</i> <i>c. Ability to apply knowledge and skill in a particular work environment.</i> <i>d. Ability to work in a team and <u>interpret</u> ideas with real work team and under supervision, give and receive clear instructions.</i> <i>e. Ability to take initiatives and to manage a project within a given time frame.</i> <i>f. <u>Recognise</u> and practice real computer based problem solution on architecture software i.e. CAD, Max, Photoshop, Revit and Sketch up.</i>

- g. Ability to effectively communicate solution to problems (oral, visual, written).*
- h. Group work experience, Collaborate work and communicate effectively.*
- i. Measure ethical principles and commit to professional ethics, responsibilities and norms of computer practice.*
- j. Ability to describe technical, aesthetic, and conceptual decisions based on architectural and design principles.*
- k. Ability to develop their ideas professionally and connect with their intended audience using visual, verbal communication, and presentation skills relevant to their field.*
- l. Ability to justify the basic administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor.*

3. Project or Research Requirements (if any)

Summary of any project or thesis requirement in the program. (Other than projects or assignments within individual courses) (A copy of the requirements for the project should be attached.)

- *Project or thesis requirements in the Bachelor of Architectural program: As per the prerequisite for registration, the number of hours remaining from graduation should not exceed 37 hours (Sum of semester 9 and 10 and addition 7 hours: 17+13+07=37)*
- *The work in the graduation project extends over two semester (9 and 10 semester), and the student is granted a continued grade by the end of first semester after the project registration. By the end of second semester, he is granted his final grade after presenting and submitting the project report to Jury*
- *In case the student failed in the graduation final project, given a chance for one more semester and will be eligible to present and submit the project to the Jury by the end of that semester.*

a. Brief description

The student is assigned, with one or more faculty, the design of an applied architectural project which simulates the real working condition / career-oriented to which the student will be exposed after graduation. The project should be comprehensive and includes all the necessary preliminary field studies, feasibility studies, architectural design, architectural modeling, bill of materials and consumable items, and the total operating cost of the project. The course of graduation project ARC-510-ARC-520 in two semesters.

The graduation project course need literature review, case studies, formulate project objectives, architecture planning process, critical analysis and elective design work. Most of the students learning outcomes is analyzed on the basis of graduation project. Students choose their project according to their interest which feedback will be provided by the specialized faculty to promote the success.

At the end of the second semester of the graduation project (semester 10th of the study plan), the students will submit a final project report. Also, there will be a presentation for the project student to present his work. The student will be orally examined and evaluated based on his architectural design/modeling work, report, presentation as well as oral discussion by the Jury.

b. List the major intended learning outcomes of the project or research task.

- *Understanding the fundamentals of the architecture project and its value in present scenario.*
- *Learn the professional practices and ethics of project research work i.e. administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor.*
- *The ability to identify the project problems within their field of architect and design, including research and synthesis of technical, aesthetic, and conceptual knowledge in coordination with the other person responsible for the same research project.*
- *The ability to work with teams of architects and various interdisciplinary design teams involved in the building industry*
- *The ability to explain buildings and spaces based on design, plan, style, constructability and contribution to the field.*
- *The ability to conceptualize and coordinate designs, addressing socio-cultural, environmental and technological aspects of architecture*
- *The ability to learn the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and the built environment in the GCC/Arab region as well as globally*
- *The ability to execute technical, aesthetic, and conceptual decisions based on architectural and design principles*
- *The ability to formulate the state of the art in computer technologies that can be utilized at different stages of architectural presentation, design, and construction during research project.*
- *The ability to realize the basic administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor.*

c. At what stage or stages in the program is the project or research undertaken? (e.g. level)

Fifth (5th) year/ 9th & 10th semester (Course curriculum attached)

d. Number of credit hours (if any): **7 credits**

e. Description of academic advising and support mechanisms provided for students to complete the project.

- *Providing students all the relevant key notes from the basic level to the advanced stage for the completion of the project.*
- *Periodical evaluation/meeting with supervisor/s*
- *Aiding the students to suggest a plan for the project steps including a time schedule*
- *Provision of IT facilities, computers, Software program related to design and architectural work, laboratories and workshops*
- *Progress reports to be submitted and a mid-term project scrutiny will be held in order to check his proper direction of his project.*

f. Description of assessment procedures (including mechanism for verification of standards)

1. Submission of final graduation project report including below heads:

- Introduction
- Literature survey
- Significance of the project (site analysis, live case studies & comparative analysis along with core requirements of the projects.)
- Project objectives
- Project methodology
- Results from the live case study, site conditions and Discussions.
- Design the projects (site planning, Architectural planning with all floor plans, elevations, sections, views and models.)
- Conclusions and recommendations

2. Demonstration of architectural model and Design

3. Oral discussion and final presentation with the Jury of Department of Architecture & Planning in the following stages:-

1. Introduction of project with literature and live case study.
2. Conceptual design and development work with single line diagram or sketching form.
3. Complete architecture drawings including necessary building services i.e. HVAC, firefighting and structure etc.
4. Final project completion with all electives, project model and thesis reports.

4. Learning Outcomes in Domains of Learning, Assessment Methods and Teaching Strategy

Program Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning and teaching.

The **National Qualification Framework (NQF)** provides five learning domains. Learning outcomes are required in the first four domains and some programs may also require the Psychomotor Domain.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable learning outcomes required in each of the learning domains. **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each program learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process.

	NQF Learning Domains and Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		



1.1	<u>Define</u> the fundamentals of the architecture and contemporary issues related to architecture and its practice.	<ul style="list-style-type: none"> Delivering knowledge through the course lectures. Class discussion, Group discussions Memorization Hands-on student learning activities Independent group project for architecture design following the principle of systematic design procedures and covering the course topics. Interactive Learning process through discussion in lecture and class(Visual presentation , Tutorial (video+ practical)) 	<ul style="list-style-type: none"> Oral discussion Written tests Debates Team Presentation Seminars and Discussions Exams Portfolios Project work & field visit Assignments. And quizzes are used to evaluate the students understanding during assignment exercises. Performance based evaluation
1.2	<u>Describe</u> the values of environmental conservation and sustainability in Architectural design.		
1.3	<u>Recognize</u> the Architectural characteristics of buildings, minarets, social cultural environment components, awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.		
1.4	<u>Describe</u> the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc.		
1.5	<u>State</u> the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.		
2.0	Cognitive Skills		
2.1	<u>Solving</u> problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.	<ul style="list-style-type: none"> Active Learning lectures Critical thinking Surprise test Problem based learning Homework& tutorial Discussion strategies- Dialogues& class Site visits &research activities. Students to think independently Experimental Architectural design and its outcomes Brainstorming Debates 	<ul style="list-style-type: none"> Analytical report Written tests Group/individual presentation Quizzes Seminars and Discussions Oral discussion Case studies Long & short assignments Additional notes Faculty observations Concept mapping Video Analysis Midterm exams Final exams
2.2	<u>Evaluate</u> the built and unbuilt spaces based on architecture design, plan and style with their impact on environment.		
2.3	<u>Develop</u> the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.		
2.4	<u>Identify</u> the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.		
2.5	<u>Explain</u> the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment.		



		<ul style="list-style-type: none"> • Lab assignment and independently performing tutorials • Interactive classes • Engaged students in team work discussions session with questions & answers. 	
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3.0	Interpersonal Skills & Responsibility		
3.1	<u>Illustrate</u> the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.	<ul style="list-style-type: none"> • Active Learning-lectures • Team based learning-Tutorials and practice 	<ul style="list-style-type: none"> • Meeting deadlines for the assignments. • Helping each other in doing their experiments
3.2	<u>Show</u> the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.		





3.3	<u>Analyse</u> the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.	<ul style="list-style-type: none"> • Participation of students in classroom discussions and presentations • Awareness of time management in completing their reports. • Blackboard learning (e-learning) • Encourage students to help each other • Collaborative learning-group assignments, Small group work, Whole group discussion • Experimental Learning-Lab. demonstrations. • Role playing • Debates • Motivation and Expanding students' keen interest • Humor • Special hours to week students 	<ul style="list-style-type: none"> • Logical arguments • Laboratory/ workshops Exam • Oral exams • Debates • Individual and group presentations • Demonstration • Peer-Evaluation • Artwork • Midterm exams. • Final exams.
4.0	Communication, Information Technology, Numerical		
4.1	<u>Evaluate</u> different ideas and concepts to select the appropriate alternatives in architectural & urban design projects along with technological aspects of architecture.	<ul style="list-style-type: none"> • Problem based learning- Lectures • Computer Labs 	<ul style="list-style-type: none"> • Written tests • E – learning home work
4.2	<u>Demonstrate</u> with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.	<ul style="list-style-type: none"> • Social networking tools. • Tutorials and practice • Cooperative learning - group assignments, Small group work, 	<ul style="list-style-type: none"> • Quizzes • Helping each other in doing their experiments • Laboratory/ workshops Exam • Oral exams
4.3	<u>Illustrate</u> the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect's responsibilities.	<ul style="list-style-type: none"> • Encourage students to help each other • Experimental Learning-Site Demonstrations. • Brainstorming • Individual Presentation • Dialogue discussion 	<ul style="list-style-type: none"> • Discussion forums • Videos • Analytical reports • Individual and group presentations



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		<ul style="list-style-type: none"> • guest speakers • Group discussion • Participation during the lectures • Student assignments with ICT standards 	<ul style="list-style-type: none"> • observation his performance in class room interaction.
5.0	Psychomotor	.	
5.1	<p><u>Draw</u> all type of building drawings with 2D or 3D conceptual diagram and produce neat sketches by manually using individual art skills and imagination based on design problems.</p>	<ul style="list-style-type: none"> • Lecture with demonstration, • Sketching on whiteboard, • drawing sheets sketch work, • Art book, 	<ul style="list-style-type: none"> • Art & Sketching book evaluation, • Portfolio for design work, Class sketching, • Rendering and painting assignments, students individual presentation (manual + digital)

NQF Learning Outcome Verb, Assessment, and Teaching Strategies and Suggestions

NQF Learning Domains	Suggested Verbs
Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.



Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

Form (6) - A Matrix of Identifying Learning Outcomes of the Program Courses

Identify on the table below the courses that are required to achieve the program learning outcomes. Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale. Levels: I = Introduction P = Proficient A = Advanced (see help icon)

Course Offerings and Learning Outcomes	110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7	521-ARC-3
Information																																								
Facts, Concepts, Theories	√	√	x	√	√	√	√	√	-	√		√	x	-	√	√	x	x	x	-	x	-	x	√	√	x	-	x	-	√	x	-	-	-	x	x	-	√	x	x
Cognitive Skills																																								
Skill Application Creative Thinking and Problem Solving	√	√	√	√	√	-	x	√	-		√	√	x	x	-	√		x	-	-	√	-	x	x	x	√	-	-	x	x	√	-	-	-	-	v	-	-	x	x
Interpersonal Skills																																								
Learning Responsibility	x	-	x	-	-	√		-	-	x		-	√	-	√	x	√	x	√	-	x	-	x	√	√		-	x	√	x	x	x	-	-	x	√	-	x	x	x
Collaboration and Leadership		-		√	√	-	x	√	√	√		-	√	x	-		√	x	-	√	x	-	x	x	x	x	-	x	√	x	x	x	-	-	x	√	-	x	x	x
Personal and Professional Accountability	x	√	√	-	√	-	√	-	-	x	√	-	-	-	-	√	√	√	-	√	x	-	x	√	√	x	-	x	-	√	x	x	-	-	x	√	-	x	x	x



Program Learning Outcomes Mapping for Departmental Matrix

Identify on the table below the courses that are required to achieve the program learning outcomes. Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale. Levels: I = Introduction P = Proficient A = Advanced (see help icon)

	Course Offerings NQF Learning Domains and Learning Outcomes	110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7		
1.0	Knowledge																																									
1.1	Define the fundamentals of the architecture and contemporary issues related to architecture and its practice.	I	I	-	I	-	P	-	I	I	I	I	-	I	-	P	-	I	P	P	-	P	-	A	P	-	A	-	I	A	-	-	-	-	A	A	-	I	A	A	A	I
1.2	Describe the values of environmental conservation and sustainability in Architectural design.	-	I	-	-	I	I	-	-	-	-	I	-	-	I	I	-	I	-	I	P	-	-	-	I	-	-	-	A	I	P	-	-	-	I	-	-	-	-	P	-	
1.3	Recognize the Architectural characteristics of buildings, minarets, social cultural environment components, and awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.	-	-	I	I	I	I	-	I	I	-	-	I	I	I	I	-	P	-	A	I	P	-	-	I	-	-	-	-	P	-	-	-	-	-	-	-	-	-	A	-	





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1.4	Describe the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc.	I	-	-	I	I	I	-	I	I	I	-	-	I	I	I	P	I	I	I	I	-	P	-	I	I	-	I	-	P	I	P	-	-	I	-	A	I	A	A	I
1.5	State the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.	I	I	-	I	-	I	-	I	I	-	I	-	I	-	-	P	-	I	P	-	-	P	-	P	I	-	P	P	-	P	-	P	-	P	-	I	P	A	A	P



	Course Offerings			110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210-ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7	521-ARC-3
2.0	Cognitive Skills																																										
2.1	<u>Solving</u> problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.	I	I	-	I	I	-	I	I	I	-	I	-	I	-	P	P	-	P	-	-	I	-	A	-	-	-	A	P	I	-	-	-	-	A	P	-	A	-	P	A	A	I
2.2	<u>Evaluate</u> the buildings and spaces based on architecture design, plan, style, constructability, and contribution to the field.	-	-	-	-	I	I	-	-	I	I	-	I	-	I	P	I	I	P	-	I	P	-	A	P	I	-	P	A	P	P	A	-	-	A	P	P	A	-	A	A	P	P
2.3	<u>Develop</u> the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.	I	-	-	I	I	I	-	I	I	-	I	-	I	-	P	I	-	P	-	I	-	-	A	-	I	-	A	I	-	-	A	-	-	A	I	I	A	-	I	A	A	-



	Course Offerings	110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7	521-ARC-3	
2.0	Cognitive Skills																																									
2.4	<u>Identify</u> the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.	-	I	I	-	-	I	I	I	I	-	I	I	I	-	I	-	I	A	-	P	P	-	P	I	I	A	P	-	-	A	-	P	-	P	P	-	-	I	A	I	
2.5	<u>Explain</u> the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment.	I	-	-	I	-	-	-	-	I	-	I	-	-	I	-	-	I	I	-	-	A	-	-	I	P	A	P	-	-	-	I	I	-	-	-	-	I	I	A	I	



	Course Offerings	110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7	521-ARC-3
3.0	Interpersonal Skills & Responsibility																																								
3.1	<u>Illustrate</u> the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.	-	-	I	-	-	-	-	-	-	-	-	I	I	-	I	P	I	-	P	-	P	I	-	A	I	I	P	P	-	-	A	I	-	-	P	-	-	A	A	I
3.2	<u>Show</u> the student’s performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.	I	I	-	-	I	I	I	-	I	I	-	-	I	P	-	P	-	I	P	-	P	I	-	A	I	P	P	P	-	-	P	I	I	-	A	-	-	A	A	I
3.3	<u>Analyse</u> the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.	-	I	-	I	-	-	I	I	-	-	-	I	-	-	-	I	-	I	P	-	P	I	-	P	-	I	P	A	-	-	A	I	P	-	P	-	-	A	A	P



	Course Offerings	110-ARC-4	120-ARC-4	121-ARC-2	122-ARC-2	210ARC-5	211-ARC-3	213-ARC-3	ARC-214	220-ARC-5	221-ARC-3	222-ARC-2	223-ARC-3	310-ARC-5	311-ARC-3	312-ARC-2	313-ARC-2	324-ARC-3	320-ARC-5	321-ARC-2	322-ARC-3	323-ARC-2	41X-ARC-3	410-ARC-5	412-ARC-3	413-ARC-2	415-ARC-3	42X-ARC-3	420-ARC-5	421-ARC-2	422-ARC-3	423-ARC-2	428-ARC-3	431-ARC-0	51X-ARC-2	510-ARC-6	511-ARC-3	518-ARC-2	52X-ARC-2	520-ARC-7	521-ARC-3		
4.0	Communication, Information Technology, Numerical																																										
4.1	<u>Evaluate</u> different ideas and concepts to select the appropriate alternatives in architectural and urban design projects along with technological aspects of architecture.	-	I	I	-	-	-	I	-	-	I	-	I	I	-	-	I	-	I	-	-	-	-	-	I	-	P	-	P	-	-	I	I	P	-	-	-	-	-	A	A	I	
4.2	Demonstrate with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.	-	I	I	-	-	I	-	I	I	-	I	-	P	P	-	P	-	I	-	-	-	A	I	-	A	A	-	P	-	-	-	-	A	P	-	-	P	-	-	A	A	I
4.3	<u>Illustrate</u> the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect’s responsibilities.	-	I	I	-	-	-	-	-	-	I	-	-	I	-	P	-	I	-	-	-	-	I	I	-	P	-	I	P	-	-	-	P	-	I	-	I	-	-	A	A	-	



Program Learning Outcomes Mapping Matrix – FOR ELECTIVES SUBJECTS

Identify on the table below the courses that are required to achieve the program learning outcomes. Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale. Levels: I = Introduction P = Proficient A = Advanced (see help icon)

	Course Offerings NQF Learning Domains and Learning Outcomes	416-ARC-3	418-ARC-3	424-ARC-3	425-ARC-3	513-ARC-2	517-ARC-2	524-ARC-2	525-ARC-2
1.0	Knowledge								
1.1	<u>Define</u> the fundamentals of the architecture and contemporary issues related to architecture and its practice.	I	I	I	P	I	P	P	A
1.2	<u>Describe</u> the values of environmental conservation and sustainability in Architectural design.	P	P	I	P	A	P	A	I
1.3	<u>Recognize</u> the Architectural characteristics of buildings, minarets, social cultural environment components, awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.	I	I	P	P	I	P	I	I
1.4	<u>Describe</u> the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc.	I	I	I	I	I	I	P	-
1.5	<u>State</u> the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.	-	-	I	P	I	P	I	I



	Course Offerings NQF Learning Domains and Learning Outcomes	416-ARC-3	418-ARC-3	424-ARC-3	425-ARC-3	513-ARC-2	517-ARC-2	524-ARC-2	525-ARC-2
2.0	Cognitive Skills								
2.1	<u>Solving</u> problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.	P	P	I	I	I	I	-	I
2.2	<u>Evaluate</u> the buildings and spaces based on architecture design, plan, style, constructability, and contribution to the field.	I	I	P	I	I	I	I	P
2.3	<u>Develop</u> the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.	I	I	I	I	I	I	I	P
2.4	<u>Identify</u> the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.	-	-	P	I	I	A	I	P
2.5	<u>Explain</u> the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment.	I	I	I	I	I	I	I	I



	Course Offerings NQF Learning Domains and Learning Outcomes	416-ARC-3	418-ARC-3	424-ARC-3	425-ARC-3	513-ARC-2	517-ARC-2	524-ARC-2	525-ARC-2
3.0	Interpersonal Skills & Responsibility								
3.1	<u>Illustrate</u> the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.	I	I	I	I	-	-	A	I
3.2	<u>Show</u> the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.	I	-	P	I	-	I	-	I
3.3	<u>Analyse</u> the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.	-	I	I	P	I	-	P	I



Program Learning Outcomes Mapping Matrix – FOR COLLEGE SUBJECTS

Identify on the table below the courses that are required to achieve the program learning outcomes. Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale. Levels: I = Introduction P = Proficient A = Advanced (see help icon)

	Course Offerings NQF Learning Domains and Learning Outcomes	416-ARC-3	418-ARC-3	424-ARC-3	425-ARC-3	513-ARC-2	517-ARC-2	524-ARC-2	525-ARC-2		
4.0	Communication, Information Technology, Numerical										
4.1	<u>Evaluate</u> different ideas and concepts to select the appropriate alternatives in architectural & urban design projects along with technological aspects of architecture.	I	I	P	-	A	I	I	I		
4.2	<u>Demonstrate</u> with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.	P	I	I	I	I	I	I	I		
4.3	<u>Illustrate</u> the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect’s responsibilities.	-	I	I	-	I	-	-	P		
	Course Offerings NQF Learning Domains and Learning Outcomes	111-IC1-2	112-IC1-2	113-IC1-2	114-IC1-2	201-ARAB-2	202-ARAB-2	011-ENG-6	012-ENG-6	118-PHYS-3	118-MATH-2



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1.0	Knowledge										
1.1	<u>Define</u> the fundamentals of the architecture and contemporary issues related to architecture and its practice.	-	-	-	-	-	-	-	-	I	I
1.2	<u>Describe</u> the values of environmental conservation and sustainability in Architectural design.	I	I	I	I	I	I	I	I	I	-
1.3	<u>Recognize</u> the Architectural characteristics of buildings, minarets, social cultural environment components, awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.	I	I	I	I	I	I	I	I	-	-
1.4	<u>Describe</u> the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc.	-	-	-	-	-	-	-	-	I	I
1.5	<u>State</u> the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.	-	-	-	-	-	-	-	-	I	I

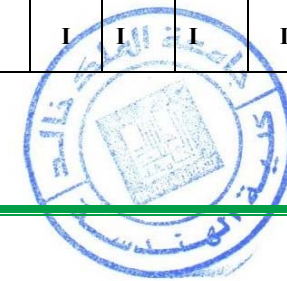


	Course Offerings NQF Learning Domains and Learning Outcomes	111-IC1-2	112-IC1-2	113-IC1-2	114-IC1-2	201-ARAB-2	202-ARAB-2	011-ENG-6	012-ENG-6	118-PHYS-3	118-MATH-2
2.0	Cognitive Skills										
2.1	<u>Solving</u> problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.	-	-	-	-	-	-	-	-	-	I
2.2	<u>Evaluate</u> the buildings and spaces based on architecture design, plan, style, constructability, and contribution to the field.	-	-	-	-	-	-	-	-	I	I
2.3	<u>Develop</u> the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.	I	I	I	I	I	I	I	I	-	I
2.4	<u>Identify</u> the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.	-	-	-	-	-	-	-	-	I	-
2.5	<u>Explain</u> the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment.	I	I	I	I	I	I	I	I	-	-



	Course Offerings NQF Learning Domains and Learning Outcomes	111-IC1-2	112-IC1-2	113-IC1-2	114-IC1-2	201-ARAB- 2	202-ARAB- 2	011-ENG-6	012-ENG-6	118-PHYS-3	118-MATH- 2
3.0	Interpersonal Skills & Responsibility										
3.1	<u>Illustrate</u> the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.	I	I	I	I	I	I	I	I	-	-
3.2	<u>Show</u> the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.	-	-	-	-	-	-	-	-	I	-
3.3	<u>Analyse</u> the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.	-	-	-	-	-	-	-	-	-	-

	Course Offerings NQF Learning Domains and Learning Outcomes	111-IC1-2	112-IC1-2	113-IC1-2	114-IC1-2	201-ARAB-2	202-ARAB-2	011-ENG-6	012-ENG-6	118-PHYS-3	118-MATH- 2
4.0	Communication, Information Technology, Numerical										
4.1	<u>Evaluate</u> different ideas and concepts to select the appropriate alternatives in architectural & urban design projects along with technological aspects of architecture.	-	-	-	-	-	-	-	-	-	-
4.2	<u>Demonstrate</u> with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.	-	-	-	-	-	-	-	-	-	-
4.3	<u>Illustrate</u> the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect's responsibilities.	I	I	I	I	I	I	I	I	I	-



Program Learning Outcomes Mapping Matrix as per NAAB (Levels: U = Understanding A= Ability)

NAAB Students Performance Criteria - Professional Education Courses Only													
King Khalid University Department of Architecture & Planning College of Engineering Bachelor of Architecture			Credit Hours	A1. Professional Communication Skills	A2. Design Thinking Skills	A3. Investigative Skills,	A4. Architectural Design Skills	A5. Ordering Systems	A6. Use of Precedents	A7. History and Global Culture	A8. Culture Diversity and Social Equity		
Architectural Courses			Realm A: Critical Thinking and Representation										
S,NO	NAAB Required Level (A/U)			A	A	A	A	A	A	U	U		
1	110-ARC-4	Visual Communication-I	4		X		X						
2	120-ARC-4	Visual Communication-II	4		X		X						
3	121-ARC-2	Design Sketching	2								X	X	
4	122-ARC-2	Freehand Drawing	2		X								
5	210-ARC-5	Architectural Design - 1	5		X		X						
6	211-ARC-3	History of Architecture	3								X	X	
7	213-ARC-3	Principles of Architectural Design	3			X	X	X					
8	220-ARC-5	Architectural Design -2	5		X		X						
9	221-ARC-3	Islamic Architecture	3				X						
10	222-ARC-2	Computer Applications in Architecture -1	2	X	X		X						
11	223-ARC-3	Building Materials & Construction Principles	3										
12	228-CE-3	Structural Design -1	3										
13	310-ARC-5	Architectural Design -3	5		X		X						
14	311-ARC-3	Regional and Urban Planning	3					X		X	X		
15	312-ARC-2	Computer Applications in Architecture -2	2	X	X		X						
16	313-ARC-2	Building Codes & specifications	2					X		X	X		
17	318-CE-3	Structural Design -2	3										
18	320-ARC-5	Architectural Design -4	5		X	X	X						
19	321-ARC-2	Architectural Theories	2						X	X	X		
20	322-ARC-3	Landscape Design	3		X		X			X			
21	323-ARC-2	Construction Technology	2										
22	324-ARC-3	Environmental Control System	3										
				B1. Pre-Design.									
				B2. Site Design.									
				B3. Codes and Regulations									
				B4. Technical Documentation.									
				B5. Structural Systems.									
				B6. Environmental Systems.									
				B7. Building Envelope Systems and Assemblies									
				B8. Building Materials and Assemblies.									
				B9. Building Service Systems.									
				B10. Financial Considerations.									
				C1. Research									
				C2. Integrated Evaluations and Decision making design process.									
				C3. Integrative Design									
				D1. Stakeholder Roles in Architecture									
				D2. Project Management									
				D3. Business Practices									
				D4. Legal Responsibilities									
				D5. Professional Conduct									

Program Learning Outcomes Mapping Matrix as per NAAB (Levels: U = Understanding A = Ability)

NAAB Students Performance Criteria - Professional Education Courses Only																																																																																																																
King Khalid University			Credit Hours	A1. Professional Communication Skills																																																																																																												
Department of Architecture & Planning				A2. Design Thinking Skills																																																																																																												
College of Engineering				A3. Investigative Skills,																																																																																																												
Bachelor of Architecture				A4. Architectural Design Skills																																																																																																												
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Architectural Courses			Realm A: Critical Thinking and Representation										Realm B: Integrated Building Practices, Technical Skills and Knowledge										Realm C: Integrated Arch. Solutions:										Realm D: Professional Practice																																																																															
S.NO	NAAB Required Level (A/U)			A	A	A	A	A	A	U	U	A	A	A	A	A	U	U	U	U	U	U	U	A	A	A	U	U	U	U	U																																																																																	
23	410-ARC-5	Architectural Design -5	5		X		X					X	X		X		X																																																																																															
24	412-ARC-3	Construction Drawings-1	3				X			X	X																																																																																																					
25	413-ARC-2	National Architectural Heritage -Asir Region	2	X									X	X		X																																																																																																
26	415-ARC-3	Interior Design	3																																																																																																													
27	420-ARC-5	Architectural Design -6	5		X		X						X		X		X		X																																																																																													
28	421-ARC-2	Acoustics & Lighting	2												X	X		X																																																																																														
29	422-ARC-3	Construction Drawings-2	3	X									X	X			X																																																																																															
30	423-ARC-2	Housing	2				X						X																																																																																																			
31	428-ARC-3	Building Systems and Technologies	3				X								X	X		X	X																																																																																													
32	431-ARC-0	Field Training	0	X	X		X						X	X	X																																																																																																	
33	510-ARC-6	Architectural Design-7	6		X		X					X	X		X		X	X	X																																																																																													
34	511-ARC-3	Graduation Project Thesis	3	X			X						X	X	X	X	X			X	X																																																																																											
35	518-ARC-2	Project Management	2																																																																																																													
36	520-ARC-7	(Graduation Project) Architectural Design -8	7	X			X			X	X		X	X	X			X	X																																																																																													
37	521-ARC-3	Professional Practice	3											X																																																																																																		
			B1. Pre-Design.										B2. Site Design.										B3. Codes and Regulations										B4. Technical Documentation.										B5. Structural Systems.										B6. Environmental Systems.										B7. Building Envelope Systems and Assemblies										B8. Building Materials and Assemblies.										B9. Building Service Systems.										B10. Financial Considerations.																			
			C1. Research										C2. Integrated Evaluations and Decision making design process.										C3. Integrative Design																				D1. Stakeholder Roles in Architecture										D2. Project Management										D3. Business Practices										D4. Legal Responsibilities										D5. Professional Conduct																													

5. Admission Requirements for the program

Attach handbook or bulletin description of admission requirements including any course or experience prerequisites.

Admittance of New Students

Requirements of admission to the Bachelor of Science program:

- *Secondary School Certificate (Natural Sciences) or its equivalent from inside or outside the Kingdom of Saudi Arabia.*
- *Score of “Entrance Examination” which resides of an aptitude test, and a subject test. The test is conducted by the National Center for Assessment in Higher Education, Kingdom of Saudi Arabia. It has two sections. The first section is General Aptitude Test (QIYAS). This test measures a student's analytical and deductive skills. It focuses on testing the student's capacity for learning in general regardless of any specific skill in a certain subject or topic. The other section is called “Achievement test for Science Colleges (TEHSILI)”. This section covers the general and key concepts in physics, chemistry, biology, mathematics and English covered in the courses of General Secondary School.*
- *Character certificate from the Secondary School.*
- *Appearance in interviews required by the University Council.*
- *Physical fitness certificate.*
- *Permission from the employer (For employed candidates).*
- *No objection certificate of suspension/rustication from King Khalid University (KKU) or any other university.*

All the above conditions are considered for admission fulfilling by the applicants. A merit list of all applicants is prepared by the Deanship of Admission and Registration on the basis of the following weights to the three types of scores:

- *Secondary school certificate score (30%).*
- *Aptitude test score (30%).*
- *Achievement test score (40%).*

Applicants are offered Admission in a college of their preferences on the basis of merit list subject to the availability of seats. Once seats are filled in a particular college, the admission to that particular college is closed and remaining students have to make their choices from other colleges. All freshly admitted students to the College of Engineering seeking acceptance to the Bachelor of Science in concern program spend their first academic year in the PYP.

Pre-request for necessary experience-

- *Students enrolling in the Program must have enough knowledge of basic mathematics; have a reasonable proficiency in the English language, both spoken and written and Knowledge of computer skills to study in this program.*
- *Students are directed to take some pre-requisite courses by studying the first two semesters that contain all basic courses needed.*
- *These pre-requisite courses of college will be attached to the previous necessary experience for their previous education and intended towards architecture program.*
- *After studying first two semester student will be allowed to get study in other newly architecture courses.*

6. Attendance and Completion Requirements

Attach handbook or bulletin description of requirements for:

- a. Attendance. **75%**
- b. Progression from year to year. **N.A.**
- c. Program completion or graduation requirements. **162Credit hours**

E. Regulations for Student Assessment and Verification of Standards

What processes will be used for verifying standards of achievement (e.g., verify grading samples of tests or assignments? Independent assessment by faculty from another institution) (Processes may vary for different courses or domains of learning.)

- ***Unified exams,***
- ***Group marking and group grading for multi-section courses.***
- ***Internal assessment at the end of semester.***
- ***Evaluation of a sample/project of student achievements by an independent faculty member***
- ***The Standard marks distribution is same for major of the course but it may vary as per the course required. (Class Assignment-10%, Mid sem1-20%, Midsem2-20%, Final exams-50%)***

F Student Administration and Support

1. Student Academic Counselling

Describe arrangements for academic counselling and advising for students, including both scheduling of faculty office hours and advising on program planning, subject selection and career planning (which might be available at college level).

- ***Committee of student affairs at faculty and department level in King Khalid University.***
- ***Forming committees' for student's orientation***
- ***Assign an academic supervisor for each student***
- ***Announce 10 office hours for each faculty member to be part of the academic supervision and scientific help.***
- ***Every student has mentor and buddy to assist throughout the program***
- ***Faculty member help and support students solving problems***
- ***Faculty member advice students planning their career***
- ***The availability of full information about the department and its members, and their contact information.***
- ***The availability of full information about study plan and the courses taught.***

2. Student Appeals

Attach regulations for student appeals on academic matters, including processes for consideration of those appeals.
Regulations for academic appeals are according to the policy of ministry of higher education, kingdom of Saudi Arabia

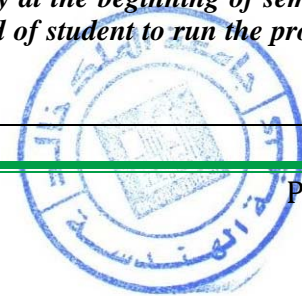
G. Learning Resources, Facilities and Equipment

1a. What processes are followed by faculty and teaching staff for planning and acquisition of textbooks, reference and other resource material including electronic and web based resources?

- *Faculty members search for texts on-line, learn of recommended texts in professional journals and from publishers and colleagues at conferences. Those teaching the same course meet and decide upon recommended texts and materials for the course and then submit their recommendations to the program chair for approval.*
- *Faculty member prepares the relevant scientific material of his course.*
- *Faculty member prepares the course file that includes the detailed description of the topics covered in the course, references and readings, and examination.*
- *Dates and marks plus all other relevant information pertinent to the course.*
- *The department send to the administration of the central library of the university list of Text books and references and specialized periodicals*
- *Reserve books and reading material needed for the course at the library.*
- *The timing for defining the educational resources according to the academic program. As the course will be begin to deliver to student in particular semester, all the necessary information regarding educational requirement will be available to students as mentioned above.*

1b. What processes are followed by faculty and teaching staff for planning and acquisition resources for library, laboratories, and classrooms.

- *Using the public library of the University.*
- *Adopting the references and text books approved by the council of the Department of Architecture & Planning or any authorized committee.*
- *Participating in the University's database that allows the access to most international publishers.*
- *Writing books and translation by the department members.*
- *Purchasing and providing the necessary books.*
- *Laboratories and workshops: The director of the King Khalid University (KKU) laboratories/workshops contacts Head of department whom in turn will contact faculty members for selection or any recommendations on laboratory/workshop resources. Selection of laboratory/workshop material is considered after the approval of the head of department and according to the recommendations of experienced faculty members. The information is then passed on to the director of KKU laboratories/workshops to act in response to the student and faculty needs*
- *The timing for evaluating educational resources will be mainly at the beginning of semester, but in middle of semester, it can be checked out as per the need of student to run the program successfully.*





2. What processes are followed by faculty and teaching staff for evaluating the adequacy of textbooks, reference and other resource provisions?

- *Review the returns of the books, through the monitoring of the students results and the student's opinion about how simple are these references.*
- *Periodic review of the references of the department.*
- *Evaluation of the reference and translated books.*
- *Proving the expensive reference books in the Central University Library to ease the financial burden on the students*
- *The condition for participating faculty will be at the last of each semester after getting feedback from students and other responsible quality members of the university.*
- *Survey "the overall rate of faculty member for library and multimedia"*
- *Survey "the overall rate of faculty member for digital library"*

3. What processes are followed by students for evaluating the adequacy of textbooks, reference and other resource provisions?

- *Survey "the overall rate of faculty member for library and multimedia"*
- *Survey "the overall rate of faculty member for digital library"*
- *Students have the opportunity to evaluate textbooks within student course experience survey as well as annual student focus group.*
- *Course report*
- *Surveying for academic staff*

4. What processes are followed for textbook acquisition and approval?

The dean of the library affairs contacts to the head of Department of Architecture & Planning whom in turn contact faculty members for selection of library resources. Selection of study materials is considered according to experienced faculty recommendation of resources in their field of course. If it approves after a division meeting, the minutes of meeting (MoM) with the approval is raised to the library director and the approval is then finalized by the Dean. The information is then provided using a technical services acquisition book order form, which is then handed to the director of King Khalid University Library for acquisition of the required resource from a trusted publisher in the field of architecture.

H. Faculty and other Teaching Staff

1. Appointments

Summarize the process of employment of new faculty and teaching staff to ensure that they are appropriately qualified and experienced for their teaching responsibilities.



- *The specializations which need faculty positions are identified by the department committee or the head of the department*
- *Announcement for faculty positions are published in newspaper, recruitment agencies, and on the university websites*
- *Complete rules and regulations for employment are provided with full faculty position descriptions and conditions of employment, together with general information about the institution and its mission and programs, and also full details about the particular program for which they are being considered are given on the university and faculty websites.*
- *The interested persons are asked to send their CV's which are investigated carefully by a committee consisting of head of the department and two other faculty staffs. This committee will forms as per the department council.*
- *The committee verifies the adequacy of the applicants to the required positions by*
 - *Identifying the field of specialization of the M.Sc. and Ph. D. degree*
 - *Identifying the field of research and from his published works*
 - *Investigating the teaching experiences and courses' list that have been taught*
 - *Investigating the publications list as the international standard (i.e. Impact factor: ISI or Thomson Reuters; Research gate scores etc.)*
- *The initially chosen faculty members is, then, interviewed by a committee consisting of the dean and managing staff or place a personal interview with the applicant through the internet.*
- *Qualification and experience certificates and documents are verified by the university faculty affairs office. All the certificates should have been endorsed and certified by the Saudi Arabia ministry of foreign affairs through the Saudi Arabia cultural office in the certificate awarding countries.*

2. Participation in Program Planning, Monitoring and Review

- a. Explain the process for consultation with and involvement of teaching staff in monitoring program quality, annual review and planning for improvement.
- *Forming several academic committees in the department such as: course timetables committee, scientific research committee, quality control committee, summer internship committee, E-learning committee.*
 - *Activate the recommendations of these committees by discussing it in the department's council and the present the recommendations of these committees*
 - *The condition for participating faculty members in the monitoring and the controlling committees for program quality, annual review, and planning for continuous improvement of the program minimum 5 yrs. minimum teaching experience and has worked experience in quality where PhD degree holder are majority preferable in such a committee or as per the university norms.*





- *Teaching staff must be appropriately qualified and experienced for their particular teaching responsibilities*
- *End-of-term course reports are completed by faculty reviewing activities and indicating areas for improvement.*
- *Semester-end faculty meetings are held to assess how the term went.*

b. Explain the process of the Advisory Committee (if applicable): *Under progress because this is a new program*

3. Professional Development

What arrangements are made for professional development of faculty and teaching staff for:

a. Improvement of skills in teaching and student assessment?

- *Encourage the faculty members to attend conferences and workshops to use them for their promotions.*
- *Students feedback*
- *Launch talks and seminars in the department.*
- *Encourage the faculty members to publish their work*
- *Faculty member need to provide all the teaching materials of learning, text books, course description in detail, teaching strategies and evaluation technique for particular course where teaching skill improvement, techniques and procedures will be assess as per the above teaching requirement of faculty.*
- *Workshops for various aspects of academic development are conducted frequently over the academic year for the exchange of ideas.*
- *Peer consultation in teaching is conducted over the academic year for the faculty upon their own request.*

b. Other professional development including knowledge of research and developments in their field of teaching specialty?

- *Research and publishing of findings in the educator's field of expertise is encouraged*
- *If no research is underway then a written review of a publication in the educator's field is required annually.*
- *Launch the talks and seminars in the department and the university.*
- *Invite specialist professors to throw some lectures in the department*
- *Training plan for developing teaching skill and improvement of the faculty by the department in the end of semester after proper evaluation of the course*
- *Workshops run by international experts are conducted frequently throughout the academic year on emerging teaching and learning strategies*
- *Sponsoring grants for research and innovation in teaching and learning are offered.*
- *Faculty members attend conferences, workshops and sabbatical leaves to enhance their knowledge of research in the field of teaching.*

4. Preparation of New Faculty and Teaching Staff



Describe the process used for orientation and induction of new, visiting or part time teaching staff to ensure full understanding of the program and the role of the course(s) they teach as components within it.

- *The orientation includes a detailed briefing and two follow up meetings with the department chair, reading faculty handbooks to understand the mission and philosophy of the university, department and program and to become familiar with policies and procedures.*
- *All new faculties are assigned a trained mentor (an experienced member of faculty in the department) as an advisor for their first year of employment.*
- *Class observations are done to better understand the institution's teaching methodology*
- *Introduce the department's program and described its courses.*
- *Conducting awareness workshop for the new faculty members*
- *A new faculty will be in contact with chairman/head of department*
- *Chairman/Head of department will help new faculty to assign the course time schedule, textbook, written exam rules, assessment procedure etc.*
- *Introduce the internal regulations of the university and the higher education. A faculty handbook can be arranged for the same.*
- *Hold workshops to introduce the college.*

5. Part Time and Visiting Faculty and Teaching Staff

Provide a summary of Program/Department/ College/institution policy on appointment of part time and visiting teaching staff. (i.e. Approvals required, selection process, proportion of total teaching staff etc.):

- *Applications are reviewed by a committee of the concerned faculty and the final selection is approved by the higher university administrators.*
- *If there is a need for visiting/adjunct faculty, approval is sought from the Head of the Department and the Dean of Academic Affairs.*

I. Program Evaluation and Improvement Processes

1. Effectiveness of Teaching

a. What QA processes are used to evaluate and improve the strategies for developing learning outcomes in the different domains of learning?

As this is new program, so actual process cannot be determined yet, but we suggest the following:

- *Faculty are required to commence an assessment to learn their desired learning style(s) which should increase responsiveness of their biases in learning and teaching*
- *Training in different learning styles is conducted along with teaching strategies to address a variety of learning styles*
- *Strategies on how to effectively teach to a variety of learning styles are outlined by the faculty member in her/his set of goals and objectives at the beginning of the academic year and then reviewed at the end of the year during the performance evaluation*
- *Survey's to evaluate the different courses.*



- *Survey's to evaluate the faculty member by the student.*
- *Internal workshops in the department.*
- *Periodic evaluation to the teaching plan to be adapted to the technical and market requirements.*
- *Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.*
- *Periodical revision of the method of teaching and the program specifications*
- *Faculty Survey (To be submitted on annual basis by each faculty member)*

b. What processes are used for evaluating the skills of faculty and teaching staff in using the planned strategies?

Since the program is new, we can suggest the following methods which will be adopted later as per the requirements of program-

- *Survey's to evaluate the faculty member& course by the student.*
- *Research studies orientation(measurable indicators: Published paper, Project granted after joining the university)*
- *Self-evaluation by the head of department and the dean of the college.*
- *Student ratings (such as Student Evaluations of Teaching);*
- *Peer reviews;*
- *Self-reviews;*
- *Videos of practice;*
- *Interviews with student;*
- *Alumni, employer and administrator ratings;*
- *Teaching awards and scholarship;*
- *Learning outcome measures; and*
- *Maintenance of teaching portfolios*

Procedure & development techniques will be based on above teaching effectiveness method, which will be different as per the course evaluation. It will be further developed as the new program begins. Rest evaluation processes and the procedures and the proposed improving and development techniques will be as per the university norms.

2. Overall Program Evaluation

a. What strategies are used in the program for obtaining assessments of the overall quality of the program and achievement of its intended learning outcomes:

(i) From current students and graduates of the program?

- *Polls for the enrolled students and those who graduated from the program*
- *Alumni surveys.*
- *Establishing an internet open forum to get student feedback.*
- *Individual student assessment through questionnaire regarding feedback of overall program regarding its strengths and weakness.*





<ul style="list-style-type: none">• <i>Student Course Evaluation Questionnaire (To be filled by each Student at the time of Course Completion).</i>
<p>(ii) From independent advisors and/or evaluator(s)?</p> <ul style="list-style-type: none">• <i>External reviewer establishing advising committee.</i>• <i>Asking for external evaluation from external expert referees.</i>• <i>Faculty Course Review Report (To be filled by each teacher at the time of Course Completion).</i>• <i>Faculty members compare their program with similar programs at other universities.</i>• <i>Faculty members measure their program against accreditation agency standards.</i>• <i>Feedback is sought from accreditation evaluators regarding quality of program.</i>
<p>(iii) From employers, Advisory Committee, and/or other stakeholders.</p> <ul style="list-style-type: none">• <i>Polls/surveys for the employers to know suitability of these graduates to the job, and how good their scientific knowledge is, about the strength and weakness.</i>• <i>We also have to follow the NAAB standards as a professional organization for the overall quality of program.</i>

Complete the following two tables.

1. Program KPI and Assessment Table

2. Program Action Plan Table



Program KPI and Assessment Table (*Data not filled because this is new program*)

NCAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 1 Mission & Objectives	S1.1	1. Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate and graduate students, respectively, on a five- point scale in an annual survey).	3.0					
Standard 2 Governance Administration	S2.1	2. Stakeholder evaluation of the Policy Handbook, including administrative flow chart and job responsibilities (Average rating on the adequacy of the Policy Handbook on a five- point scale in an annual survey of teaching staff and <u>final year students</u>).	4.0					
Standard 3 Management of Quality Assurance and Improvement	S3.1	3. Students' overall evaluation on the quality of their learning experiences. (Average rating of the overall quality on a five point scale in an annual survey of final year students.)	4.0					
	S3.2	4. Proportion of courses in which student evaluations were conducted during the year.	100%					
	S3.3	5. Proportion of programs in which there was an independent verification, within the institution, of standards of student achievement during the year.	-					
	S3.4	6. Proportion of programs in which there was an independent verification of	-					





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National Center for Academic Accreditation and Evaluation

		standards of student achievement by people (evaluators) external to the institution during the year.						
NCAAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 4 Learning and Teaching	S4.1	7. Ratio of students to teaching staff.(Based on full time equivalents)	1:10					
	S4.2	8. Students overall rating on the quality of their courses. (Average rating of students on a five point scale on overall evaluation of courses.)	4.0					
	S4.3	9. Proportion of teaching staff with verified doctoral qualifications.	1:3					
	S4.4	Retention Rate; 10. Percentage of students entering programs who successfully complete first year.	-					
	S4.5	Graduation Rate for Undergraduate Students: 11. Proportion of students entering undergraduate programs who complete those programs in minimum time.	-					
	S4.6	Graduation Rates for Post Graduate Students:	-					





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		12. Proportion of students entering post graduate programs who complete those programs in specified time.						
	S4.7	13. Proportion of graduates from undergraduate programs who within six months of graduation are: (a) employed (b) enrolled in further study (c) not seeking employment or further study	-					
NCAAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 5 Student Administration and Support Services	S5.1	14. Ratio of students to administrative staff	-					
	S5.2	15. Proportion of total operating funds (other than accommodation and student allowances) allocated to provision of student services.	-					
	S5.3	16. Student evaluation of academic and career counselling. (Average rating on the adequacy of academic and career counselling on a five- point scale in an annual survey of final year students.)	-					
Standard 6 Learning Resources	S6.1	17. Stakeholder evaluation of library and media center. (Average overall rating of the adequacy of the library & media center, including: a) Staff assistance,	-					





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		b) Current and up-to-date c) Copy & print facilities, d) Functionality of equipment, e) Atmosphere or climate for studying f) Availability of study sites, and g) Any other quality indicators of service on a five- point scale of an annual survey.) .						
	S6.2	18. Number of web site publication and journal subscriptions as a proportion of the number of programs offered.	-					
	S6.3	19. Stakeholder evaluation of the digital library. (Average overall rating of the adequacy of the digital library, including: a) User friendly website b) Availability of the digital databases, c) Accessibility for users, d) Library skill training and e) Any other quality indicators of service on a five- point scale of an annual survey.)	-					
NCAAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 7 Facilities and Equipment	S7.1	20. Annual expenditure on IT budget, including: a) Percentage of the total Institution, or College, or Program budget allocated for IT; b) Percentage of IT budget allocated per program for institutional or per student for programmatic;	-					





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		c) Percentage of IT budget allocated for software licences; d) Percentage of IT budget allocated for IT security; e) Percentage of IT budget allocated for IT maintenance.						
	S7.2	21. Stakeholder evaluation of the IT services (Average overall rating of the adequacy of on a five- point scale of an annual survey). a) IT availability, b) Website, c) e-learning services d) IT Security, e) Maintenance (hardware & software), f) Accessibility g) Support systems, h) Hardware, software & up-dates, and Web-based electronic data management system or electronic resources (for example: institutional website providing resource sharing, networking & relevant information, including e-learning, interactive learning & teaching between students & faculty).	-					
	S7.3	22. Stakeholder evaluation of facilities & equipment: a) Classrooms, b) Laboratories, c) Bathrooms (cleanliness & maintenance), d) Campus security, e) Parking & access,	-					





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		f) Safety (first aide, fire extinguishers & alarm systems, secure chemicals) g) Access for those with disabilities or handicaps (ramps, lifts, bathroom furnishings), h) Sporting facilities & equipment.						
Standard 8 Financial Planning and Management	S8.1	23. Total operating expenditure (other than accommodation and student allowances) per student.	-					
NCAAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 9 Faculty and Staff Employment Processes	S9.1	24. Proportion of teaching staff leaving the institution in the past year for reasons other than age retirement.	-					
	S9.2	25. Proportion of teaching staff participating in professional development activities during the past year.	-					
Standard 10 Research	S10.1	26. Number of refereed publications in the previous year per full time equivalent member of teaching staff. (Publications based on the formula in the Higher Council Bylaw excluding conference presentations)	-					
	S10.2	27. Number of citations in refereed journals in the previous year per full time equivalent faculty members.	-					
	S10.3	28. Proportion of full time member of teaching staff with at least one refereed publication during the previous year.	-					
	S10.4	29. Number of papers or reports presented at academic conferences during the past	-					



		year per full time equivalent faculty members.						
	S10.5	30. Research income from external sources in the past year as a proportion of the number of full time faculty members.	-					
	S10.6	31. Proportion of the total, annual operational budget dedicated to research.	-					
NCAAA standards	KPI Code#	List of Program KPIs Approved by the Institution	KPI Target Benchmark	KPI Actual Benchmark	KPI Internal Benchmarks	KPI External Benchmarks	KPI Analysis	KPI New Target Benchmark
Standard 11 Community Service	S11.1	32. Proportion of full time teaching and other staff actively engaged in community service activities.	-					
	S11.2	33. Number of community education programs provided as a proportion of the number of departments.	-					
Analysis of KPIs and Benchmarks: (list strengths and recommendations)								

NOTE The following definitions are provided to guide the completion of the above table for Program KPI and Assessment.

KPI refers to the key performance indicators the programs used in the SSRP and are approved by the institution (if applicable at this time). This includes both the NCAAA suggested KPIs chosen and all additional KPIs determined by the program (including 50% of the NCAAA suggested KPIs and all others).

Target Benchmark refers to the anticipated or desired outcome (goal or aim) for each KPI.

Actual Benchmark refers to the actual outcome determined when the KPI is measured or calculated.

Internal Benchmarks refer to comparable benchmarks (actual benchmarks) from inside the program (like data results from previous years or data results from other departments within the same college).

External Benchmarks refer to comparable benchmarks (actual benchmarks) from similar programs that are outside the program (like from similar programs that are national or international).

KPI Analysis refers to a comparison and contrast of the benchmarks to determine strengths and recommendations for improvement.

New Target Benchmark refers to the establishment of a new anticipated or desired outcome for the KPI that is based on the KPI analysis.

Program Action Plan Table





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Directions: Based on your “*Analysis of KPIs and Benchmarks*” provided in the above Program KPI and Assessment Table, list the recommendations identified below. (*Not applicable because this is new program*)



No.	Recommendations	Action Points	Assessment Criteria	Responsible Person	Start Date	Completion Date
1						
2						
3						
4						
5						
6						



Attachments:

1. Copies of regulations and other documents referred to in template preceded by a table of contents.
2. Course specifications for all program courses including field experience specification if applicable.

Authorized Signatures

Dean/Chair	Name	Title	Signature	Date
Program Dean or Program Chair Main Campus				
Branch 1				
Branch 2				
Branch 3				
Branch 4				



Kingdom of Saudi Arabia

**The National Commission for Academic Accreditation &
Assessment**

FORM-4
Course Specifications of B. Arch
Departmental Courses
(CS)



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Visual Communication-1 (110-ARC-4)			
2. Credit hours: 4 credit (0L+8T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 1st / 1st Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="90"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="10"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To understand and practices the rules of lettering, commonly used and applied in environment design.
- To understand and practice application of drawing scale.
- To learn the methods of drawing the basic forms such as hexagon, octagon, polygon, pentagon, and ellipse.
- To understand the concept of hatching and the method of presenting different materials.
- To introduce the rules and methods of drawing trees, human figures, and similar objects in design.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Wiki and virtual classes exercises will be conducted to improve manual presentation and rendering skills in various medium.
- There will be announcement on the given topics followed by practical exercises.
- Sketch handouts will be given to the students at the beginning of the unit once the course offered again.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Forum will be formed to visualize graphics.

C. Course Description (Note: General description in the form used in Bulletin or Handbook)

Course Description:

This course is designed in such a way to enable the first year student to understand basic visual communication skills such as lettering, basic design elements, constructing two dimensional shapes and three dimensional volumes, and model making and manual rendering techniques.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Architectural Graphic Fundamentals 1: Horizontal and vertical lines, cross line and Islamic geometric pattern(sheet equally divided in six squares with the size 20cmx20cm) lettering and dimensioning. • A full A3 sheet exercise – combination of horizontal, vertical and both side 45 angle line. 	1	8
<ul style="list-style-type: none"> • Architectural Graphic Fundamentals 2: Combination of six same squares illustrating various geometrical patterns i.e. horizontal lines, horizontal and vertical dotted (big and small dotted space) lines, different angled cross line (60 and 30), combination of various square and circle and combination of squares at 45 angle. 	1	8
<ul style="list-style-type: none"> • Studio exercise for various geometrical elements in complex design format in a combination of horizontal/ Vertical/ both side angled line/ square and curve etc. 	1	8
<ul style="list-style-type: none"> • Isometric Views: Introduction of basic isometric geometric elements with mass subtract and addition 	1	8
<ul style="list-style-type: none"> • Isometric model Drawings-1: Deep understanding of a given irregular geometrical model and draw its:- <ul style="list-style-type: none"> ○ Layout (top view) ○ Front Elevation ○ Right Elevation ○ Left Elevation ○ Back Elevation ○ Vertical section AA & BB ○ Horizontal section CC <p>(All the drawings should be prepared with proper hatch/ dimension and pencil grades and every week will be the same task with different and more complex geometric models)</p>	3	24





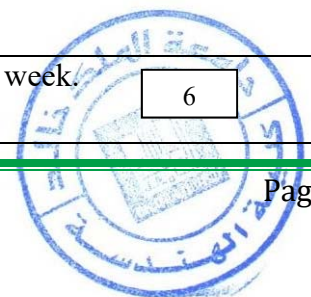
<p>• Isometric model Drawings-1: Students are provided layout (top view), left elevation & front elevation with proper dimension and inside hidden line. Ask students to draw the following with the model information:-</p> <ul style="list-style-type: none"> ○ Isometric model for the given drawings ○ Plan horizontal section CC ○ Vertical section AA & BB ○ Right Elevation <p>(All the drawings should be prepared with proper hatch/ dimension and pencil grades and every week will be the same task with different and more complex geometric models)</p>	3	24
<p>• Mid Term Exam</p>		
<p>• Isometric section Drawings-: Students are provided the architectural layout models with all the necessary information for dimension, section line and inside dotted (hidden) lines. Ask students to draw the following:-</p> <ul style="list-style-type: none"> ○ Isometric sectional model (AA) for the given drawings ○ Isometric sectional model (BB) for the given drawings <p>(All the drawings should be prepared with proper hatch/ dimension and pencil grades and every week will be the same task with different and more complex geometric models)</p>	2	16
<p>• Ask students to design a model with 6 cubes and 12 cubes. Arrange them in the form of various building compositions at individual level.</p>	1	8
<p>• After completion the above said model, ask the students to draw the elevation and section with proper dimensions for the best model of the class</p>	1	8
	14	112

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned		14x8=112			112
	Actual					
Credit	Planned		14x4			56
	Actual					

3. Additional private study/learning hours expected for students per week:

6



4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various definitions for various operating tools i.e. paper types and sizes, drawing pens, T-square a7 various type of triangles..	Lectures and text book,, class discussion	studio sheet work, Written exam & Assignment
1.2	Students will be able to <u>recognize</u> their sketching ability with various kind of lines.	Lectures, tutorials and practice	Oral discussion, quizzes, and presentation
1.3	To <u>outline</u> an overview of all sketch manuals and patterns of draft drawings with scale patterns.	Lectures and Tutorials	Class Assignments
1.4	<u>Memorization</u> of various rendering pattern while preparing geometrical drawings.	Small group work, hands on learning activities	Portfolios, Quizzes on completion of each topic& Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between free hand drafting and drafting by equipment	Lectures and studio manual, brainstorming	<ul style="list-style-type: none"> Evaluation of Manual sketch sheet work Class assignment
2.2	Students can <u>analyze</u> the sketching model of various hatching and texture patterns.	Sketch notes to study the various live & virtual objects	<ul style="list-style-type: none"> Quizzes. Students portfolio
2.3	Students will <u>develop</u> their interest in drafting methods & various drawings scale	Lectures, Guidance and supervision	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules of free hand drawings along with their appropriate proportion with lighting and shadow effect of any real or virtual object.	Team based learning-tutorial and practice.	Class manual sketching assignment, portfolio and Final exams



3.2	Student will be able to <u>show</u> their draw sketches for architecture graphics work	Collaborative learning group assignments, Small group work, Whole group discussion	Class Assignments, individual sketch work & creativity, portfolios, sheet work in class for judging individual creativity.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to architectural design	Computer Labs, Participation during the lectures,	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the human figures.	Individual Presentation, Encourage the students to seek information	Evaluation of oral presentation, Analytical reports
5.0	Psychomotor		
5.1	N.A.		

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#															
1.2					#											
1.3	#															
1.4					#											
2.1						#										
2.2								#								
2.3						#		#								
3.1												#				
3.2												#				
4.1															#	
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%

4	Final Exam	End Semester	30%
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D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Griffin, A.W. and Brunicardi, V.A (1998), Introduction to Architectural Presentation Graphics: Prentice Hall
- Ciriello, M. (2002), Architectural Design Graphics: McGraw-Hill

2. List Essential References Materials (Journals, Reports, etc.)

- Ching, F.D.K (2003), Architectural Graphics (4th Ed.): John Wiley
- Gill, W Robert (2012), Rendering with Pen and Ink

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.cs.brown.edu>
- [http://www.dtcc.edu/-document,project info - Arch.dwg.](http://www.dtcc.edu/-document,project%20info%20-%20Arch.dwg)
- <http://design.tutsplus.com/articles/technical-drawing-for-beginners-an-introduction-to-perspective--vector-21707>
- <http://www.wikihow.com/Draw-Perspective>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)



<ul style="list-style-type: none">• 1 studio Room for group of 20 students.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none">• Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none">• Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester• Students Faculty meeting (once during semester)• Faculty-students periodical meeting (during office hours)• Analysis of students' performance on the tests and final.• Comparison of students' scores on test I, test II and Final exam
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<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none">• External reviewer feedback.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Free hand Drawing (122-ARC-2)			
2. Credit hours: 2 credit (0L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 2nd / 1stYear			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To develop the requisite level of proficiency in drawing, this is seen as a primary communication tool in the practice of architecture as language.
- To familiarized with a range of techniques of expression beginning with manual drawing.
- To express their thoughts with free hand drawings.
- To improve manual presentation and rendering skills in various medium through lectures and studio based exercises.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Enhance use of visual aids for better understanding of the subject, the art of famous artist can be shown to students at national & International both and can be incorporated for further future course.
- Lecture & small group work teaching methods might be involved to enhance the sketching ability of students as available on net or power point presentation.
- Sketch handouts will be given to the students at the beginning of the unit once the course offered again.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Free Hand drawing is a course which deals with various sketches & free hand drawings. It is important while making general diagrams of any building majorly in conceptual stage. It is very basic of any architecture designing. In this class you will discover or refine your personal freehand drawing style. At the end of the semester you will be able to translate your ideas, thoughts and concepts to paper. You will learn how to draw existing physical objects + buildings on site, and also learn how to bring your creative concepts onto paper. In this process, you will learn how to use different techniques and materials.



1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Introductions Line – hatching, cross-hatching, stippling, blind contour and contour Learning to define spaces and shapes with line drawing techniques; In-class drawing.	1	4
Tone Learning how to use tone to define space, shapes and to learn rendering of shades and shadows.	1	4
Scale and Proportions Learning how to use proportioning tools - thumb and pencil technique.	1	4
Nature/Landscape Objects: trees and plants, and human figures (Part I & II) Learning different sketching techniques of trees, plants and human figures. Apply the previous technique and presentation given.	2	8
Nature/Landscape Objects: Land and Water – Surfaces & forms (Part III) Learning different sketching techniques of nature object (rocks, grass, topography & contours ...etc.).	1	4
Abstract objects Learn how to abstract and articulate objects.	1	4
Perspective: one-point perspective. Learn how to draw one-point perspective; the basic vocabulary of perspective; horizon line, view point, picture plan...etc.	1	4
Perspective: two-point and three-point perspective. Learn how to draw two-point perspective & three-point perspective; the basic vocabulary of perspective; horizon line, view point, picture plan...etc.	1	4





Sun, shade & shadow - architecture and landscape (Part I & II). Introduction to the light and shadow technique on buildings and architectural elements. Apply the previous technique and presentation given.	2	8
Re-design an architectural scene Sketch an existing architectural scene from your built environment (exterior or Interior), and make a changes of its shape, objects or the surrounded environment.	1	4
Introduction to the design process Learn how to present different aspects of architectural analysis (bubble diagrams, site analysis, zoning analysis...etc.) within design process.	1	4
Final project: Draw a full architectural scene (Exterior/Interior) You will present an architectural scene, and it consist any nature objects or human figures, this projects must be including all the techniques that you learned in the course.	1	4
	14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x4			56
	Actual						
Credit	Planned			14x2			28
	Actual						

3. Additional private study/learning hours expected for students per week.

6

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various types & fundamentals of free hand drawings component.	Lectures, text book	Written exam & Assignment, Artwork & concept mapping evaluation
1.2	<u>Recognize</u> their sketching ability to live object sketching	Lectures, tutorials and practice	Oral discussion, quizzes, and presentation
1.3	To <u>outline</u> an overview of all sketch manuals and patterns of free hand drawings	Hands-on student learning activities	Class Assignments Midterm exam
1.4	<u>Memorization</u> of various rendering pattern, light & Shadow effect & proportions regarding free hand drawing etc.	Team work	Portfolios, Quizzes on completion of each topic & Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between free hand drawing & its elements	Critical thinking, Site visits	<ul style="list-style-type: none"> Evaluation of Manual sketch sheet work Class assignment
2.2	Students will be able to <u>analyze</u> the sketching model of live object and virtual objects	Problem based learning, Brainstorming	<ul style="list-style-type: none"> Quizzes. Students portfolio
2.3	Students will <u>develop</u> their interest in drafting methods & various drawings scale	Lectures, Guidance and supervision of the individual assignments	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules of free hand drawings along with their appropriate proportion with lighting and shadow effect of any real or virtual object.	Small group work	Assignment to assess their sketch component work Explain and communicate the students results in lectures
3.2	Student will be able to <u>show</u> their draw sketches for architecture design work	Role playing & debates	Class Assignments, individual sketch work & creativity, portfolios
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to architectural design	Brain storming, Participation during the lectures.	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the real and virtual object and can exhibit by a strong verbal/ visual communication with presentation skills.	Encourage the students to help each other, observation class room interaction.	Evaluation of oral presentation, Analytical reports.

5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	5.1
1.1	#															
1.2					#											
1.3					#											
1.4	#				#											
2.1						#	#									
2.2							#	#								
2.3						#		#								
3.1												#	#			
3.2													#			
4.1															#	
4.2															#	
5.1																#
5.2																#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%

4	Final Exam	End Semester	30%
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D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Ching Francis D K (2009). Architectural Graphics (5th Ed.): John Wiley & Sons.
- Laseau Paul (2004) Free Hand Sketching: W.W. Norton & Company
- Wang C. Thomas (2002) Pencil Sketching: John Wiley & Sons.
- Gupitill L.(1997). Rendering in pen and ink (rev ed.) US: Watson-Gupitill Publication.

2. List Essential References Materials (Journals, Reports, etc.)

- Bhatt N. D. (2014). Engineering Drawing (53rd Ed.) Anand, Gujrat : Charotar publishing house Pvt. Ltd,
- D. K. Francis and Juroszek Steven P. (2010) Design Drawing (2nd Ed) Hoboken, New Jersey : John Wiley & Sons
- Lewis, D. (1984) Pencil Drawing Techniques: Watson-Gupitil

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.cs.brown.edu>
- <http://www.dtcc.edu/-document,project info - Arch.dwg>.
- <http://www.technologystudent.com/designpro/ortho1.htm>



4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
<ul style="list-style-type: none"> • For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book A4/A5 size, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale, Sketching / Drawing Paper; white smooth drawing paper A3 size (Canson / Fabriano / Derwent and Markers – variety Prismacolor or Chartpak etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____

Date Received: _____



Course Specifications-3

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Visual Communication-2 (120-ARC-4)			
2. Credit hours: 4 credit (0L+8T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 2nd / 1st Year			
6. Pre-requisites for this course (if any): 110-ARC-4			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="90"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="10"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- Introduction and familiarization with Architectural Graphic Fundamentals.
- To give basic knowledge of good drafting and lettering techniques.
- To develop comprehension and Visualization of geometric forms
- To develop perception and presentation of architectural forms and buildings.
- To familiarize the students with preparation of perspectives by innovative methods.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Wiki and virtual classes exercises will be conducted to improve manual presentation and rendering skills in various medium.
- There will be announcement on the given topics followed by practical exercises.
- Sketch handouts will be given to the students at the beginning of the unit once the course offered again.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Forum will be formed to visualize graphics.

C. Course Description (Note: General description in the form used in Bulletin or Handbook)

Course Description:

This course introduces the fundamentals of architectural drawing and presentation through the study of architectural graphic symbols, orthographic projections, and section of solids and sciography. Isometric and axonometric views and perspectives will also be covered





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Draw a Geometrical configuration: (based on final exam sheet) • A full A3 sheet exercise – combination of horizontal, vertical and both side 45 angle line. 	1	8
<ul style="list-style-type: none"> • Measuring and redraw the students homes, in order to present an as built drawings for their floor plans include on sequence. <ul style="list-style-type: none"> ○ Draw architectural sketch for home ○ Draw the floor plans ○ Draw an isometric floor plan ○ Furnish the floor plan ○ Ink all the presented drawings with different line weights. 	3	24
<ul style="list-style-type: none"> • Working in a group to measuring and redraw the mosque at KKU campus in sketches, in order to present then as built drawings:- <ul style="list-style-type: none"> ○ Group A: Floor plan ○ Group B: All Elevations ○ Group C: Sections 	1	8
<ul style="list-style-type: none"> • Working separately, to draw the mosque at KKU campus and present an architectural as built drawings So, each students must provide:- <ul style="list-style-type: none"> ○ Architectural Floor plan ○ Elevations ○ Isometric floor plan ○ Sections 	3	24
<ul style="list-style-type: none"> • Re-draw the existing building private villa (Part-1):- • Draw by using pencils <ul style="list-style-type: none"> ○ Architectural Floor plans ○ All Elevations ○ 3D Sections 	1	8





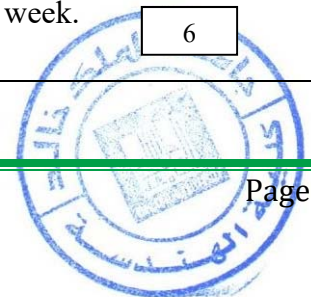
<ul style="list-style-type: none"> • Re-draw the existing building private villa (Part-1):- • Draw by using pencils <ul style="list-style-type: none"> ○ Isometric Floor plan ○ Sections ○ Two (outdoor) Perspectives 	1	8
<ul style="list-style-type: none"> • Re-draw the existing building private villa (Part-2):- • Draw by using ink pen <ul style="list-style-type: none"> ○ Architectural Floor plans ○ All Elevations ○ 3D Sections 	1	8
<ul style="list-style-type: none"> • Re-draw the existing building private villa (Part-1):- • Draw by using ink pens <ul style="list-style-type: none"> ○ Isometric Floor plan ○ Sections ○ Two (outdoor) Perspectives 	1	8
<ul style="list-style-type: none"> • Re-draw an architectural item • Draw a modular element of the prophets mosque (entrance gate) <ul style="list-style-type: none"> ○ Elevation ○ Isometric view 	2	16
	14	112

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x8			112
	Actual						
Credit	Planned			14x4			56
	Actual						

3. Additional private study/learning hours expected for students per week.

6



4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various definitions Architectural Graphic Fundamentals i.e. Lines, lettering and dimensioning.	Lectures and text book will help students to understand the element of architecture graphics, class discussion	studio sheet work, Written exam & Assignment
1.2	Students will be able to <u>recognize</u> their sketching ability to live object perspective	Lectures, tutorials and practice	Oral discussion, quizzes, and presentation
1.3	To <u>outline</u> an overview of all sketch manuals and patterns of draft drawings.	Lectures and Tutorials	Class Assignments
1.4	<u>Memorization</u> of various rendering pattern, light & Shadow effect & proportions regarding free hand drawing etc.	Small group work, hands on learning activities	Portfolios, Quizzes on completion of each topic & Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between free hand drafting and drafting by equipment	Lectures and studio manual, brainstorming	<ul style="list-style-type: none"> Evaluation of Manual sketch sheet work Class assignment
2.2	Students can <u>analyze</u> the sketching model of live object and virtual objects	Sketch notes to study the various live & virtual objects	<ul style="list-style-type: none"> Quizzes. Students portfolio
2.3	Students will <u>develop</u> their interest in drafting methods & various drawings scale	Lectures, Guidance and supervision	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules of free hand drawings along with their appropriate proportion with lighting and shadow effect of any real or virtual object.	Team based learning-tutorial and practice.	Class manual sketching assignment, portfolio and Final exams
3.2	Student will be able to <u>show</u> their draw sketches for architecture graphics work	Collaborative learning group assignments,	Class Assignments, individual sketch work & creativity,

		Small group work, Whole group discussion	portfolios, sheet work in class for judging individual creativity.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to architectural design	Computer Labs, Participation during the lectures,	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the real and virtual object and can exhibit by a strong verbal/visual communication with presentation skills.	Individual Presentation, Encourage the students to seek information	Evaluation of oral presentation, Analytical reports
5.0	Psychomotor		
5.1	N.A.		

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#															
1.2					#											
1.3	#															
1.4					#											
2.1						#										
2.2								#								
2.3						#		#								
3.1												#				
3.2												#				
4.1															#	
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Griffin, A.W. and Brunicardi, V.A (1998), Introduction to Architectural Presentation Graphics: Prentice Hall
- Ciriello, M. (2002), Architectural Design Graphics: McGraw-Hill

2. List Essential References Materials (Journals, Reports, etc.)

- Ching, F.D.K (2003), Architectural Graphics (4th Ed.): John Wiley
- Gill, W Robert (2012), Rendering with Pen and Ink

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.cs.brown.edu>
- [http://www.dtcc.edu/-document,project info - Arch.dwg.](http://www.dtcc.edu/-document,project%20info%20-%20Arch.dwg)
- <http://design.tutsplus.com/articles/technical-drawing-for-beginners-an-introduction-to-perspective--vector-21707>
- <http://www.wikihow.com/Draw-Perspective>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

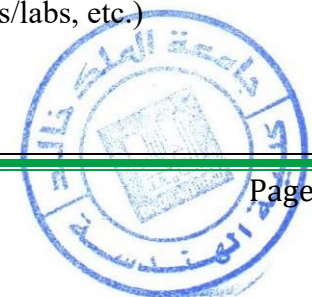
- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 studio Room for group of 20 students.





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National Center for Academic Accreditation and Evaluation

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam





<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none">• External reviewer feedback.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Design Sketching (121-ARC-2)			
2. Credit hours: 2 credit (0L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 2nd / 1stYear			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is –

- Draw with ease any object placed before him/her (without the use of rulers, T-squares, set squares etc);
- Attempt rapid or quick sketches with minimal mistakes;
- Draw various forms, from natural landscapes and human figures;
- Draw human activities and postures;
- Attempt using any wet media for graphic communication.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Enhance use of visual aids for better understanding of the subject, the art of famous artist can be shown to students at national & International both and can be incorporated for further future course.
- Lecture & small group work teaching methods might be involved to enhance the sketching ability of students as available on net or power point presentation.
- Sketch handouts will be given to the students at the beginning of the unit once the course offered again.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course is mainly a practical oriented course. It is an introduction to freehand sketching. It provides a basis for which students can develop their graphic communication in architecture by expressing themselves using pencils and markers etc on paper or any other suitable media. It takes steps towards introducing the students to line drawings, sketches of assembled objects within the studio, sketches of human figures, cars, trees and a combination of all these, rapid sketches of objects, buildings, and buildings entourage, and also introduction to simple floor plans. As a practical course, the focus is to impart useful skills on the students in order to enhance their drawing abilities using freehand techniques (i.e. without the aid of mechanical drawing instruments) and prepare them for architectural design -a studio base course in higher levels.



Topics to be covered include Line exercises, sketching assembled objects, cars, trees and people around buildings. Rapid sketches of assembled objects, buildings and entourage to such buildings and image transfer in black and white media among others.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
General Introduction and overview of design sketching with various examples & drawings of buildings on white board. Types of Sketch drawings, Sketch drawings with memory. Sketch Drawing with observations, Drawing from dimensional information, Drawings from imagination. Expressive sketch drawings. Focuses on sketching tools, such as visualization, annotation, 2D and 3D sketches. Homework- Draw Any furniture sketch	1	4
Brief introduction about the lines sketching and their values in Architecture & discussing type of formats for A3 sheets. Line exercises: Horizontal, vertical, diagonal lines. Combination of lines, free forms.	1	4
Angle line Sketching- Brief introduction about Angle lines and learn them for object sketching. Sketching of simple objects within the studio. Homework- Make an A3 sheet by Creating the organised hatching pattern composition using 45 degree angle lines in both directions along with the size of 2cmx1cm	1	4
Curve pattern and lettering style: Familiarization with learning drafting, sketching, lettering and rendering techniques under various sizes guidelines and tell them the value of lettering in the drawings while writing individuals titles inside drawings layout and the bottom sheet format as well . Free hand drawings for small curves. Homework- Lettering (alphabet+numeric) with guidelines on A3 sheets with proper designed format and well composition in small and caps letter.	1	4





<p>Basic Elements and Design-1: Drawing and rendering of geometrical elements and analytical study of these shapes in 2D and 3D both, such as: circle, cylinder, rectangle and pyramid. Also discussing the shadow guidelines at 45 angles for the basic shapes elements i.e. Square, rectangle and sphere free hand drawings as home work.</p> <p>Homework- A3 sheet with square(cube), rectangle(cuboid) and Circle(sphere) each 3 nos shade at 45 angle.</p>	1	4
<p>Scale- Brief discussion over scale and its value in architecture, Engineers scale, Graphical scale and Representation factor (R.F.) Scales on drawings. Also ask for bottles sketching to analyse the proportions of bottles shapes and their shadows accordingly.</p> <p>Homework- A group of variety of bottle sketches with showing proper shadows.</p>	1	4
<p>Basic Elements and Design-2: Based on previous exercise for geometrical elements i.e. circle, cylinder and cone based building design and also proper proportion study of these shapes actual building style in various creative aspects at individual level for each students. Also discussing the furniture sketches for the drawings hall at their home in proper rendering and should include the plans and elevations i.e. sofas as home work.</p> <p>Homework- A group of variety of sofa sketches with showing proper rendering and proportions.</p>	1	4
<p>Quick sketch- Draw free hand sketching of existing Administration building in university campus with two corners using the site plan of the campus. Also illustrating the landscaping elements i.e. trees, plants, slope and plane road, paring areas, building materials i.e. stone, glazing. Also discussion of basic perspective principles in the studio.</p> <p>Homework- same extended to work in more detail.</p>	1	4
<p>Space Analysis- Discuss the Zoning bubbles diagram for a given building, its location plans, functionality of small spaces inside with proportions, study of building sections for studying light, AC duct location and skylights, Elevation study in different masses of the building showing all the elements and detailed about the materials.</p> <p>Homework- same extended to work in more detail.</p>	2	8





Breaking Units - Discuss the various repetitive structure units in plans, elevation and different views from the development to design stages. The modules are in varying size with breaking units methods. As the concept of breaking the structural bays down into spatial units helped students to understand the typology and maintaining human scale, which breaks down the massiveness of the interiors. Homework- Draw the various sketch (plans, elevations and views) of door entrance for the mosque in Dom style from initial to complete design stages on A3 sheet.	1	4
Architectural Graphics Various types of graphics patterns using different grades of pencils as individual and combination form. These graphics pattern should follow a proper hatch pattern justifying the light and dark effects.	1	4
Natural Section Sketching scene from memory and observation of nature, buildings etc. This section should emphasize the various graphical representation for the mountains, landscaping elements i.e. water, trees etc. along with building block section and sky as a background effect.	1	4
Landscaping- Actual graphical representation for the various types of trees showing different types of graphics and rendering techniques. Emphasize to be given to trees various foliage and their light and shadow effects. Home exercise for Human figures and Design process.	1	4
	14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x4			56
	Actual						
Credit	Planned			14x2			28
	Actual						

3. Additional private study/learning hours expected for students per week.

4



4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various types sketching drawings and methods to draw with memory, observation & imagination.	Lectures, text book	Written exam & Assignment, Artwork & concept mapping evaluation
1.2	<u>Recognize</u> their sketching ability to draw many line exercises.	Lectures, tutorials and practice	Oral discussion, quizzes, and presentation
1.3	To <u>outline</u> an overview of all sketch manuals and patterns of free hand sketches.	Hands-on student learning activities	Class Assignments Midterm exam
1.4	<u>Memorization</u> of various sketches through observation & assembled objects outside the studio/classroom.	Team work	Portfolios, Quizzes on completion of each topic & Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the sketching through design elements imagination to live object as buildings.	Critical thinking, Site visits	<ul style="list-style-type: none"> Evaluation of Manual sketch sheet work Class assignment
2.2	Students will be able to <u>analyze</u> the sketching model of live object and virtual objects	Problem based learning, Brainstorming	<ul style="list-style-type: none"> Quizzes. Students portfolio
2.3	Students will <u>develop</u> their interest in drafting methods & various drawings scale for human postures with car, trees and people around building.	Lectures, Guidance and supervision of the individual assignments	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission
2.4	Student will be able to analyses the built and unbuilt (natural) space.		<ul style="list-style-type: none">
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules quick sketch designing, space analysis along with their appropriate	Small group work	Assignment to assess their sketch component work



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	proportion with lighting and shadow effect of any real or virtual object.		Explain and communicate the students results in lectures
3.2	Student will be able to <u>show</u> their design sketching task for architecture design work/ buildings and graphical patterns.	Role playing & debates	Class Assignments, individual sketch work & creativity, portfolios
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to architectural design	Brain storming, Participation during the lectures.	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the sketch design work with actual through observation or imagination.	Encourage the students to help each other, observation class room interaction.	Evaluation of oral presentation, Analytical reports.
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper design sketches and <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making
5.3	Students could <u>demonstrate</u> their design sketching task with live case study with built and unbuilt environment.	Lectures and live sketching views, notes, problem based learning	Assignments, concept mapping, drawing sheets.

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	5.1
1.1	#															
1.2					#											
1.3					#											
1.4	#				#											
2.1						#	#									
2.2							#	#								
2.3						#		#								
3.1												#	#			
3.2													#			
4.1															#	
4.2															#	
5.1																#
5.2																#

6. Schedule of Assessment Tasks for Students During the Semester
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	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Griffin, A.W. and Brunicardi, V.A (1998), Introduction to Architectural Presentation Graphics: Prentice Hall
- Ciriello, M. (2002), Architectural Design Graphics: McGraw-Hill
- Laseau Paul (2004) Free Hand Sketching: W.W. Norton & Company
- Travis S. (2015). Sketching for Architecture + Interior Design (1st ed.) UK: Laurence King Publishing
- Carpo, M., "Perspective, Projections and Design: Technologies of Architectural Representation", Routledge

2. List Essential References Materials (Journals, Reports, etc.)

- Gupitill L.(1997). Rendering in pen and ink (rev ed.) US: Watson-Gupitill Publication.
- D. K. Francis and Juroszek Steven P. (2010) Design Drawing (2nd Ed) Hoboken, New Jersey : John Wiley & Sons
- Ching Francis D K (2009). Architectural Graphics (5th Ed.): John Wiley & Sons.
- Gill, W Robert (2012), Rendering with Pen and Ink
- Lorraine F.(2008). Basics Architecture 01: Representational Techniques (1st Ed) : Fairchild Books AVA
- Lewis D. (1984) Pencil drawing techniques (1st Ed) : Watson-Gupitill Publications

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.



- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.technologystudent.com/designpro/ortho1.htm>
- <https://design.tutsplus.com/articles/technical-drawing-for-beginners-an-introduction-to-perspective--vector-21707>
- <https://design.tutsplus.com/tutorials/technical-drawing-for-beginners-three-point-perspective--vector-23680>
- <http://www.aproged.pt/biblioteca/handbookofdrawing.pdf>
- <http://www.wikihow.com/Draw-Perspective>
- <http://design.tutsplus.com/articles/technical-drawing-for-beginners-an-introduction-to-perspective--vector21707>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

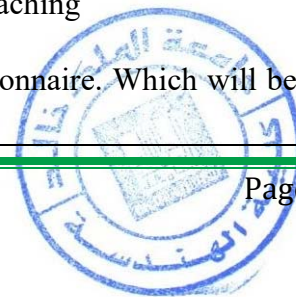
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester





<ul style="list-style-type: none">• Students Faculty meeting (once during semester)• Faculty-students periodical meeting (during office hours)• Analysis of students' performance on the tests and final.• Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none">• External reviewer feedback.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____

Date Received: _____



Course Specifications-5

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 1 (210-ARC-5)			
2. Credit hours: 5credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 3rd/ 2ndyear			
6. Pre-requisites for this course (if any): 120-ARC-4			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To improve the graphic communication and initiation into design; and also explore spatial thinking in basic structural forms and shapes.
- To conceptualize and develop the skills of studio exercises i.e. drawing is seen as an essential tool, along with modelling.
- To place an emphasis on the making of an artefact.
- To develop, refine, and communicate design ideas.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- All the handouts regarding architecture design terminology given to the students.
- Increased use of power point and projector in classroom to familiar student with arch design time to time.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Virtual classroom
- Increased use of visual aids.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This Architecture studio facilitates a series of exploratory design exercises and projects intended to familiarize the beginning student with fundamental technological issues in architecture design. The series starts with the initial step of working with the material through modelling.



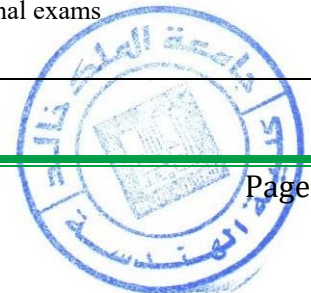
1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Lectures		
<ul style="list-style-type: none"> Introduces the architectural design process, including issues of concept making and design development. Work on drawing sheets for the concept making and design development for an assign small project. 	2	20
<ul style="list-style-type: none"> Spatial analysis (with the emphasis on spatial relationships). On board about detail spaces like sketches. 	2	20
<ul style="list-style-type: none"> Conducting experiments using a Manual Lab. Design and development drawing schedule as manual studio 	2	20
<ul style="list-style-type: none"> Function and circulation in relation to modest building types. 	2	20
<ul style="list-style-type: none"> Primarily rural settings through sheet work. 	3	30
<ul style="list-style-type: none"> Site planning and the sense of structure on sheet during studio. 	3	30
Total	14	140

2. Course components (total contact hours and credits per semester):						
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:
Contact Hours	Planned			14x10		140
	Actual					
Credit	Planned			14x5		70
	Actual					

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
<p>On the table below are the five NQF Learning Domains, numbered in the left column.</p> <p>First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)</p>

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>memorize</u> various methodology of design process & Standards of different buildings' elements.	<ul style="list-style-type: none"> Lectures and text book Class-work 	<ul style="list-style-type: none"> Team Presentation (Design problem) (to express design process on transparent sheet to assess student visualization) Oral Discussion
1.2	Students will be able to <u>define</u> various mode of integration during architectural planning & Functional relationships between elements of buildings	<ul style="list-style-type: none"> Individual presentation with wide variety of hands-on student learning activities, Group discussions 	<ul style="list-style-type: none"> Assignment Exercise (weekly sketch design & explain sheet work feedback) Portfolios
2.0	Cognitive Skills		
2.1	Ability to <u>explain</u> the basic difference between the form and functions of various design aspects by making study model.	<ul style="list-style-type: none"> Lectures Site Visit & research activities 	<ul style="list-style-type: none"> Design problem with small introduction Home assignment Monitoring the progress of student work on weekly basis
2.2	Ability to <u>analyze</u> architectural problems in accordance with the researched standards.	<ul style="list-style-type: none"> Study notes for research standards Critical thinking Debates 	<ul style="list-style-type: none"> Analytical reports (each group level, at the end of the semester students present an architectural design project which reflects their final evaluation for the whole problem and discuss the diverse methods that rate their judgment for the final solution.) Case-Studies
2.3	Students will <u>develop</u> their interest to know the use of design elements, scale and proportion.	<ul style="list-style-type: none"> Experimental Architectural design and its outcomes Brainstorming 	<ul style="list-style-type: none"> Students portfolio (It will show the criteria of student's evaluation for which their design is accurate, effective, economical & environmentally satisfying)
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules for any existing design and imaginary design problems.	<ul style="list-style-type: none"> Awareness of time management in completing their reports. 	<ul style="list-style-type: none"> Evaluation of group reports (individual contribution within the group)
3.2	Student will be able to <u>show</u> their creative architecture design work in proper sequence of drawing hierarchy i.e. site planning, elevation, sections, 3D views and model making exercises	<ul style="list-style-type: none"> Encourage students to help each other Team based learning- Tutorials and practice 	<ul style="list-style-type: none"> Peer evaluation or self-assessment of student at individual and group basis. Assess complete Student portfolio Final exams





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3.3	Students are required to cooperate in the whole system to <u>demonstrate</u> their skills and to carry out their responsibilities.	<ul style="list-style-type: none">• Group presentation• Role playing• Experimental Learning-Lab. demonstrations.	<ul style="list-style-type: none">• Meeting deadlines for the assignments.• Helping each other in doing their experiments
4.0	Communication, Information Technology, Numerical		
4.1	Writing reports and giving presentation that <u>evaluate</u> language ability.	<ul style="list-style-type: none">• Individual projects presentations digitally (All students are obliged to present)	<ul style="list-style-type: none">• Videos• Analytical reports Individual and group presentations
4.2	Using architectural software programs to <u>operate</u> graphic ability.	<ul style="list-style-type: none">• Social networking tools.• Dialogue discussion	
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#																
1.2					#												
2.1						#	#										
2.2									#								
2.4						#			#								
3.1												#					
3.2													#				
3.3												#					
4.1														#			
4.2															#		
5.1																	#
5.2																	#



6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> • Project and site selection • Concept of the Project • Layout Study • Plans study • Elevation Study • Sections Studies • 3D study • Review and presentation 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	16	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

- List Required Textbooks
 - Ching Francis D. K. (2007) Architecture: Form, Space, and Order (3rd ed.): John Wiley & Sons
 - Neufert, P., Neufert, E. (2000): Architects Data (3rd Ed)., Blackwell Science
 - Watson Donald and Crosbie Michael J (2004) Time savers standards for Architectural design (8th edition): McGraw-Hill Education.
- List Essential References Materials (Journals, Reports, etc.)
 - Patterson Terry L. (2002) Architect's Studio Handbook (1st Ed):, McGraw-Hill
 - Farshid Moussavi, Daniel Lopez, Garrick Ambrose (2009) The Function of Form : Harvard
- List Electronic Materials, Web Sites, Facebook, Twitter, etc.
 - Blackboard, King Khalid University (lms.kku.edu.sa)
 - <http://www.hampsons.com/freshair>
 - <http://www.columbiamedical.com/>





- <http://www.mgarchitects.com/>
- www.greatbuildings.com
- www.newschoolarch.edu
- www.dexigner.com/directory/cat/architecture/design_studios
- www.troutdesign.com

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

Software needed: -

- Autodesk Auto CAD.
- Autodesk Revit.
- Autodesk 3D Max.
- Sketch-up.
- Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)





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<ul style="list-style-type: none">• Faculty-students periodical meeting (during office hours)• Analysis of students' performance on the tests and final.• Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Review of recommended teaching strategies.• Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.• Periodical revision of the method of teaching and the course specifications• Student feedback and learning outcomes
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff• Compare the standards of achievement in the course with standards achieved elsewhere.
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none">• Feedback of external reviewer.• A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-6

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: History of Architecture (211-ARC-3)			
2. Credit hours: 3 credit (3L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 3rd/ 2ndYear			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To expose the evolution of different architectural solutions through historical periods within the restraints of prevalent socio-culture, geography, climate, building materials and techniques, structural complexities and technology available at the time.
- To generate an understanding about the development of civilization and its architectural implications.
- To familiarizing with typical examples of building type.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- The emphasis should be to highlight the salient features of a style, awareness about the planning, construction, function and aesthetics of historical buildings and an appreciation of architectural style as a product of the time, place and culture in the western world.
- Virtual classroom Assignments in History should include the model of a historical building.
- Involvement of wiki in research work.
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- Lecture & small group work teaching methods might be involved to enhance the sketching ability of students as available on net or power point presentation.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.





C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course introduces students to the history of world architecture by examining the origins and elaboration of human settlements and architecture, from prehistory to the medieval era. Particular attention is given to the evolving status and role of the architect in the ancient world, as well as to the development of architecture as an autonomous category of cultural artefact

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
• Introductory module: prehistoric architecture.	2	6
• Architecture of the Ancient near East (ANE).	2	6
• Ancient Egyptian and Aegean architecture.	2	6
• <u>Greek Architecture</u> General study of location, influences and architectural character of temples, theatres, public places and cities. Greek orders. Representative examples of Mycenae. Parthenon, Erechtheion, Dionysos, Agora, Cities of Miletus, Priene. Brief study of Greek art and culture.	2	6
• <u>Roman architecture.</u> General Study of important forums, temples, basilicas, thermaes, theatres, amphitheatres, circuses, tombs, triumphal arches, Aquaducts, Roman Orders, palaces, houses and villas. Representative examples of the Pantheon, Colosseum, Forum of Augustus, Basilica of Trajan, Basilica of Constantine, Thermae of Caracalla, Circus of Marcellus. Brief study of Roman art and	3	9





<p>• <u>Early Christian and Byzantine architecture.</u></p> <p>Early Christian and Byzantine Architecture: General study of structural and construction system of Early Christian and Byzantine architecture. Development of pendentives. Representative examples of St. Sophia, Constantinople, St. Peters basilica of Rome.</p>	3	9
	14	42

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x3					42
	Actual						
Credit	Planned	14x3					42
	Actual						

3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various period with their buildings style with their socio-cultural aspects	Lectures, tutorials and text book	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam



1.2	<u>Telling</u> the students with the basic concept of evolution of form in different dynasty as Greek, Roman, Early Christian and Byzantine architecture	Lectures, tutorials and practice, class discussion	Individual assignment Oral discussion, quizzes, and presentation
1.3	<u>Memorization</u> of various civilization of Pre-Historic and Modern Architecture	Lectures, tutorials and practice, dialogues , Interactive classes	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know the use of design elements, scale and proportion in between Pre-Historic and modern period.	Lectures and Lab task, individual learning	Group and individual assignment
2.2	Student can <u>explain</u> the basic difference between the architecture civilization from Pre-Historic to Modern period	Explanations and examples given in lectures, Assignment based on open ended tasks and problem solving approach	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze</u> the Architectural major aspects as form and function, construction techniques and building services in both eras	Lectures, Guidance and supervision of the individual assignments & tutorials, self-learning	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Student will be able to <u>show</u> their creative architecture design work in proper sequence of civilization from pre-modern to modern period.	Peer review for students weekly presentations, Group presentation/ discussion	group assignment evaluation includes component for individual contribution, midterm exam, Peer-Evaluation
3.2	They will <u>illustrate</u> the application of these historical standard terms and concept into their imaginative work of drawings with considering aesthetic aspects	Investigation of student skill & capability for historical terminology about drawings & aesthetic aspects.	individual assignments for independent study assessed, individual sketchbook historical diagram, Final exams.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design style of pre-modern to modern with its design elements.	Participation during the lectures, Student assignments with ICT standards, Social networking tools	Class/Material Lab participation assignments & Quizzes, oral discussion, E – learning home work
4.2	Students can <u>evaluate</u> the difference between the pre-modern and modern on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Critical discussion of their work, Writing reports & Student essay assignment in college style manual, class room interaction	Evaluation of oral presentation using ICT, test questions, Analytical reports
5.0	Psychomotor		
5.1	N.A.		



5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#			#												
1.2			#													
1.3	#		#	#												
2.1									#							
2.2									#							
2.3									#							
3.1											#					
3.2											#					
4.1														#		#
4.2															#	#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks



<ul style="list-style-type: none"> • J. J. Norwich (1975) Great Architecture of the World (1st ed.) London: Mitchell Beazley Publishers Limited, • Sir Banister Fletcher (2002) A History of Architecture, (20th edition)
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> • D Watkin (1986) A History of Western Architecture (1st Ed): Thames and Hudson, • B. Fletcher (1996) A History of Architecture (20th Ed.): Butterworth Heinemann.
<p>3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p> <ul style="list-style-type: none"> • Blackboard, King Khalid University (lms.kku.edu.sa) • http://www.ancient-greece.org/architecture.html • http://www.tribunesandtriumphs.org/roman-architecture/ • http://www.crystalinks.com/romearchitecture.html • https://www.google.co.in/#q=early+christian+byzantine+and+romanesque+architecture+ppt
<p>4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations



3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.





5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Introduction to Geo-Sciences (212-CE-3)			
2. Credit hours: 3 credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 3 / 2nd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- Ability to apply knowledge of mathematics, science, and engineering to understand the measurement techniques and equipment used in land surveying and Geotechnical Engineering.
- Ability to apply knowledge of mathematics, science, and engineering to understand the measurement techniques and equipment used in land surveying and Geotechnical Engineering.
- Ability to work in-group and coordinate the given tasks as a member of a team.
- Understand the importance of professional licensure to protect the public in the practice of land surveying and Geotechnical Engineering.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Group discussion and interactive class environment should be introduced
- Lecture & small group work teaching methods might be involved to enhance the awareness about modular design & construction..
- Studio assignments for understanding practical implications.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- More real life example

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Modular design is basically a coordination design tool that provides modern design principles and rules which combine freedom in architectural planning and free choice of construction method, with the possibility of incorporating standardised modular components in the project.

1. Topics to be Covered

List of Topics

No. of
Weeks

Contact hours



Unit-1	<ul style="list-style-type: none"> An Overview of Geoscience Engineering Capabilities of Geoscience Engineering Hardware and Software requirements Application of Geoscience in Urban Planning Classification of Geoscience Engineering 	3	12
Unit-2	<ul style="list-style-type: none"> Units of measurements International system of units (SI) Significant Figures Rounding off numbers 	2	8
Unit-3	<ul style="list-style-type: none"> Linear measurements Levelling Theory and practice Theodolites and Total Station Traversing 	2	8
Unit-4	<ul style="list-style-type: none"> Introduction to new technology used in surveying Introduction to GIS Introduction to Remote Sensing Surveying using GPS tool 	3	12
Unit-5	<ul style="list-style-type: none"> Introduction to Geotechnical Engineering Soils and Rocks classification Overview of main tests in laboratory and in-situ Introduction to Modeling used in Geotechnical Engineering Stability of Civil Engineering works and prevention risk Mapping and plans used in Geoscience Engineering 	4	16
		14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2=28	14x2=28				56
	Actual						
Credit	Planned	28	14				42
	Actual						



3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Defining various components of geoscience engineering.	Lectures, Class discussion, Visual presentation, Tutorial (video + practical)	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	Telling the students with the basic concepts of standardization – need and importance.	Lectures, tutorials and practice, site visit	Individual assignment Oral discussion, quizzes, and presentation
1.3	Memorizing the various terminologies of Geo-science in urban planning.	Lectures, tutorials and practice, interactive classes	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know about the theodolites and total stations.	Lectures/teaching students how to perceive attentively and critically	Group and individual assignment
2.2	Student can explain the basic difference between the various GIS components	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial, Surprise tests to know the level of student for further proactive solution like special hours for the weak students. Lab assignment and independently performing tutorials	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio



2.3	Students can <u>analyze</u> the classification aspects with all types of soil and rock.	Lectures, Guidance and supervision of the individual assignments& tutorials, debates	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can justify the fundamentals rules for positioning of functional elements: slabs, walls, staircases	Peer review for students weekly presentations, Group presentation.	group assignment includes component for individual contribution
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to building module in building design with remote sensing.	Participation during the lectures, Student discussion on construction methods	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	<u>Realizing</u> the interrelationship of mapping and plans in geoscience engineering	Lecture, Critical evaluation of their work, Writing reports & Student essay assignment in college style manual	Student assignment & project work, test questions, workshop exam, written test
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#		#											
1.2			#	#												
1.3	#		#	#	#											
2.1						#	#		#	#						
2.2						#			#							
2.3							#			#						
3.1											#		#			
4.1														#	#	
4.2																
4.3																

6. Schedule of Assessment Tasks for Students During the Semester
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	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Duggal S K, " Surveying " (vol-1&2) 9th edition , Tata McGraw Hill, 2013
- Paul R. Wolf and Chales D. Ghilani " Elementary Surveying an introduction to Geomatics "12thedition , Pearson Prentice Hall, 2008
- Das, B., "Principles of Geotechnical Engineering", 8th edition, Brooks/Cole, 2014.

2. List Essential References Materials (Journals, Reports, etc.)

- Barry Kavanagh, “ Surveying Principles and Application” Pearson, 8th edition, 2009
- Clarke, Keith C. ,l Getting started with geographic information systems 5th ed. Pearson Education, 2011

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.docstoc.com/docs/136085590/What-is-Modular-Coordination>
- http://www.bca.gov.sg/Publications/BuildabilitySeries/others/mcg_intro.pdf
- <http://www.cavitytrays.co.uk/closers/view/3/47/1/type-d-damp-proof-course-vertical->
- <http://civildigital.com/prefabricated-structures-prefabrication-concept-components-advantages-ppt/>
- <http://www.slideshare.net/neni009/curtain-wall-26074405>





المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

- <http://www.docstoc.com/docs/136000429/prefabrication-ppt>
- <https://www.cmhc-schl.gc.ca/en/inpr/bude/himu/coedar/upload/glass-aluminum-curtain-wall-systems.pdf>
- <http://www.aparnaenterprisesltd.com/upvc.html>
- http://www.nicee.org/iaee/E_Chapter3.pdf

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 studio Room for group of 20 students.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.





• Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none">• Feedback of external reviewer• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-8



Institution: King Khalid University	Date:.
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Principles of Architectural Design (213-ARC-3)			
2. Credit hours: 3 credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 3rd / 2nd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	90
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input checked="" type="checkbox"/> Yes	What percentage?	10
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			

B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To understand the theory of architectural design and principles pertaining to the visual and aesthetic aspects of architecture.
- To familiar students with the various principles element of design to perceive the architecture drawing.
- To enhance the capability within students with various additive and subtractive architecture principles.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increase use of visual aids
- Lecture & small group work teaching methods might be involved to generate the ability of students as available on net or power point presentation.
- Final portfolio contains of manual design work (for principles of design) with other tasks.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

The course involves introducing architecture as a discipline, to develop sensitivity towards the aesthetic and psychological experience of form and space and to make aware of how meaning is created in architecture.

1. Topics to be Covered





List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> Understanding of appropriate terms – architecture, design art, fine art, visual art, architectural design and other types of design; comparisons of aesthetics in art and architecture. 	3	12
<ul style="list-style-type: none"> Principles of 2-D design elements, such as point, line, polygon and its visual variable such as orientation, shape, size, colour and texture; 3-D design profiles of geometric forms and their arrangement in different compositions. 	3	12
<ul style="list-style-type: none"> Harmony and contrast in 2-D and 3-D design; interplay of light and shade on building blocks and their effect. 	2	8
<ul style="list-style-type: none"> Scale and proportion in architecture; Le Modular and other concepts 	2	8
<ul style="list-style-type: none"> Principles of design i.e. Style, rhythm, balance, unity and order, contrast, emphasis etc. 	2	8
<ul style="list-style-type: none"> Form and function in architecture; use of building materials, construction techniques and engineering services for different functions. 	2	8
	14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2=28	14x2=28				56
	Actual						
Credit	Planned	2	1				3
	Actual						

3. Additional private study/learning hours expected for students per week.

5

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various principles of design parameters as pattern, contrast, emphasis, balance, style. Rhythm and order.	Lectures and text book, class discussion	Written exam & Assignment, written test
1.2	<u>Describing</u> the basic concept of Form and Function, construction techniques in architecture.	hands-on student learning activities, individual presentation	Report evaluation & sheet work feedback
1.3	<u>Memorization</u> of various terms i.e. architecture, design art, fine art, visual art, architectural design and other types of design.	Small group work, seminar	Portfolios, Quizzes on completion of each topic & Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the architecture principle terms i.e. design art, fine art, visual art, architectural design etc.	Lectures and course manual, problem based learning, Homework	<ul style="list-style-type: none"> Evaluation of Manual sheet work Class assignment Seminar and discussion
2.2	Students will be able to <u>compare</u> the Architecture major aspects as form and function, construction techniques and engineering services	Study notes, tutorials, debates	<ul style="list-style-type: none"> Quizzes. Students portfolio Evaluation of report Video analysis
2.3	Students will <u>develop</u> their interest to incorporate the use of design elements with scale and proportion in Architecture design.	Engaged students in team work discussions session with questions & answers.	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission





3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules for theory of design, Principles of Architectural Design and elements of design	Collaborative learning group assignments, Small group work, Whole group discussion	Evaluation of group reports and individual contribution within the group, timely quiz
3.2	Student will be able to <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects	Debates, Tutorial and practice, special contact hours to weak students	<ul style="list-style-type: none"> • Peer or self-assessment • Student portfolio • Final exams
4.0	Communication, Information Technology, Numerical		
4.1	<u>Participation</u> through questions and discussion during the lectures	Participation during the lectures, Critical interaction of Power point presentation	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the real and virtual, visual and functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/visual communication with presentation skills.	Tutorials and practice, Dialogue discussion	Evaluation of oral presentation, E – learning home work
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#		#											
1.2	#		#													
1.3	#	#			#											
2.1						#		#	#							
2.2							#		#							
2.3						#	#	#								
3.1												#				
3.2												#				
4.1														#	#	
4.2														#		



6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Fisher Thomas (2008) Architectural Design and Ethics (tools for survival).(1st Ed.), Burlington, MA, USA : Architectural Press
- Ching FDK (2014) Architecture: form, space and order, (4thEd) Hoboken, New Jersey : John Wiley & Sons

2. List Essential References Materials (Journals, Reports, etc.)

- Smith Peter F. (2003) The Dynamics of Delight: Architecture and Aesthetics (1st Ed.), London: Routledge Publication

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.slideshare.net/fdjaipur/theory-of-design-9068949>
- <http://www.scribd.com/doc/80579364/Architectural-Theories-of-Design>
- <http://www.winchester-cathedral.org.uk/history-treasures/art-architecture/>
- <http://www.johnlovet.com/test.htm>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.



- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Self-Evaluation of instructors.

3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

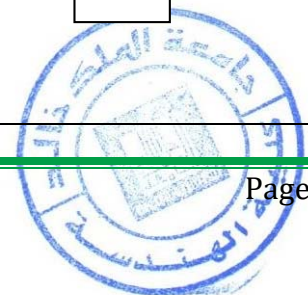


Course Specifications-9

Institution: King Khalid University	Date:..
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 2 (220-ARC-5)			
2. Credit hours: 5 credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 4th/ 2ndYear			
6. Pre-requisites for this course (if any): 210-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	85
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	15
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			





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B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To introduce the student to the expressive and communicative potential of architectural assemblage;
- To involves analytical thinking in design.
- To response to site constraints; site design; architectural programming; materials and technology.
- To explore of functional, aesthetic, and structural aspects of buildings.
- To develop a complete a set of graphics for architectural design projects.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Virtual classroom for small design work which will include the model for better understanding of spaces and form.
- Students should make free-hand conceptual sketches of design work using by geometrical shape in integration.
- Announcement for course messages.
- Increased use of power point and projector in classroom to familiar student with arch design time to time.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- More real life examples.



C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

- This course continues the study of the development of design principles from architecture studio-I (ARC 200). In this Architectural Design intended to improve student awareness and skills needed to deal with the different philosophical perspectives, the various school of thought, and recent trends in contemporary architecture and also space definition is supplemented with human, cultural and localized contextual needs. The course runs three days per week for three and one half hours each day. The studio is utilize the conventional tools for the architecture design after that it focus on 3-D modelling and introduces 2-D imaging and desktop publishing software, along with scanning, collage and page layout instruction

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> In this studio, small and minimally complex projects will be carried out that explore the functional, aesthetic and structural issues. 	6	60
<ul style="list-style-type: none"> Continued development of the creative architectural design process and techniques of medium sized building types, primarily in an urban setting, involving consideration of program, space, site context, structure, and mechanical equipment systems. Conducting Experiments using Manual Lab 	8	80
	14	140

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planed			14x10			140
	Actual						
Credit	Planed			14x5			70
	Actual						

3. Additional private study/learning hours expected for students per week.

8

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>memorize</u> various methodology of design process & Standards of different buildings' elements	Lectures and text book, Class discussion	Seminar and discussions (power point to express design process on transparent sheet to assess student visualization)
1.2	Students will be able to <u>define</u> various mode of integration during architectural planning & Functional relationships between elements of buildings	individual presentation with wide variety of hands-on student learning activities, Group discussions	Design assignment (Weekly sketch design evaluation & explaining sheet work feedback, Special hours for the weak students and giving extra time after the completion of every session)
2.0	Cognitive Skills		
2.1	Ability to <u>explain</u> the basic difference between the form and functions of various design aspects by making study model	Lectures and text book, Peer review for students weekly presentations, dialogue and class discussion, Engaged students in team work, discussions session with questions & answers.	<ul style="list-style-type: none"> Analytical report, Design problem with small introduction /Class assignment Faculty observations Concept mapping
2.2	Students can <u>analyze</u> the Architectural major aspects incorporating the various services supporting design	Study notes, experimental architectural design and its outcomes	Students portfolio (each group level, at the end of the semester students present an architectural design project



2.3	Ability to <u>illustrate</u> building components and focus on the relationships between various parts.	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking.	which reflects their final evaluation for the whole problem and discuss the diverse methods that rate their judgment for the final solution, Existing site case study)
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules for any existing design and imaginary design problems.	small group design problem, Role playing	Evaluation of group reports and individual contribution within the group
3.2	Student will be able to <u>show</u> their creative architecture design work in proper sequence of drawing hierarchy i.e. site planning, elevation, sections, 3D views and model making exercises	Group presentation, Lab demonstrations, Supporting and cooperating the studio in its social, economic, research and learning activities.	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & design elements to produce the final design output	Present projects and presentations digitally, Computer labs, Site demonstrations	Portfolios (showing assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format)
4.2	Students can <u>evaluate</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and 3D and other presentation tools.	Participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, Helping each other in doing their problems.
5.0	Psychomotor		





5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#				#												
1.2				#													
1.3	#			#	#												
2.1							#		#	#							
2.2						#	#	#	#								
2.3						#		#		#							
3.1											#	#					
3.2												#					
3.4												#					
4.1															#		
4.2														#		#	
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection Concept of the Project Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	16	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Patterson Terry L. (2002) Architect's Studio Handbook (1st Ed): , McGraw-Hill
- Neufert, P. (2000): Architects Data (3rd Ed)., Blackwell Science
- Rossi, A (1982) Architecture and the City: MIT Press,

2. List Essential References Materials (Journals, Reports, etc.)

- Boyer, M.C. (1996) The City of Collective Memory: Its Historical Imagery and Architectural: MIT Press
- Farshid Moussavi, Daniel Lopez , Garrick Ambrose (2009) The Function of Form : Harvard

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.hampton.com/freshair>
- <http://www.columbiamedical.com/>
- <http://www.mgarchitects.com/>
- www.greatbuildings.com
- www.newschooarch.edu
- www.dexigner.com/directory/cat/architecture/design_studios
- www.troutdesign.com

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

- Time Saver Standards

Software needed:-

- Autodesk Auto CAD.
- Autodesk Revit.
- Autodesk 3D Max.
- Sketch-up.
- Adobe Photoshop

F. Facilities Required





Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none">1 Studio Room for group of 20 students.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none">Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none">Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semesterStudents Faculty meeting (once during semester)Faculty-students periodical meeting (during office hours)Analysis of students' performance on the tests and final.Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">Department assessment by the related instructors & teaching staffFaculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.Review of recommended teaching strategies.Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.





- Periodical revision of the method of teaching and the course specifications.
- Student feedback for learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-10

Institution: King Khalid University	Date:..
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Computer Applications in Architecture - 1 (222-ARC-2)			
2. Credit hours: 2credit (0L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level4th/ 2ndyear			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	70
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	30
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is -

- To familiarise students with the CAD and BIM.
- Introduction and the use of software available for architectural applications
- To familiarize students with computers so as to understand complete management outlook of an architects' office besides architectural drawings.
- To teach graphic applications specially 2Dimensional for fast and attractive presentation of theme and ideas.
- To teach utilisation of knowledge of 3D modelling and its application in design.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- All the handouts given to the students. It is suggested that all these handouts be given to the students at the beginning of the course once the course offered again.
- Virtual Classrooms
- Increased use of updated software to improve the work efficiency.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Computer Application in Architecture is an introductory course to the field. The course involves a theoretical background on the newest capabilities that computer offer to architects. This course will prepare students to apply various computer applications in emerging a digital computer model of buildings. The topics covered include, 3D modelling, rendering, animation, as well as presentation drawing for built environment.

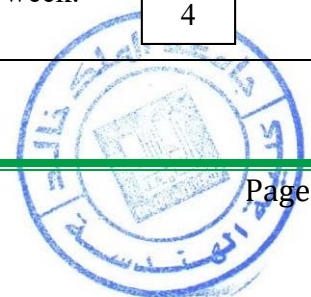




1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Introduction to various software available for the purpose of documentation, presentation and drawing.	2	8
• Introduction to computer programming to automated drafting function • Introduction of CAD and BIM as drafting tool.	2	8
• Familiarisation with the use of scanners, printers, plotters etc.	1	4
• Introduction to personal computing in an office environment	1	4
• Basic commands for 2D and 3D drawing, editing and modifying techniques.	2	8
• Standard layering system, associative dimensioning	2	8
• Blocks and External referencing system, layout management.	2	8
• Understanding basic composition in 2-D and the preparation of attractive compositions using relevant software.	2	8
	14	56

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x4			56
	Actual						
Credit	Planned			2			2
	Actual						

3. Additional private study/learning hours expected for students per week.	4
--	---



4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various software available for the purposes of documentation, presentation and drawings.	Lectures, class discussion and text book, self learning through the course website	<ul style="list-style-type: none"> Portfolios (drawing sheet of existing case study to draw manual with varying grade) CAD Lab assignments lab exams
1.2	<u>Recalling</u> students previous memory along their previous software skill	Lectures and Tutorials	<ul style="list-style-type: none"> Class Assignments
1.3	<u>Memorization</u> of various Basic commands for 2D and 3D drawing with editing and modifying techniques	Multiple choice test, class recitation/ tutorial, independent study assignments	<ul style="list-style-type: none"> Lab manuals Quizzes on completion of each topic Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between CAD and BIM	Lectures and Lab manual (help students to understand the command of CAD & BIM)	CAD lab assignments
2.2	Students can <u>analyze</u> the commands between CAD and their implication for create drawings of building in 2D and 3D both	Lab notes& practice , Role playing, brainstorming	<ul style="list-style-type: none"> Quizzes. Problem solving tasks Students portfolio
2.3	Students will <u>develop</u> their interest in drafting methods & to know the different stages of Architectural presentations, design & constructions.	Lectures, Guidance , Debates, Interactive classes	<ul style="list-style-type: none"> Final Exam Project presentation and Report submission
3.0	Interpersonal Skills & Responsibility		
3.1	Student will be able to <u>illustrate</u> the application of these software skills into their imaginative work of import drawings, drafting function in different formats	Peer review for students weekly presentations, Group presentation	<ul style="list-style-type: none"> Explain and communicate the students results in lectures, Midterm and final exams



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3.2	Students can <u>justify</u> the fundamentals rules of CAD and BIM to produce the 2D and 3D drawings.	interactive classes Lab demonstrations	• Lab Assignments, individual evaluation for drafting work & creativity
4.0	Communication, Information Technology, Numerical		
4.1	<u>Participation</u> through questions and discussion during the lectures & computer lab	Tutorials and practice, Participation during the lectures,	Class/ CAD Lab participation assignments & Quizzes, oral discussion
4.2	Students will be able to <u>interpret</u> the basics of CAD and BIM work relevant to architectural design.	Critical evaluation of their drafting and modeling work Individual presentations	Evaluation of oral presentation
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#			#												
1.2	#		#	#	#											
1.3			#		#											
2.1						#	#		#							
2.2									#	#						
2.3						#	#	#								
3.1												#				
3.2													#			
4.1														#		
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%

4	Final Exam	End Semester	50%
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D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Kalay Yehuda E. & Mitchell William J. (2004). Architecture's new media: Principles, Theories, and Methods of Computer-Aided Design: MIT Press
- John Elys (2013). CAD fundamentals for Architecture, (1stEd.) London, UK : Laurence King publishing
- Noble Douglas and Kensek Karen (2014) Building Information Modelling: BIM in Current and Future Practice, (1stEd) Hoboken, New Jersey : John Wiley & Sons

2. List Essential References Materials (Journals, Reports, etc.)

- Davies N. and Barnes P.T. (2014) BIM in Principal and In Practices (1st Ed.). Westminster, London : ICE Publishing

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.autodesk.com/products/autocad/overview>
- <http://www.autodesk.com/solutions/building-information-modeling/overview>
- <http://www.ddimagazine.com/>
- <http://www.atlasmagazine.com/photo/lande6/>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- AutoCAD 2D & 3d CD with latest version

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

<ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs. • CAD Labs
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations • 1 Computer laboratories each for groups of 25 students
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p> <p>For CAD Lab – AutoCAD & Revit Software</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> • Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. • Periodical revision of the method of teaching and the course specifications • Student feedback for learning outcomes





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<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work.• Analyzing the marks of student in test & assignment sample by the department staff.
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none">• Feedback of external reviewer.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-11

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Building Materials & Construction Principles (223-ARC-3)			
2. Credit hours: 3credit (3L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 4th / 2nd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To introduce the basic building materials and its construction components
- To study importance of climate in architecture
- To understand the basic physical and chemical properties of the materials.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- All the handouts given to the students.
- Lecture & small group work teaching methods might be involved to enhance the awareness about building materials & construction components.
- Virtual class introducing various concepts of building sciences and materials.
- Portfolios for real materials.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

An introduction to the elementary principles of building materials, their properties and application in building construction, along with the construction of some basic components of a building. The focus will also be on the bio-climatic behaviour of building materials with respect to human comfort in buildings





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Introduction: basic building materials (such as lime, sand, brick, cement, grit, steel, stone, etc.)	2	6
• Various construction components of building foundations: definition, safe bearing capacity of soils and methods of improving the depths and width of foundations; causes of failure and their remedies; simple, steeped, combined and cantilevered footing; RCC footing and raft foundation.	4	12
• Importance of climate in architecture.	2	6
• Thermal behaviour of buildings and materials.	2	6
• Lighting and wind.	2	6
• Site selection and site planning in relation to climate factors.	2	6
	14	42

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x3					42
	Actual						
Credit	Planned	14x3					42
	Actual						

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
On the table below are the five NQF Learning Domains, numbered in the left column. First , insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second , insert supporting teaching strategies that fit and align



with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various components of building.	Lectures, tutorials and text book will help students to understand the building components, class interaction.	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.3	To <u>outline</u> an overview of all amenities in building like climate, thermal behavior, Lighting and wind etc.	Hands-on student learning activities, class discussion	Individual assignment Oral discussion, quizzes, and presentation
1.4	Memorization of various terminologies of structural component, advanced materials and types and their behaviors.	Lectures, tutorials and practice, special contact hours to weak student	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know about the behavior of building materials	Lectures and Lab task will help students to understand the building materials	Group and individual assignment, Case studies
2.2	Student can <u>explain</u> the basic difference between building materials	Site visits & research activities.	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze</u> the construction aspects with all climatic factors	Problem based learnings, Brainstorming and Engaged students in team work discussions session with questions & answers.	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Additional notes Video Analysis
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules of materials diversity and their climatic response.	Collaborative learning group assignments, Small group work, Whole group discussion	group assignment includes component for individual contribution, Midterm exams.
3.2	They can <u>modify</u> the use of building materials as per their variant factors of demand	Role playing, Investigation of student skill & capability, case study with discussion in tutorials, Debates	individual assignments for independent study assessed, Demonstration, Final exams



4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to building construction and materials	Social networking tools, Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of Lighting, wind and thermal behavior of buildings.	Experimental Learning-Site Demonstrations.,	Evaluation of oral presentation using ICT, test questions
4.3	<u>Realizing</u> the interrelationship of various building materials	Lecture, Dialogue discussion	Student assignment & project work, Written tests.
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#	#												
1.2			#													
1.3		#		#												
1.4		#	#	#												
2.1							#		#							
2.2									#	#						
2.3							#			#						
3.1												#	#			
3.2											#	#				
4.1														#		
4.2																
4.3														#		



6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Kumar, S.K.(2001)Building Construction (19th Ed.): Standard Publishers Distributors
- Allen, E. and Iano, J (2004)Fundamentals of Building Construction: Materials and Methods: JohnWiley& Sons

2. List Essential References Materials (Journals, Reports, etc.)

- Mehta, M., Scarborough, W. and Armpriest, D. (2008) Building Construction: Principles, Materials and Systems: Pearson Prentice Hall
- Mckay W B (2013) Building Construction: metric, Volume 1, (5th Ed): Orient Longman

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- [http:// ag.avizona.edu/SWES](http://ag.avizona.edu/SWES)
- <http://www.angelfite.com/in>
- <http://www.idrc.ca/library/documents/104800/chapz-e.html>
- <http://www.ibex-ibex-intl.com>



- <http://www.inika.com/chitra>
- <http://www.routbdge.com>
- <http://www.ventura.india.com>
- <http://www.britmetfed.org.uk/frmedu.html>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department



- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____

Date Received: _____



Course Specifications-12

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Structural Design – 1 (228-CE-3)			
2. Credit hours: 3 credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 4th / 2nd Year			
6. Pre-requisites for this course (if any): NA			
7. Co-requisites for this course (if any): NA			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	90
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input checked="" type="checkbox"/> Yes	What percentage?	10
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			





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B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To apply knowledge of mathematics, science and engineering to analyze the structures.
- To use the theory, skills to make a complete analysis of different types of determinate structures and their role in Architecture
- To identify, formulate, and solve spatial determinate structures problems to design architectural projects.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increased use of visual presentation
- Lecture & small group work teaching methods might be involved to enhance the awareness about structure in Architecture.
- Studio assignments for understanding practical implications.
- Increased use of power point and projector in classroom.
- Increased use of information technology or web based reference materials for searching exact site location on google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Introduction to elementary concept of concrete structure in building design. It will also impart knowledge in the area of the design of simple concrete structural elements and structure as well as the behavior of advanced concrete structures. This course will develop in students material skills to analyze and understand fundamentals and working of various parts of different structural systems.



1. Topics to be Covered

List of Topics		No. of Weeks	Contact hours
Unit I	<ul style="list-style-type: none"> • Introduction to structural analysis. • Shear force, Normal force, Bending moment & Buckling 	2	8
Unit II	<ul style="list-style-type: none"> • Internal forces of statically determinate beams. • Internal forces of statically determinate frames. • Loads on Structure 	4	16
Unit III	<ul style="list-style-type: none"> • Internal forces of statically determinate trusses. • Internal forces of statically determinate arches. 	3	12
Unit IV	<ul style="list-style-type: none"> • Influence lines of statically determinate beams and frames. 	3	12
Unit IV	<ul style="list-style-type: none"> • Introduction to deflections. • Deflection of beams. 	2	8
		14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2		14x2			56
	Actual						
Credit	Planned	14x2		14x1			42
	Actual						

3. Additional private study/learning hours expected for students per week.

5

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.





First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.).

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> meaning and scope of concrete structure in Architecture.	Lectures, tutorials and text book will help students to understand the building structure, interactive classes	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	<u>Telling the</u> students with the basic concept of elementary components of structure	Lectures, tutorials and practice, class discussion	Individual assignment Oral discussion, quizzes, and presentation
1.3	To <u>outline an</u> overview of beams, arches, trusses & frame structure and their design implication in architectural project for stability & aesthetics.	Explanations and examples given in lectures, team work	Individual class assignment
1.4	<u>Recognizing</u> the role of structural elements in designing architectural projects.	Lectures, tutorials and practice, self learning project	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop their</u> interest for creative design in architectural projects to play with the structural component i.e. Beam, column, trusses & frame structures.	Lectures and Lab task will help students to understand the building elements, brainstorming	Group and individual assignment
2.2	Student can <u>explain the</u> basic difference between the structural components	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving, site visit	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze the</u> elements of architecture with due consideration all the structure stability & requirements.	Lectures, Guidance and supervision of the individual assignments& tutorials	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>show</u> their draw sketches of innovative design model of concrete structure for aesthetics purpose	Peer review for students weekly presentations, Group presentation.	group assignment includes component for individual contribution



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3.2	They can <u>modify</u> the use of traditional structural components as per the demand of contemporary architectural design projects.	Investigation of student skill & capability for building materials, case study with discussion in tutorial, special hours to weak student	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret the</u> basics of aesthetic and conceptual sketch relevant to structural elements.	Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of various types of contemporary architectural design over structural impact	Group discussion, student's participation in PowerPoint presentation, observation his performance in class room interaction.	Evaluation of oral presentation using ICT, test questions
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#				#											
1.2			#													
1.3	#				#											
1.4	#		#	#	#											
2.1						#	#		#	#						
2.2						#			#							
2.3							#			#						
3.1											#		#			
3.2											#	#	#			
4.1																#
4.2														#		
4.3																

6. Schedule of Assessment Tasks for Students During the Semester



	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks

- Hsieh. V., 1998 "Elementary Theory of Structures", (4th Ed.): Prentice-Hall.
- R.C. Hibbeler, 2005 "Structural Analysis" (5th Ed.): Prentice-Hall.
- Angus J Macdonald, 2001 "Structure and Architecture" (2nd Ed.): Architectural Press.
- Andrew Charleson , 2005 "Structure As Architecture: A source book for architects and structural engineers," (1st Ed.): Architectural Press.

2. List Essential References Materials (Journals, Reports, etc.)

- McCormac and Nelson, 2003 "Structural Analysis: Using Classical and Matrix Methods", Wiley.
- Jack C. McCormac, 2006 "Structural Analysis: Using Classical and Matrix Methods", (4th Ed.): Wiley.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester Students Faculty meeting (once during semester) Faculty-students periodical meeting (during office hours) Analysis of students' performance on the tests and final. Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> Department assessment by the related instructors & teaching staff Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes
- Teaching method will focus on students' learning and on course learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Feedback of external reviewer
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-13

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Islamic Architecture (221-ARC-3)		
2. Credit hours: 3 credit (3L+0T)		
3. Program(s) in which the course is offered: Bachelor of Architecture		
4. Name of faculty member responsible for the course:		
5. Level/year at which this course is offered: Level 4th / 2nd Year		
6. Pre-requisites for this course (if any): None		
7. Co-requisites for this course (if any): None		
8. Location if not on main campus: None		
9. Mode of Instruction (mark all that apply)		
a. traditional classroom	<input type="checkbox"/> Yes What percentage?	<input type="text" value="85"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes What percentage?	<input type="text" value="15"/>
c. e-learning	<input type="checkbox"/> What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/> What percentage?	<input type="text"/>
f. other	<input type="checkbox"/> What percentage?	<input type="text"/>





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Comments:



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To study historic and contemporary Islamic architecture, its influences on society and culture, and its implications.
- To provide an opportunity for students to undertake architectural research and design to supplement their theoretical knowledge, leading to an ability to use historical examples to identify the universal Principles of Architectural Design.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Asking study report on historic and contemporary Islamic architecture.
- Provision of free-hand sketches in the tutorials of specific building examples to familiarize them with the architectural character that identifies the work of an Islamic period through theory exercises with visual and aesthetic aspects the students will get improve.
- Site visit at regular basis.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Maximum use of Visual Aids.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

It covers the chronological development of Islamic civilization and architecture from Umayyad in Syria and Iraq, through the classical and late classical periods in Spain, North Africa, and the Middle East, including Mesopotamia, the Ottoman empire, Persia and the Mughal Empire. The course covers the relevance of Islamic art, geometry, calligraphy and variations in cultural attitudes in architectural styles.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
----------------	--------------	---------------



• Introduction: The beginnings of Islam; the complex blend of cultures; the influence of religion on culture; the nature of Islamic architecture and decoration	3	9
• Prophet Period and Umayyad Architecture. The Abbasids of Baghdad and the Local Dynasties in the East. The Umayyads of Spain.	2	6
• The Fatimids. The Architecture of the Seljuk	1	3
• The Architecture of the Atabeks and the Ayyubids. The Mongol Period. Mamluk Architecture.	2	6
• The Timurid Period. The Architecture of the Ottoman Turks. Safavid Iran.	2	6
• The Architecture of the Mughal Empire	2	6
• The importance of Islamic art, geometry, calligraphy and variations in cultural attitudes in architectural styles.	2	6
	14	42

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x3					42
	Actual						
Credit	Planned	14x3					42
	Actual						

3. Additional private study/learning hours expected for students per week.

4



4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> various periods with their buildings style with their socio-cultural aspects.	Lectures, tutorials and text book , class discussion	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>tell</u> the students with the basic concept of Prophet Period , The Fatimids, The Timurid Period & The Architecture of the Mughal Empire	Lectures, tutorials and practice	Individual assignment Oral discussion, quizzes, and team presentation
1.3	Student will be able to <u>memorize</u> beginnings of Islam; the complex blend of cultures; the influence of religion on culture	Lectures, tutorials and practice and Site visits.	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the architecture civilization from various Islamic period regarding material, method & tectonics and concomitant cultural changes	Lectures and Lab task will help students to understand the component of Islamic period.	Group and individual assignment, seminar
2.2	Students will be able to <u>analyze</u> the Architectural major aspects as form and function, construction techniques and building services in all Islamic civilizations.	Explanations and examples given in lectures, Assignment, Brainstorming	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest to know the importance of Islamic art, geometry, calligraphy and variations in cultural attitudes in architectural styles	Lectures, Guidance and supervision of the individual assignments& tutorials for major aspects of Islamic history, debates	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Seminar Written test

3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules for theory of design for civilization regarding the complex blend of cultures; the influence of religion on culture; the nature of Islamic architecture and decoration	Collaborative learning group assignments, Small group work, Whole group discussion, Peer review for students weekly presentations.	group assignment includes component for individual contribution
3.2	They will <u>illustrate</u> the application of these Islamic features and concept into their imaginative work of drawings with considering aesthetic aspects	Role playing, Investigation of student skill & capability	individual assignments for independent study assessed, logical arguments, Artwork
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design style of all Islamic periods with its design elements	Participation during the lectures, Student assignments with ICT standards, Encourage students to help each other	Class/Material Lab participation assignments & Quizzes, oral discussion, Individual and group presentations
4.2	Students can <u>evaluate</u> the difference between the numerous Islamic period like on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills	Dialogue discussion, Critical evaluation of their work, Writing reports & Student essay assignment in college style manual	Evaluation of oral presentation using ICT, test questions, videos and Analytical reports.
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#	#												
1.2		#		#	#											
1.3	#	#	#		#											
2.1							#			#						
2.2							#									
2.3										#						
3.1											#					
3.2											#					
4.1																#
4.2																#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Hillenbrand, R. (1994) Islamic Architecture: Edinburgh University Press.
- Grube, E.J. (1966) The World of Islam: McGraw-Hill Book Company
- Hoag John D. (2014) Western Islamic Architecture: A Concise Introduction (1st Ed): Dover Publications.
-

2. List Essential References Materials (Journals, Reports, etc.)

- D Watkin (1986) A History of Western Architecture (1st Ed): Thames and Hudson,
- B. Fletcher (1996) A History of Architecture (20th Ed.): Butterworth Heinemann.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc.): **None**

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.ancient-greece.org/architecture.html>
- <http://www.tribunesandtriumphs.org/roman-architecture/>



- <http://www.crystalinks.com/romearchitecture.html>
- <https://www.google.co.in/#q=early+christian+byzantine+and+romanesque+architecture+ppt>

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, sketch book & tools

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam





2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Self-Evaluation of instructor

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____

Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 3 (310-ARC-5)			
2. Credit hours: 5credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 5th / 3rd Year			
6. Pre-requisites for this course (if any): 220-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To expose students to the unique mix of social, economic, and physical processes which have created, and are continuously reshaping the city;
- To equip students with a foundation and specific techniques to employ in research activity on urban forms and in critical analysis; and
- Through this learning experience, to generate urban form and architectural design grounded in both intuitive and measurable conceptions of the inhabited environment.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.
- Portfolios for small design work which should also include the model for better understanding of spaces and form.
- Visual Aids use will be enhance.
- Increased used of visual presentations for various case studies done by students.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

In this studio an intermediate design scale is explored. This intended to improve student awareness and skills needed to deal with the urban design and planning, landscape and environmental design activity applied to existing urban environments and also establishment of urban design guidelines. In this course more emphasis is on site design, programming, materials and technology.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Intermediate design scale, utilizing analytical approaches to problem solving, sketching and 3D modelling	2	20
• Urban design and planning methods.	2	20
• Goal formulation and site planning.	2	20
• Landscape and environmental design activity applied to existing urban environments.	3	30
• Establishment of urban design guidelines.	2	20
• Analysis, programming, and urban space design.	3	30
	14	140

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x10			140
	Actual						
Credit	Planned			14x5			70
	Actual						

3. Additional private study/learning hours expected for students per week.	7
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
On the table below are the five NQF Learning Domains, numbered in the left column. First , insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second , insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third , insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> various Intermediate design scale, utilizing analytical approaches to problem solving	Lectures and text book will help students to understand design parameters, Series of explanatory sessions, standards literature study, class interaction	Team Presentations (design problem to express design process on transparent sheet to assess student visualization)
1.2	Student will be able to <u>recognize</u> various methodology of urban design & planning methods	individual presentation with wide variety of hands-on student learning activities, Group discussions, literature study	Assignments (weekly sketch design & explain sheet work feedback, literature study standards evaluation)
1.3	To <u>tell</u> the students with the basic concept of Goal formulation and site planning	Small group work will be there to present the Preliminary sketch design	Portfolios submission, Homework assignments, Final and Mid-term exams.
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the urban design parameters for a city along with their issues	Active learning lectures and text book for understanding form & function & Peer review for students weekly presentations, class discussion	<ul style="list-style-type: none"> Design problem with small introduction /Class assignment Monitoring the progress of student work on weekly basis at least 2 times
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for urban design work.	Experimental Architectural design and its outcomes	Group/ Individual presentation (each group level, at the end of the semester students present an architectural design project which reflects their final evaluation for the whole problem and discuss the diverse methods that rate their judgment for the final solution, Existing site case study)
2.3	Students will <u>develop</u> their interest to know the use of urban design elements, scale and proportion with urban design and planning methods	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking, Engaged students in team work discussions session with questions & answers.	Concept mapping, Faculty observations, Students portfolio will show the criteria of students evaluation for which their design is accurate, effective, economical & environmentally satisfying



3.0	Interpersonal Skills & Responsibility		
3.1	To <u>write</u> reports with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	small group design problem within courses so they can cooperate and share the skills	Evaluation of group reports and individual contribution within the group
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity applied to existing urban environments.	Role playing, Explain and communicate the students.	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem. • Final exams
3.3	Student will be able to <u>evaluate</u> their urban design in conjunction with urban environment, urban design guidelines & urban space design with site planning aspects.	Group presentation, Incorporating the use and utilization of computer, software, Power point presentations of case study works	Assessment is through coursework, design problem presentation, Group assignment & Individual assignment
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & urban design elements to produce the final urban design problem output.	Brainstorming, All students are obliged to present their projects and presentations digitally.	Assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format.
4.2	Students can <u>assess</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Problem based learning (urban design case study of existing site in Group or individual task, Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and 3D and other presentation tools)	Analytical reports and participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study Evaluation at preliminary, pre-final and final stages
5.0	Psychomotor		





5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#		#		#												
1.2		#	#	#													
1.3	#	#		#	#												
2.1						#		#	#								
2.2							#		#								
2.3						#	#	#									
3.1											#						
3.2												#					
3.3											#	#					
4.1															#	#	
4.2														#	#		
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection of urban project Concept of the urban Project existing seminar Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation of urban project. 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	16	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

List Required Textbooks

- Calvino, I. (1972) Invisible Cities: Italy
- Terry L. Patterson (2002) Architect's Studio Handbook: McGraw-Hill,
- Rossi, A (1982) Architecture and the City: MIT Press,
- Neufert, P. (2000): Architects Data (3rd Ed)., Blackwell Science

2. List Essential References Materials (Journals, Reports, etc.)

- Boyer, M.C. (1996) The City of Collective Memory: Its Historical Imagery and Architectural: MIT Press
- Patterson Terry L. (2002) Architect's Studio Handbook (1st Ed):, McGraw-Hill

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.hampton.com/freshair>
- <http://www.columbiamedical.com/>
- <http://www.mgarchitects.com/>
- www.greatbuildings.com
- www.newschoollarch.edu
- www.dexigner.com/directory/cat/architecture/design_studios
- www.troutdesign.com

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Time Saver Standards for urban design issues at city level

Software needed:-

- Autodesk Auto CAD.
- Autodesk Revit.
- Autodesk 3D Max.



- Sketch-up.
- Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> • 1 Studio Room for group of 20 students.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Self-Evaluation of instructors.
3 Processes for Improvement of Teaching



- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Review of recommended teaching strategies.
- Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-15

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Regional and Urban Planning (311-ARC-3)			
2. Credit hours: 3credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 5th / 3rdYear			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	70
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	30
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			





المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To familiarize the students with Regional and Urban Planning related to the socio-economic and demographic characteristics of villages, towns and cities: their present growth trends and future needs
- To conceptualize the Regional and Urban Planning and its importance in architecture.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Studio assignments for understanding the elements of urban design.
- The students shall submit informative notes about the urban parameters with their impact.
- Lecture & small group work teaching methods might be involved to enhance the awareness about urban planning.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Group discussion and interactive class environment should be introduced

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Introduction to history of urban planning and design; history and evolution of public spaces in different contexts, diversity, integration into buildings and landscape.; urban and regional theory and analysis; smart growth; new urbanism; land use/cover planning methods; urban engineering, Infrastructure, transportation, and environmental planning and assessment; sustainable urban development; Urban design issues.

1. Topics to be Covered





List of Topics	No. of Weeks	Contact hours
• Introduction to history of urban planning and design.	1	4
• Urban and regional theory and analysis; smart growth; new urbanism; land use planning methods; sustainable urban development	2	8
• Planning issues: Identification of planning problems of land use distribution and change; communication systems; overcrowding; slums; sporadic growth and conurbation	3	12
• Planning Standards: Formulation of planning standards for land use; density; road and various community facilities at the local and town level.	2	8
• Development Plan: Planning process; concept of master plan, its elements, preparation and implementation	2	8
• Regional Planning: Concept of regional planning; types of regions; locational factors of settlements, etc.	2	8
• Planning Legislation: Review of the development of planning legislation in Saudi Arabia	2	8
	14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2	14x2				56
	Actual						
Credit	Planned	14x2	14x1				42
	Actual						

3. Additional private study/learning hours expected for students per week.

3



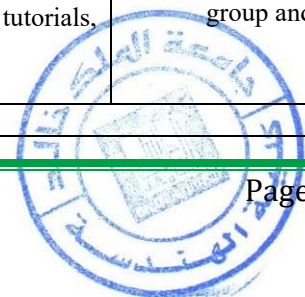


4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> history of urban planning and design	Lectures, tutorials and text book, visit for case study	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	Students will be able to <u>recognize</u> various concept of regional planning.	Lectures, tutorials and practice, class discussion	Multiple choice test, tutorial independent study assignments
1.3	Student will be able to <u>memorize</u> various terminologies of Planning Legislation	Lectures, tutorials and practice, group discussion	Independent study assignment related urban policies.
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference urban planning and regional planning	Lectures and sketching task, problem based learning, debate	Group and individual assignment
2.2	Students can <u>analyze</u> the elements of planning issues	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial, Surprise tests to know the level of student for further proactive solution like special hours for the weak students. Lab assignment and independently performing tutorials	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest for development plan for urban.	Lectures, Guidance and supervision of the individual assignments& tutorials, interactive classes	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		





3.1	Students can <u>justify</u> the difference between urban planning and design and regional planning .	Peer review for students weekly presentations, Group presentation, special hours to weak student	group assignment includes component for individual contribution, individual group presentation
3.2	Student will be able to <u>show</u> their draw sketches for urban planning	Investigation of student skill & capability for urban sketch design & creativity.	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to urban planning.	Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	This deep <u>research</u> will help them to communicate professionally to planning parameters.	Critical discussion for their work, Writing reports & Student essay assignment in college style manual	Evaluation of oral presentation using ICT, test questions, videos
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#	#	#											
1.2	#	#		#	#											
1.3	#	#	#		#											
2.1							#		#							
2.2							#			#						
2.3									#	#						
3.1												#	#			
3.2											#	#				
4.1															#	#
4.2																#





6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Anis Ur Rahmaan (2011) The Imperatives of Regional and Urban Planning: Concepts and Case Studies from the Developing World: Xlibris Corporation
- Rangwala, S.C. (1989) Town Planning: Charotar Publishing House

2. List Essential References Materials (Journals, Reports, etc.)

- Gupta, V. (1984) Energy and Habitat: Town Planning and Building Design for Energy Conservation: Wiley Eastern
- Randall, A. (2001) Crossroads, Hamlet, Village, Town: Design Characteristics of Traditional Neighbourhoods, Old and New: American Planning Association

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc.): **None**

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/ftp04/MQ61319.pdf>
- http://archive.org/stream/principlesofcity00lohmrch/principlesofcity00lohmrch_djvu.txt

<ul style="list-style-type: none"> • http://www.srmuniv.ac.in/downloads/townplaning.pdf • http://megrevenue.dm.gov.in/acts/land-aquisition-act-1894.
<p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard. • Landscaping Time saver standards • IGBC Standards

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • 1 Lecture room for group of 20 students.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, sketch book & tools</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
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2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Individual assessment of students.
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes
- Teaching method will focus on students' learning and on course learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Computer Applications in Architecture - 2 (312-ARC-2)			
2. Credit hours: 2 credit (0L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 5th / 3rd Year			
6. Pre-requisites for this course (if any): 222-ARC-2			
7. Co-requisites for this course (if any): NA			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="70"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="30"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- Introduction to the computer visualization process and virtual reality in Architecture.
- Developing the sense of making virtual modelling into the reality
- To understand Computer visualization process such as 3D modelling, analytical rendering, and animation.
- To utilize the knowledge of computer visualization tools in design studio project.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Major amount of work through virtual classes in the CAD lab by the students for 3D visualization
- Increased use of updated software to improve the work efficiency.
- Through exercises the students will get improve between 2D drawing and 3D modeling.
- Increased use of power point and projector in classroom.
- Final portfolio contains of digitized design projects (plans, sections, elevations views- 3D model, etc.) with other tasks.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course introduces the computer visualization process and virtual reality in Architecture. This course also includes the exposure to a broad spectrum of modelling and presentation software.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Computer visualization process: 3D modelling, analytical rendering, and animation, focusing on the description of architectural design.	4	16
• Digital video: Capturing editing video and audio clips	4	16
• Virtual reality in Architecture: terminology, characteristics, environment and application.	4	16
• Virtual reality modelling language	2	8
	14	56

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x4			56
	Actual						
Credit	Planned			14x2			28
	Actual						

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
On the table below are the five NQF Learning Domains, numbered in the left column. First , insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second , insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third , insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various software available for the purposes of documentation, presentation and drawings FOR 3D visualization.	Lectures and text book, class room discussion, interactive classes	<ul style="list-style-type: none"> software steps exercise CAD Lab assignments practiced under supervision in tutorials and CAD lab tasks
1.2	<u>Recognizing</u> the software ability to work on CAD.3D visualization	Lectures, tutorials and practice	Oral discussion, quizzes, and presentation
1.3	<u>Telling</u> students with the basic concept of computer programming and use of CAD regarding the virtual reality.	Explanations and examples given in lectures	CAD & BIM work in computer lab with all commands by instructors
1.4	<u>Recalling</u> students previous memory along their previous software skill	Lectures and Tutorials	Class Assignments
1.5	<u>Memorization</u> of various Basic commands for 2D and 3D drawing with editing and modifying techniques	tutorial independent study assignments, interactive class	<ul style="list-style-type: none"> Lab manuals Quizzes on completion of each topic Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between CAD and BIM	Lectures and Lab manual will help students to understand the command of CAD & BIM	CAD lab assignments
2.2	Students can <u>analyze</u> the commands between CAD and their implication for create Virtual reality modeling language	Lab notes & practice to study the various commands of drafting as virtual reality concept	<ul style="list-style-type: none"> Quizzes. Problem solving tasks Students portfolio
2.3	Students will be able to <u>develop</u> their interest in Virtual reality in Architecture: terminology, characteristics, environment and application.	Lectures, Guidance and supervision of the individual assignments of virtual projects, class discussion	<ul style="list-style-type: none"> Final Exam Project presentation and Report submission
3.0	Interpersonal Skills & Responsibility		
3.1	Student will be able to <u>illustrate</u> the application of these software skills into their imaginative work of import drawings, drafting function in different formats	Team based learning- Tutorials and practice, Peer review for students weekly presentations, Group presentation	Demonstrations, Explain and communicate the students results in lectures for their presentation, Final exams
3.2	Student will be able to <u>show</u> their drafting work for architecture design work i.e. Plans, elevation, sections & 3D views as a virtual design.	Lab demonstrations, Explain and communicate the fundamental rules of virtual design.	Lab Assignments, individual drafting work & creativity, Oral exams

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4.0	Communication, Information Technology, Numerical		
4.1	<u>Participation</u> through questions and discussion during the lectures & computer lab	Computer lab, Participation during the lectures,	Class/ CAD Lab participation assignments & Quizzes, oral discussion
4.2	Students will be able to <u>interpret</u> the basics of Virtual reality in Architecture: terminology, characteristics, environment and application.	Brainstorming, Critical comments for their drafting and modeling work	Evaluation of oral presentation, helping each other in doing their experiments.
4.3	Students can <u>evaluate</u> the difference between the real and virtual object at software 3D modeling, analytical rendering, and animation and can exhibit by a strong verbal/ visual communication with presentation skills.	Dialogue discussion, Student work review with good standards of use of ICT	Test questions, student's assignment and project work evaluation, presentation using ICT.
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#			#													
1.2				#													
1.3	#			#													
1.4	#																
1.5	#			#													
2.1						#	#		#								
2.2						#		#									
2.3							#	#	#								
3.1												#					
3.2												#					
4.1															#		
4.2															#		
4.3															#		
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks

- Kalay Yehuda E. & Mitchell William J. (2004). Architecture's new media: Principles, Theories, and Methods of Computer-Aided Design: MIT Press
- John Elys (2013). CAD fundamentals for Architecture, (1stEd.) London, UK : Laurence King publishing
- Noble Douglas and Kensek Karen (2014) Building Information Modelling: BIM in Current and Future Practice, (1stEd) Hoboken, New Jersey : John Wiley & Sons

2. List Essential References Materials (Journals, Reports, etc.)

- Davies N. and Barnes P.T. (2014) BIM in Principal and In Practices (1st Ed.). Westminster, London : ICE Publishing.
- Bill Fane (2013) AutoCAD 2014 for Dummies

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc): None





4. List Electronic Materials, Web Sites, Facebook, Twitter, etc. <ul style="list-style-type: none">• Blackboard, King Khalid University (lms.kku.edu.sa)• http://www.autodesk.com/products/autocad/overview• http://www.autodesk.com/solutions/building-information-modeling/overview• http://www.ddimagazine.com/
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. <ul style="list-style-type: none">• Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.• AutoCAD 2D & 3d CD with latest version

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none">• 1 Lecture room for group of 20 students with comfortable chairs.• CAD Labs
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none">• Computer & Data show projectors for digital presentations• 1 Computer laboratories each for groups of 25 students
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <ul style="list-style-type: none">• For Studio Class – N.A.• For CAD Lab – AutoCAD & Revit Software

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none">• Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester• Students Faculty meeting (once during semester)• Faculty-students periodical meeting (during office hours)• Analysis of students' performance on the tests and final.
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<ul style="list-style-type: none">• Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none">• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-17

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Building codes and Specifications (313-ARC-2)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 5th / 3rd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To initiate the students into theory and practice of estimating and quantity surveying.
- To acquaint students with methodology of writing specifications with reference to building trades, materials, workmanship and performance of different items of work and introducing the students to specifications as an integral part of contract document for building projects.
- To inform to students the need and importance of specification, how to write specification, important aspects of the design of a specification
- To inform to students the need for estimation the concept of abstract and detailed estimates based on measurement of materials and works.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- All the handouts given to the students.
- Lecture & small group work teaching methods might be involved to enhance the awareness about quantities and specifications..
- Virtual class introducing various concepts of building sciences and materials.
- Portfolios for real materials.
- Increased use of power point and projector in classroom.
- Increased use of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Principles of construction cost estimating of the related materials, labor, and machines. The techniques of calculations to be applied to the wide variety of construction projects, housing, and commercials. It also provide the student with the ability to estimate the quantities of item of works involved in buildings, water supply and sanitary works, road works and irrigation works, and also to equip the student with the ability to do rate analysis, valuation of properties and preparation of reports for estimation of various items.



1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
UNIT I - SPECIFICATION Necessity of specification, importance of specification, - How to write specification, - Types of Specification, -Principles of Specification writing, - Important aspects of the design of specification – Classification of Specification.	3	6
UNIT II SPECIFICATION WRITING Brief Specification for 1st class, 2nd class , 3rd class building. Detailed specification for earthwork excavation, plain cement concrete, Reinforced concrete, first class and second class brickwork, Damp proof course, ceramic tiles/marble flooring, woodwork for doors, windows frames and shutters, cement plastering, painting & weathering course in terrace.	4	8
UNIT III QUANTITIES & ESTIMATION Types & purpose, Approximate estimate of buildings – Bill of quality, - Requirement for preparing estimation, factors to be considered, - principles of measurement and billing, contingencies, Elementary billing and measurement of basic materials like brick, wood, concrete and unit of measurement for various items of work – abstract of an estimate.	3	6
UNIT IV DETAILED ESTIMATE Deriving detailed quantity estimates for various items of work of a building. Like earthwork excavation, brick work, plain cement concrete, Reinforced cement concrete works, wood work, iron works, plastering, painting, flooring, weathering course for a single storied building using center line method and long and short wall method.	4	8
	14	28

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2					28
	Actual						
Credit	Planned	14x2					28
	Actual						





3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various parameters of specification of building.	Lectures, tutorials and text book will help students to understand the building components, class interaction.	<ul style="list-style-type: none">Independent study assignmentMultiple choice testFinal exam
1.3	To <u>outline</u> an overview of all specification writing in building like specification for earthwork excavation, plain cement concrete, Reinforced concrete, first class and second class brickwork, Damp proof course etc. .	Hands-on student learning activities, class discussion	Individual assignment Oral discussion, quizzes, and presentation
1.4	Memorization of various terminologies of quantities & estimation.	Lectures, tutorials and practice, special contact hours to weak student	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their detailed estimate for various type of building.	Lectures and Lab task will help students to understand the building materials	Group and individual assignment, Case studies
2.2	Student can <u>explain</u> the basic difference between specification & estimation for the building materials	Site visits & research activities.	<ul style="list-style-type: none">Quizzes.Problem solving test at the end of topic & semester as well.Students portfolio
2.3	Students can <u>analyze</u> the construction aspects with all specification writing factors.	Problem based learnings, Brainstorming and Engaged students in team work discussions session with questions & answers.	<ul style="list-style-type: none">Final ExamReport submission in group and individual.Additional notesVideo Analysis
3.0	Interpersonal Skills & Responsibility		

3.1	Students can <u>justify</u> the fundamentals rules of materials while writing specification.	Collaborative learning group assignments, Small group work, Whole group discussion	group assignment includes component for individual contribution, Midterm exams.
3.2	They can <u>modify</u> the use of building materials as per demand of client for detailed budget and costing.	Role playing, Investigation of student skill & capability, case study with discussion in tutorials, Debates	individual assignments for independent study assessed, Demonstration, Final exams
4.0	Communication, Information Technology, Numerical		
4.1	Students can <u>evaluate</u> the quantities according to the behavior of buildings.	Experimental Learning-Site Demonstrations.,	Evaluation of oral presentation using ICT, test questions
4.2	<u>Realizing</u> the interrelationship of various building materials as per their estimation & specification.	Lecture, Dialogue discussion	Student assignment & project work, Written tests.
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#	#												
1.2			#													
1.3		#		#												
1.4		#	#	#												
2.1							#		#							
2.2									#	#						
2.3							#			#						
3.1												#	#			
3.2											#	#				
4.1														#		
4.2																

6. Schedule of Assessment Tasks for Students During the Semester
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	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Frank R. Dagostino. Estimating in Building Construction. Seventh Edition, 2011, Pearson Publishers,
- Kohli, D.D and Kohli, R.C., “A Text Book of Estimating and Costing (Civil)”, S.Chand & Company Ltd., 2004

2. List Essential References Materials (Journals, Reports, etc.)

- Estimating Costing and Specification. – By M. Chakraborti 21.B – Bhabananda Road, Calcutta – 700 026.
- Allen, E. and Iano, J (2004) Fundamentals of Building Construction: Materials and Methods: John Wiley & Sons

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-18

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Structural Design - 2 (318-CE-3)		
2. Credit hours: 3 credit (2L+2T)		
3. Program(s) in which the course is offered: Bachelor of Architecture		
4. Name of faculty member responsible for the course:		
5. Level/year at which this course is offered: Level 5th / 3rdYear		
6. Pre-requisites for this course (if any): 228-CE-3		
7. Co-requisites for this course (if any): None		
8. Location if not on main campus: None		
9. Mode of Instruction (mark all that apply)		
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage? <input type="text" value="90"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage? <input type="text"/>
c. e-learning	<input checked="" type="checkbox"/> Yes	What percentage? <input type="text" value="10"/>
d. correspondence	<input type="checkbox"/>	What percentage? <input type="text"/>
f. other	<input type="checkbox"/>	What percentage? <input type="text"/>





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Comments:



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To understand the role of surveying and levelling in Architecture.
- To understand the surveying measurements units.
- To determinate and evaluate the soil mechanics with their implication in architecture.
- appreciating the design process in foundation engineering and designing simple foundations
- To identify, formulates, and solves spatial determinate structures problems to design architectural projects.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Group discussion and interactive class environment should be introduced
- Lecture & small group work teaching methods might be involved to enhance the awareness about structure in Architecture.
- Studio assignments for understanding practical implications.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

To understand the basic principles of structural mechanics pertinent to simple design elements. To further gain an understanding of the structural behaviour of building elements. Also to introduce the students to the indeterminate structural analysis, and the deformations of the structures. Understand the fundamentals and the basic methods that used to solve the indeterminate structures, and displacement methods such as, consistent deformation method, three moments equation, slope deflection method, moment distribution method, stiffness matrix method and approximate analysis of multi-story structures. Expose students to use the computer applications to analyze the beam structure.





1. Topics to be Covered			
List of Topics		No. of Weeks	Contact hours
Unit I Survey	<ul style="list-style-type: none"> • Introduction to surveying, type of surveying, survey equipment and land topography and its relevance in architecture. • Chain Surveying; Compass surveying. • Levelling and plane tabling. 	2	8
Unit II Soil Mechanics	<ul style="list-style-type: none"> • Introduction to Geotechnical Engineering • Soil Formation and Grain Size • Weight-Volume Relationships • Soil Classification • Exploration and Sampling • Compaction 	4	16
Unit III Foundation	<ul style="list-style-type: none"> • Foundation introduction, Types of foundations, • Shallow Foundations • Bearing capacity • Settlements • Spread Footing Design • Mat Foundations • Lateral Earth Pressure and Retaining Structures <ul style="list-style-type: none"> • Gravity Retaining Structures (John Emery) • Deep Foundation Analysis and Design • Types, installation, load transfer etc. • Single Piles • Pile Groups 	3	12
		14	56

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2		14x2			56
	Actual						
Credit	Planned	14x2		14x1			42
	Actual						

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> the scope of concrete indeterminate structure in Architecture	Lectures, tutorials and text book, class discussion	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>outline an</u> overview of displacement control methods in structure and their design implication in architectural project.	Explanations and examples given in lectures, team work	Individual class assignment and power point presentations
1.3	<u>Recognizing</u> the role of structural elements in designing architectural projects.	Lectures, tutorials and practice, site visits	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop their</u> interest for learning Computer applications for beam structural analysis..	Lectures, Lab task and site visits	Group and individual assignment, additional notes, analytical report
2.2	Student can <u>explain the</u> basic difference between the determinant and indeterminate structure components	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze the</u> elements of architecture with due consideration all the indeterminate structure with their stability & requirements.	Lectures, Guidance and supervision of the individual assignments& tutorials, brainstorming	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Case studies
3.0	Interpersonal Skills & Responsibility		
3.1	They will <u>illustrate</u> the application of these skills in to show in their imaginative work of architectural design by using structure elements.	<ul style="list-style-type: none"> Active Learning lectures Team based learning- Tutorials and practice Awareness of time 	group assignment includes component for individual contribution, laboratory/ workshop exam, peer evaluation



		Management in completing their reports.	
3.2	They can <u>modify</u> the use of traditional structural components as per the demand of contemporary architectural design projects.	Investigation of student skill & capability for building materials, case study with discussion in tutorial, experimental learning	individual assignments for independent study assessed, oral exams
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret the</u> basics of aesthetic and conceptual sketch relevant to indeterminate structural elements.	Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of various types of contemporary architectural design over structural impact	<ul style="list-style-type: none"> • Problem based learning- Lectures • Social networking tools. • Tutorials and practice • Cooperative learning - group assignments, 	<ul style="list-style-type: none"> • Discussion forums • Videos • Analytical reports • Individual and group presentations
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1				#	#											
1.2				#												
1.3				#	#											
2.1							#			#						
2.2								#								
2.3							#	#		#						
3.1													#			
3.2													#			
4.1														#		#
4.2														#		#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
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1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks

- Hsieh. V., 1998 "Elementary Theory of Structures", (4th Ed.): Prentice-Hall.
- R.C. Hibbeler, 2005 "Structural Analysis" (5th Ed.): Prentice-Hall.
- Angus J Macdonald, 2001 "Structure and Architecture" (2nd Ed.): Architectural Press.
- Andrew Charleson , 2005 "Structure As Architecture: A source book for architects and structural engineers," (1st Ed.): Architectural Press.

2. List Essential References Materials (Journals, Reports, etc.)

- McCormac and Nelson, 2003 "Structural Analysis: Using Classical and Matrix Methods", Wiley.
- Jack C. McCormac, 2006 "Structural Analysis: Using Classical and Matrix Methods", (4th Ed.): Wiley.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.



F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p>

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester Students Faculty meeting (once during semester) Faculty-students periodical meeting (during office hours) Analysis of students' performance on the tests and final. Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none"> Department assessment by the related instructors & teaching staff Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Feedback of external reviewer
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-19

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 4 (320-ARC-5)			
2. Credit hours: 5credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 6th / 3rd Year			
6. Pre-requisites for this course (if any): 310-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			





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B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To expose students to the unique mix of social, economic, and physical processes which have created, and are continuously reshaping the city;
- To equip students with a foundation and specific techniques to employ in research activity on urban forms and in critical analysis; and
- Through this learning experience, to generate urban form and architectural design grounded in both intuitive and measurable conceptions of the inhabited environment.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.
- Portfolios for small design work which should also include the model for better understanding of spaces and form.
- Visual Aids use will be enhance.
- Increased used of visual presentations for various case studies done by students.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

In this studio an intermediate design scale is explored. This intended to improve student awareness and skills needed to deal with the urban design and planning, landscape and environmental design activity applied to existing urban environments and also establishment of urban design guidelines. In this course more emphasis is on site design, programming, materials and technology.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Intermediate design scale, utilizing analytical approaches to problem solving, sketching and 3D modelling	2	20
• Urban design and planning methods.	2	20
• Goal formulation and site planning.	2	20
• Landscape and environmental design activity applied to existing urban environments.	3	30
• Establishment of urban design guidelines.	2	20
• Analysis, programming, and urban space design.	3	30
	14	140

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x10			140
	Actual						
Credit	Planned			14x5			70
	Actual						

3. Additional private study/learning hours expected for students per week.	7
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
On the table below are the five NQF Learning Domains, numbered in the left column. First , insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second , insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third , insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)			
Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> various Intermediate design scale, utilizing analytical approaches to problem solving	Lectures and text book will help students to understand design parameters, Series of explanatory sessions, standards literature study, class interaction	Team Presentations (design problem to express design process on transparent sheet to assess student visualization)
1.2	Student will be able to <u>recognize</u> various methodology of urban design & planning methods	individual presentation with wide variety of hands-on student learning activities, Group discussions, literature study	Assignments (weekly sketch design & explain sheet work feedback, literature study standards evaluation)
1.3	To <u>tell</u> the students with the basic concept of Goal formulation and site planning	Small group work will be there to present the Preliminary sketch design	Portfolios submission, Homework assignments, Final and Mid-term exams.
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the urban design parameters for a city along with their issues	Active learning lectures and text book for understanding form & function & Peer review for students weekly presentations, class discussion	<ul style="list-style-type: none"> Design problem with small introduction /Class assignment Monitoring the progress of student work on weekly basis at least 2 times
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for urban design work.	Experimental Architectural design and its outcomes	Group/ Individual presentation (each group level, at the end of the semester students present an architectural design project which reflects their final evaluation for the whole problem and discuss the diverse methods that rate their judgment for the final solution, Existing site case study)
2.3	Students will <u>develop</u> their interest to know the use of urban design elements, scale and proportion with urban design and planning methods	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking, Engaged students in team work discussions session with questions &	Concept mapping, Faculty observations, Students portfolio will show the criteria of students evaluation for which their design is accurate, effective, economical & environmentally satisfying



		answers.	
3.0	Interpersonal Skills & Responsibility		
3.1	To <u>write</u> reports with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	small group design problem within courses so they can cooperate and share the skills	Evaluation of group reports and individual contribution within the group
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity applied to existing urban environments.	Role playing, Explain and communicate the students.	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem. • Final exams
3.3	Student will be able to <u>evaluate</u> their urban design in conjunction with urban environment, urban design guidelines & urban space design with site planning aspects.	Group presentation, Incorporating the use and utilization of computer, software, Power point presentations of case study works	Assessment is through coursework, design problem presentation, Group assignment & Individual assignment
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & urban design elements to produce the final urban design problem output.	Brainstorming, All students are obliged to present their projects and presentations digitally.	Assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format.
4.2	Students can <u>assess</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Problem based learning (urban design case study of existing site in Group or individual task, Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and 3D and other presentation tools)	Analytical reports and participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study Evaluation at preliminary, pre-final and final stages
5.0	Psychomotor		

5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#		#		#												
1.2		#	#	#													
1.3	#	#		#	#												
2.1						#		#	#								
2.2							#		#								
2.3						#	#	#									
3.1											#						
3.2												#					
3.3											#	#					
4.1															#	#	
4.2														#	#		
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection of urban project Concept of the urban Project existing seminar Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation of urban project. 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%

4	Final Exam	16	30%
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D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

List Required Textbooks

- Calvino, I. (1972) Invisible Cities: Italy
- Terry L. Patterson (2002) Architect's Studio Handbook: McGraw-Hill,
- Rossi, A (1982) Architecture and the City: MIT Press,
- Neufert, P. (2000): Architects Data (3rd Ed)., Blackwell Science

2. List Essential References Materials (Journals, Reports, etc.)

- Boyer, M.C. (1996) The City of Collective Memory: Its Historical Imagery and Architectural: MIT Press
- Patterson Terry L. (2002) Architect's Studio Handbook (1st Ed):, McGraw-Hill

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.hampton.com/freshair>
- <http://www.columbiamedical.com/>
- <http://www.mgarchitects.com/>
- www.greatbuildings.com
- www.newschoolorch.edu
- www.dexigner.com/directory/cat/architecture/design_studios
- www.troutdesign.com

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Time Saver Standards for urban design issues at city level

Software needed:-

- Autodesk Auto CAD.
- Autodesk Revit.



- Autodesk 3D Max.
- Sketch-up.
- Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Studio Room for group of 20 students.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Self-Evaluation of instructors.

3 Processes for Improvement of Teaching



- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Review of recommended teaching strategies.
- Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-20

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Theories (321-ARC-2)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 6 / 3rd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			





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B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- Expose students to the thoughts, ideas and interests, establishing the base for shaping the built environment.
- Encourage the students make an informed design decisions consistent with the values and concerns of the region
- To understand Architecture styles and movement, from classical to contemporary.
- To conceptualize the factor to development of architecture thoughts i.e. social, governmental, environmental, as well as technical development, scientific and architectural.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Assignments in characteristics of various civilizations.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.
- All the handouts given to the students. It is suggested that all these handouts be given to the students at the beginning of the course once the course offered again.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- More real life example.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to the thoughts, ideas and interests, establishing the base for shaping the built environment; Review of the architectural traditions of early civilisations; Architectural tradition of Muslim lands; European developments; American development; Foundation of the modern movement.



1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Review of the architectural traditions of early civilisations: Ancient Egyptian architecture; Greek architecture; Roman Architecture.	3	6
• Early Christian architecture and Romanesque.	2	4
• Architectural tradition of Muslim lands.	1	2
• The industrial developments.	2	4
• Nineteenth century urbanism.	2	4
• Reaction to industrial development.	1	2
• European developments; American development.	2	4
• Foundation of the modern movement	1	2
	14	28

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2					28
	Actual						
Credit	Planned	14x2					28
	Actual						

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy			
<p>On the table below are the five NQF Learning Domains, numbered in the left column.</p> <p>First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)</p>			
Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods



1.0	Knowledge		
1.1	Students will be able to <u>define</u> various periods with their buildings style with their socio-cultural aspects.	Active learning - Lectures, tutorials and text book	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>tell</u> the students with the basic concept of various developments of Nineteenth century urbanism, industrial development, American development & modern movement etc.	Lectures, tutorials and practice, Memorization	Individual assignment Oral discussion, quizzes, and presentation
1.3	Student will be able to <u>memorize</u> beginnings of civilizations; Ancient Egyptian architecture; Greek architecture; Roman Architecture.	Lectures, tutorials and practice, class discussion	Multiple choice test, Class recitation/ tutorial & independent study assignments.
2.0	Cognitive Skills-		
2.1	Student will be able to <u>explain</u> the basic difference between the architecture civilization from various Islamic period regarding material, method & tectonics and concomitant cultural changes	Lectures and Lab task, critical thinking, brainstorming	Group and individual assignment
2.2	Students will be able to <u>analyze</u> the Architectural major aspects for developments as industrial, European, European & modern movement.	Explanations and examples given in lectures, Assignment based on open ended tasks , interactive classes	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest to know the importance of such urbanism movement with their impact.	Lectures, Guidance and supervision of the individual assignments tutorials, debates, discussion strategies	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Additional notes Concept mapping
3.0	Interpersonal Skills & Responsibility-		
3.1	Students can <u>justify</u> the fundamentals rules from all early civilizations to modern movement.	Peer review for students weekly presentations, Group presentation, role playing	group assignment includes component for individual contribution, logical arguments, peer evaluation
3.2	Student will be able to <u>show</u> their creative emphasize among various ancient & contemporary civilizations.	Investigation of student skill, team based learning	individual assignments for independent study assessed
3.3	Student will be able to <u>modify</u> various psychological issues in the design of buildings in their own projects.	Arranging individual and group discussion meeting to solve many problems in the lectures, dialogue discussion	Evaluation of group reports and individual contribution within the, Writing the project report.
4.0	Communication, Information Technology, Numerical		

4.1	Students will be able to <u>interpret</u> the basics of early civilization i.e. Egypt, Greek. Roman etc.	Participation during the lectures, Student assignments , problem based learning, learning by sketching	Class/Material Lab participation assignments & Quizzes, oral discussion, written and sketch test,
4.2	Students can <u>evaluate</u> the difference between the social, psychological and financial aspects.	Critical evaluation of their work, Writing reports & Student essay assignment.	Evaluation of oral presentation , oral exams, test questions
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#													
1.2			#													
1.3	#															
2.1								#	#	#						
2.2							#		#	#						
2.3							#	#		#						
3.1												#	#			
3.2													#			
3.3												#	#			
4.1														#		#
4.2														#		#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Risebero Bill (1997) The Story of Western Architecture (2nd Ed.): Herbert Press.
- James Steele (1997) Architecture Today: Phaidon Press Limited London.

2. List Essential References Materials (Journals, Reports, etc.)

- Banham, Reyner (1981) Theory and Design in the First Machine Age (2nd Ed): Architectural Press, London.
- Benevelo, L.A. (1971) History of Modern Architecture, Vol. I&II: Cambridge, Mas: MIT Press.
- Colguhoun, Alan (1981) Essays in Architectural Criticism: Modern Architecture and Historical Change: Cambridge, Mass: The MIT Press.
- Frampton, K. (1980) Modern Architecture: a Critical History: London: Thames and Hudson Ltd.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.arabian-oryx.gov.sa/>
- https://en.wikipedia.org/wiki/List_of_World_Heritage_Sites_in_the_Arab_States

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required



Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <p>For Studio Class - Drawing Boards, Parallel Bar, Sketch Book, , Different Grade pencils,</p>

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester Students Faculty meeting (once during semester) Faculty-students periodical meeting (during office hours) Analysis of students' performance on the tests and final. Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none"> Department assessment by the related instructors & teaching staff Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. Periodical revision of the method of teaching and the course specifications Student feedback and learning outcomes





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4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-21

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Landscape Design (322-ARC-3)			
2. Credit hours: 3credit (1L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 6th / 3rd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>



Comments:

B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To familiarise students with the linkage between architecture and nature through the planning and design of land using elements such as plants and water
- To analyze the site elements as potentials and constraints, synthesize them to evolve simple landscape schemes.
- To understand role of landscape elements in architectural design and impacts of landscape elements on environment.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- More visual aids in teaching methods for understanding practical implications of landscaping.
- Lecture & small group work teaching methods might be involved to enhance the awareness about landscape architecture.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to the role of landscape elements in architectural design and impacts of landscape elements on environment. This course will recognize landforms, plantation water bodies and structures as major landscape elements. It will also analyze the site elements as potentials and constraints, synthesize them to evolve simple landscape scheme.

1. Topics to be Covered





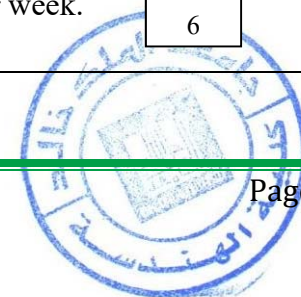
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Introduction: Definition, scope, objectives, design process and profession of landscape architecture in relation to architecture. Elements of landscape architecture, linkages with nature and built environment; Graphics in landscape architecture 	3	15
<ul style="list-style-type: none"> • Historical Review: History of the art of garden design of India, China, Persia, Japan, Italy, France and England; Garden design of the modern world. 	2	10
<ul style="list-style-type: none"> • Horticulture: Plant classification and nomenclature; plant identification; propagation and care of plants; planting preparation and methods. 	2	10
<ul style="list-style-type: none"> • Characteristics and Use of Plants: Characteristics of various types of plants and their suitability for landscaping; plant selection criteria; landscape design elements and principles. 	3	15
<ul style="list-style-type: none"> • Landscape Design: Landscape design for various building types. Landscaping parks and roads, rock gardens; interior and terrace gardens; formal and informal design, use of water and man-made elements in landscape, garden furniture and embellishments, landscape construction, preparation of landscape schemes, ecological and environmental aspects of landscape design 	4	20
	14	70

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x1	14x4				70
	Actual						
Credit	Planned	14x1	14x2				42
	Actual						

3. Additional private study/learning hours expected for students per week.

6





4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> various elements of Landscape Architecture	Lectures, tutorials and text book, class discussion.	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>outline</u> the students with the basic concept & Historical Review of garden in India, China, Persia, Japan, Italy, France and England; Garden design of the modern world	Lectures, tutorials and practice, interactive classes	Individual assignment Oral discussion, quizzes, and presentation
1.3	Student will be able to <u>memorize</u> various terminologies of Landscape Architecture.	Lectures, tutorials and practice, memorization	Surprise test, tutorial independent study assignments
1.4	Student's memory will be able to <u>recall</u> their basic knowledge of various types of plants and their suitability for landscaping	Lectures, tutorials and practice, site visits	Independent study assignment related horticulture
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference between the various gardens	Lectures and sketching task	Group and individual assignment
2.2	Students can <u>analyze</u> the elements of landscaping architecture	Explanations and examples given in lectures, Brainstorming	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest various landscape design.	Lectures, Debates, problem based learning	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Case studies
3.0	Interpersonal Skills & Responsibility		



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3.1	Students can <u>justify</u> the use of landscaping architecture into built and un-built spaces	Peer review for students weekly presentations, Group presentation & discussion	group assignment includes component for individual contribution, logical arguments, Art & sketching skill evaluation
3.2	Student will be able to <u>show</u> their draw sketches for landscaping design	Investigation of student skill & capability for landscaping design & creativity, debates	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to landscaping elements	Participation during the lectures, Student assignments with ICT standards, social networking tool	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of various types of plants and their suitability for landscaping	Critical evaluation of their work, individual presentations	Evaluation of oral presentation using ICT, test questions, written test
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#													
1.2			#													
1.3		#														
1.4		#	#													
2.1								#	#							
2.2							#	#	#	#						
2.3							#			#						
3.1													#			
3.2												#	#			
4.1														#	#	
4.2														#		



6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Simonds, J.O. & Starke B. (2013): Landscape Architecture, Fifth Edition: A Manual of Environmental Planning and Design (5th Ed.): McGraw-Hill Education
- Thompson, W. and Sorvig, K. (2007): Sustainable Landscape Construction: A Guide to Green (1st Ed): Island Press.

2. List Essential References Materials (Journals, Reports, etc.)

- H.Paul (2016): Construction Detailing for Landscape and Garden Design: Surfaces, steps and margins (1st Ed): Routledge.
- Bose, T.K. and Chowdhury, B. (1992): Tropical Garden Plants in Colour: South Asia Books

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- http://www.gardenvisit.com/landscape_architecture/landscape_debate/definition_eid
- http://agritech.tnau.ac.in/horticulture/horti_Landscaping_types%20of%20garden.html

- <http://www.localhistories.org/gardening.html>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Landscaping Time saver standards

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Studio Room for group of 20 students.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, sketch book & tools

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department





- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Periodic review & updating of the syllabus
- External reviewer feedback
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Construction Technology (323-ARC-3)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 6th / 3rd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

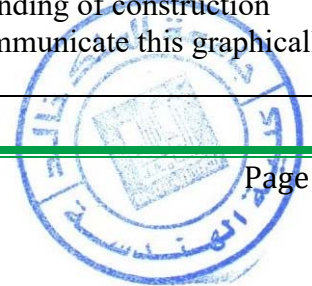
- Introduction to elementary building construction methods and their applications
- To enable the students to learn detailing of metal doors, fire proof structures, steel trusses and prefabrication
- To conceptualize the technicalities of construction and construction detail using some of the basic building materials.
- To understand the various construction practices and details using steel and aluminum and fire proof in the structural and non-structural components of a building

- 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
- Group discussion and interactive class environment should be introduced
- Lecture & small group work teaching methods might be involved to enhance the awareness about building construction.
- Studio assignments for understanding practical implications.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- More real life example

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course is formulated to provide an understanding of the various components that go into the making of a building shell and to focus on the various technicalities of construction and construction detail using some of the basic building materials. Basically the aim is for students to have an understanding of the construction process commencing at foundation level, up to roof level for this building. The students must develop a sound understanding of construction detailing of the primary building elements and components, and communicate this graphically. Sketching and drawing is an integral component of the course.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Roofs: Simple flat, jack arch, lean to and coupled roofs. Method of construction of RCC/RB roofs, including terracing details. Hollow roof construction. Construction of domes, vaults and shell roofs. • Temporary work: centring for arches, vaults and domes. 	2	4
<ul style="list-style-type: none"> • Openings: metal windows (Z sections and L sections). • Partitions: various types of glazed and wooden partitions and panelling; Curtain walls; Sound proof and light weight partitions. 	2	4
<ul style="list-style-type: none"> • Stairs: principles of staircase construction and its elements; details of various staircases in wood, stone, steel and RCC. 	2	4
<ul style="list-style-type: none"> • Steel doors, aluminium doors, windows and glazing. • M.S. frame structure components and connections. 	2	4
<ul style="list-style-type: none"> • Fire proof structures, classification of buildings and code provisions, fire protection of building elements and fire protection devices. 	2	4
<ul style="list-style-type: none"> • Advantages and disadvantages of on-site and off-site prefabrication in Saudi conditions, simple details in prefabrication. 	2	4
<ul style="list-style-type: none"> • Balconies, canopies, shop fronts, false and suspended ceilings, free standing staircases, pergolas and covered walkways. 	2	4
	14	28

2. Course components (total contact hours and credits per semester):						
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other: Total
Contact Hours	Planned	14x2				28
	Actual					
Credit	Planned	14x2				28

	Actual						
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3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various components of building construction.	Lectures, Class discussion, Visual presentation, Tutorial (video + practical)	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	<u>Telling</u> the students with the basic concept of building construction for all building components.	Lectures, tutorials and practice, site visit	Individual assignment Oral discussion, quizzes, and presentation
1.3	Student's memory will be able to <u>recall</u> their basic knowledge of materials used in daily life.	Explanations and examples given in lectures, class discussion	Individual class assignment
1.4	<u>Memorizing</u> the various terminologies of structural component, advanced materials and types and their behaviors.	Lectures, tutorials and practice, interactive classes	Multiple choice test, tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know about the on-site and off-site prefabrication.	Lectures/teaching students how to perceive attentively and critically	Group and individual assignment
2.2	Student can <u>explain</u> the basic difference between the various building construction	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial, Surprise tests to know the level of student for	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio



		further proactive solution like special hours for the weak students. Lab assignment and independently performing tutorials	
2.3	Students can <u>analyze</u> the construction aspects with all building components	Lectures, Guidance and supervision of the individual assignments& tutorials, debates	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the fundamentals rules & technology of building construction	Peer review for students weekly presentations, Group presentation.	group assignment includes component for individual contribution
3.2	They can <u>modify</u> the use of building materials as per their variant factors of demand of construction aspects.	Investigation of student skill & capability for building materials, case study with discussion in tutorial	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to building construction with varying methods	Participation during the lectures, Student discussion on construction methods	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	<u>Realizing</u> the interrelationship of various building construction techniques.	Lecture, Critical evaluation of their work, Writing reports & Student essay assignment in college style manual	Student assignment & project work, test questions, workshop exam, written test
5.0	Psychomotor		
5.1	N.A.		
5.2			



5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#		#											
1.2			#	#												
1.3	#			#	#											
1.4	#		#	#	#											
2.1						#	#		#	#						
2.2						#			#							
2.3							#			#						
3.1											#		#			
3.2											#	#	#			
4.1																
4.2																
4.3																

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks





- R. Chudley Roger Greeno, Mike Hurst (Civil Engineer), Simon Topliss (2012): Advanced construction technology (5th Ed.) Harlow : Pearson
- Kumar, S.K.(2001)Building Construction (19th Ed.): Standard Publishers Distributors
- Allen, E. and Iano, J (2004)Fundamentals of Building Construction: Materials and Methods: JohnWiley& Sons.
- Goyal, M.M. (2004) Handbook of Building Construction: Thomson Press (I) Ltd

2. List Essential References Materials (Journals, Reports, etc.)

- Mehta, M., Scarborough, W. and Armpriest, D. (2008) Building Construction: Principles, Materials and Systems: Pearson Prentice Hall
- Mckay W B (2013) Building Construction: metric, Volume 1, (5th Ed): Orient Longman
- Ching, F.D.K. (2008) Building Construction: Wiley publication

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- http://www.powershow.com/view/ac22-MjZiY/Shoring_and_Scaffolding_powerpoint_ppt_presentation
- http://www.peri-usa.com/files/pdf3/per_i_scope_usa_01_2011.pdf
- <http://www.cavitytrays.co.uk/closers/view/3/47/1/type-d-damp-proof-course-vertical->
- <http://civildigital.com/prefabricated-structures-prefabrication-concept-components-advantages-ppt/>
- <http://www.slideshare.net/neni009/curtain-wall-26074405>
- <http://www.docstoc.com/docs/136000429/prefabrication-ppt>
- <https://www.cmhc-schl.gc.ca/en/inpr/bude/himu/coedar/upload/glass-aluminum-curtain-wall-systems.pdf>
- <http://www.aparnaenterprisesltd.com/upvc.html>
- http://www.nicee.org/iaee/E_Chapter3.pdf

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

<ul style="list-style-type: none"> • 1 studio Room for group of 20 students.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> • Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. • Periodical revision of the method of teaching and the course specifications • Student feedback for learning outcomes





4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Feedback of external reviewer
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-23



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Environmental Control System (324-ARC-3)			
2. Credit hours: 3 credit (3L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 6th /3rd Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To understand the basic principles of environmental systems design including the use of appropriate performance assessment method.
- To conceptualize the climate and environment and its importance in architecture
- To understand the concept of climate responsive architecture and energy efficient building design.
- To generate awareness about climate affected building materials and techniques and their control methods.
- To enable student to understand design strategies for different climatic regions for an effective environment control.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

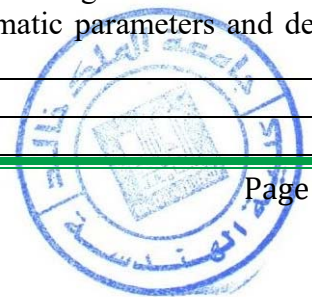
- The students shall submit informative notes about the above eco architecture and its environment.
- Lecture & small group work teaching methods might be involved to enhance the awareness about climatic elements & factors.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Introduction to elementary principles of bioclimatic studies with respect to buildings and human comfort. It also introduces principle of thermal comfort and its implication in design. It also enables student to understand design strategies for different climatic regions. This course will also familiarizing students with modern techniques to analyze climatic parameters and design buildings accordingly.

1. Topics to be Covered



List of Topics	No. of Weeks	Contact hours
Unit I - Element of Climate: Temperature, Humidity, Wind, Precipitation and Radiation Measurement and record of Data by Meteorological department. Types of tropical climates.	3	9
Unit II - Climate and Human Comfort, Solar Shading Devices: Methods of quantify human comfort and devices for achieving the same within buildings. Need for structural control, the sun and solar geometry, solar radiation, Solar chart, Shadow angles and their application in design of shading devices.	4	12
Unit III - Daylight, Ventilation and Air Movement: Nature of light and its properties, Sources of light, Daylight factor, Glare, Effect of size and shape of openings in different planes, Design of buildings for daylight. Requirement and function of ventilation, Stack effect, Airflow pattern inside and outside buildings.	4	12
Unit IV - Climate and Architectural Design: Basic principles, Orientation, fenestration, choice of materials, Form and construction of buildings in different types of climates.	3	9
	14	42

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x3					42
	Actual						
Credit	Planned	14x3					42
	Actual						

3. Additional private study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)



Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> meaning and scope of environment control system along with climate specification in Architecture	Lectures, tutorials and text book, active learning	Independent study assignment Multiple choice test Final exam
1.2	Students will be able to <u>recognize</u> Environmental Impact of climate in control way.	Lectures, tutorials and practice ,Literature study	Multiple choice test, class recitation/ tutorial & independent study assignments
1.3	To <u>outline</u> an overview of metrological aspects of climate	Lectures, tutorials and practice, class discussion	Individual assignment Oral discussion, quizzes, and presentation
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference between the environment and climate.	Lectures/teaching students how to perceive attentively and critically	Group and individual assignment
2.2	Students can <u>analyze</u> the elements of climate and its relevance to environment	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial, Surprise tests, special hours for the weak students. Lab assignment and independently performing tutorials	Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest for Environmental Impact Studies	Lectures, Guidance and supervision of the individual assignments& tutorials, brainstorming	Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the use of climate and environment.	<ul style="list-style-type: none"> Team based learning- Tutorials and practice Awareness of time management in completing their reports. 	group assignment includes component for individual contribution
3.2	Student will be able to <u>show</u> their draw sketches for ecological system of earth.	Investigation of student skill & capability for eco design parameters, site visit, Special hours to week students.	individual assignments for independent study assessed

4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to climatic elements.	Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of various types of shading devices	Critical discussion of their work, Writing reports & social networking tools	Evaluation of oral presentation using ICT, test questions
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#	#												
1.2	#		#	#												
1.3		#	#	#												
2.1							#		#	#						
2.2							#			#						
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3.1											#		#			
3.2											#		#			
4.1														#		#
4.2														#		#
4.3														#		#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Koenigsberger O.H. (2011) Manual of tropical housing and building: climatic design: universities press.
- Dahl Torben (2009) Climate and Architecture: Routledge publisher
- Freedman Bill (1995) Environmental Ecology: The Ecological Effects of Pollution, Disturbance, and Other Stresses: Academic Press.
- Stein, Reynolds, Grondzik, Kwok (2006) Mechanical and Electrical Equipment for Buildings, 10th Ed: John Wiley, Hoboken, NJ.

2. List Essential References Materials (Journals, Reports, etc.)

- Oke T.R, Mills G, Christen A, Voogt J.A.(2017) Urban climates(1st Ed): Cambridge University Press.
- Bart Johnson, Kristina Hill (2002) Ecology and Design: Frameworks For Learning: Island Press.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.envinst.conu.edu/~envinst/research/built.html>
- www.terin.org/
- <http://www.pge.com/pec/archives/w98passi.html>
- <http://solstice.crest.org/efficiency/index.shtml>
- en.wikipedia.org/wiki/Weather_and_climate
- http://wiki.naturalfrequency.com/wiki/Shading_Design
- http://erg.ucd.ie/UCDERG/pdfs/mb_shading_systems.pdf



<ul style="list-style-type: none"> • http://mhathwar.tripod.com/thesis/climaticarch/climatic_architecture.html •
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software. <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard. • Metrological Department

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) For Studio Class - Drawing Boards, sketch book.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam.
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback and learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 5 (410-ARC-5)			
2. Credit hours: 5 credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 7th / 4th Year			
6. Pre-requisites for this course (if any): 320-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To give the student a better understanding of the design of buildings.
- To manipulate spatial composition.
- To organise and compose material elements and systems to reinforce the conceptual composition.
- To understand the Integration of structural and environmental systems and their influence on architectural expression.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- The course is organized in an architecture studio format with two or three design problems and one integral or separate research problem. Research, analysis and further special investigations occur during the studio time, supported by lectures focusing on the issues. The final projects are of longer duration and are developed in detail
- Increased used of visual presentations for various case studies done by students.
- All the handouts regarding urban design terminology given to the students. It is suggested that all these handouts be given to the students at the beginning of the course once the course offered again
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Assignments of small design work which should also include the model for better understanding of spaces and form.
- Increased use of power point and projector in class room
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- Group discussion and interactive class environment should be introduced

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This Architecture studio facilitates the understanding of the available opportunities, in the design of a building, to manipulate the spatial composition and to organize and compose material elements and systems to reinforce the conceptual composition. The building types explored have greater complexity of function. Within this setting, it is also intended to have the students learn



and design to satisfy normal regulatory requirements and to generate a greater awareness of how the art and craft of building can influence, and in many ways control, the design synthesis of a building

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
• The design of medium scale buildings.	5	50
• Emphasising the nature of materials.	4	40
• Integration of structural and environmental systems and their influence on architectural expression.	5	50
	14	140

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x10			140
	Actual						
Credit	Planned			14x5			70
	Actual						

3. Additional private study/learning hours expected for students per week.

7

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.).

Cod e #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>recognize</u> various methodology of small scale building function and activities .	Lectures and text book, Series of explanatory sessions, standards literature study, site visit	Team presentation (including design problem to express design process on transparent sheet to assess student visualization, drawing stages evaluation), Final exams
1.2	Students will be able to <u>define</u> various climatic influences	individual presentation with wide variety of hands-on student learning activities, Group discussions, literature study	Assignments-Exercises or Homework (weekly sketch design & explain sheet work feedback, Small group work will be there to work on the big task of case study to formulate the requirements of climatic influence, review literature work)
1.3	To <u>tell</u> the students considerations of behavioral and cultural aspects of architecture	Lectures and text book, Small group work	Applied urban design projects, Portfolios submission Homework assignments, Midterm exams
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the building design parameters for a city along with their issues	Lectures and text book&Peer review for students weekly presentations at urban level	Design problem with small introduction /Class assignment Monitoring the progress of student work on weekly basis
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for architecture design work.	Study notes for research standards &Explanation and examples are given as a feedback to the students in their presentations, group work presentation	Manual task of free hand sketching for concept evolution in different type of architecture design issues within a city will be submitted by students to assess their level of cognitive skills
2.3	Students will <u>develop</u> their interest to know the implication of environment over small scale buildings	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking.	Students portfolio will show the criteria of students evaluation for which their design is accurate, effective, economical &environmentally satisfying



3.0	Interpersonal Skills & Responsibility		
3.1	To write <u>reports</u> with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	small group design problem within courses so they can cooperate and share the skills	Evaluation of group reports and individual contribution within the group
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity applied to existing built environments.	Group presentation, Incorporating the use and utilization of computer, software, Power point presentations of case study works.	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & design elements to produce the final design output	All students are obliged to present their projects and presentations digitally.	Assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format.
4.2	Students can <u>evaluate</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Architecture design case study of existing site in Group or individual task, Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and 3D and other presentation tools	Participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study.
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making



5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#				#												
1.2				#	#												
1.3	#			#													
2.1							#	#	#								
2.2						#		#									
2.3						#	#		#								
3.1												#	#				
3.2											#		#				
4.1																#	
4.2															#	#	
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection of urban project Concept of the urban Project existing seminar Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation of urban project. 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	16	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week



E Learning Resources

<p>List Required Textbooks</p> <ul style="list-style-type: none"> • Pressman Andy (1993): Architecture 101: A Guide to the Design Studio: Wiley • KasprisinRon (2011): Urban Design: The Composition of Complexity. (1st Ed.): Routledge • Edward Allen, Joseph Iano(2006): The Architect's Studio Companion: Rules of Thumb for Preliminary Design: John Wiley & Sons
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> • S Anderson (1986): On Streets: MIT Press • Halprin, L. (1972): Design of Cities: MIT Press • Rossi, A(1982): Architecture and the City: MIT Press,
<p>3. List Recommended Textbooks and Reference Material (Journals, Reports, etc): None</p>
<p>4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p> <ul style="list-style-type: none"> • Blackboard, King Khalid University (lms.kku.edu.sa) • http://www.hampton.com/freshair • http://www.columbiamedical.com/ • http://www.mgarchitects.com/ • www.greatbuildings.com • www.newschoollarch.edu • www.dexigner.com/directory/cat/architecture/design_studios • www.troutdesign.com
<p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard. • Time Saver Standards for urban design issues at city level <p>Software needed:-</p> <ul style="list-style-type: none"> • Autodesk Auto CAD. • Autodesk Revit. • Autodesk 3D Max. • Sketch-up. • Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • 1 Studio Room for group of 20 students.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff. • Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> • Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. • Review of recommended teaching strategies. • Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment. • Periodical revision of the method of teaching and the course specifications • Student feedback for learning outcomes



4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Feedback of external reviewer
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-25





المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: National Architectural Heritage – Asir Region (413-ARC-2)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 7th / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To enhance understanding and values of traditional architecture
- To conceptualize the landscape characteristics of the southern region and its influences in architectural types, building materials and method of buildings
- To conceptualize the Architectural characteristics of Saudi Southern region

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Assignments in characteristics of Saudi traditional Architectural.
- Students should make free-hand sketches in the tutorials of specific building examples to familiarize them with the architectural character that identifies the work of traditional Architecture of Saudi southern region.
- The students shall submit informative notes about the above world heritage, national heritage and convention heritage site
- Lecture & small group work teaching methods might be involved to enhance the sketching ability of students as available on net or power point presentation.
- Increased use of power point and projector in classroom.
- Increased use of information technology or web based reference materials for searching exact site location on Google earth.
- Increase submission to informative notes about the Trends and developments on Cultural Heritage Conservation in a Saudi Southern region.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Traditional buildings represent an important aspect of Saudi heritage, for they are physical manifestations of the traditions and teachings of Islam, which is characterized by its simplicity and humility. This course is intended to design for deep understanding and values of traditional architecture





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Introduction – Characteristics and definitions of Traditional heritage • Historical background and Traditional buildings in Saudi southern region at Asir & National level • Urban Heritage 	2	4
<ul style="list-style-type: none"> • Landscape characteristics of the southern region and its influences in architectural types, building materials and method of buildings 	2	4
<ul style="list-style-type: none"> • Architectural characteristics of Saudi Southern region: architecture of Najran area; architecture of Hilly areas of Abha-SiratAbidah, Rijal Alma; architecture of Al Baha- Zi Ain; architecture of Isdar region of the Faifa mountains; architecture of areas on the Red Sea 	3	6
<ul style="list-style-type: none"> • Architectural styles and traditional building material used in the southern region: Najran, Sarawat (height) of Abha, the Isdar region of the Faifa mountain region and Tihama of Jizan 	2	4
<ul style="list-style-type: none"> • Construction techniques and restoration methods of traditional Stone architecture including urban heritage at Aseer & national level. 	2	4
<ul style="list-style-type: none"> • Trends and developments on Cultural Heritage Conservation in a Saudi Southern region 	2	4
<ul style="list-style-type: none"> • A study trip: Architecture urban Heritage in National & Asir region 	1	2
	14	28

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	14x2					28
Credit	14x2					28



3. Additional private study/learning hours expected for students per week.

NO

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>memorize</u> beginnings of Characteristics and definitions of Traditional heritage	Lectures, tutorials and text book, site visit	<ul style="list-style-type: none">Independent study assignmentMultiple choice testFinal exam
1.2	Students will be able to <u>define</u> various Architectural characteristics of Saudi Southern region & Urban Heritage	Lectures, tutorials and practice, interactive classes	Individual assignment Oral discussion, quizzes, and presentation
1.3	To <u>tell</u> the students with the basic concept of Architectural styles and traditional building material used in the southern region.	Lectures, tutorials and practice, class discussion	Multiple choice test, class recitation/ tutorial independent study assignments
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference between the Historical background and Traditional buildings in Aseer region	Lectures and studio task will help students to understand the component of national & Saudi heritage architecture, discussion methods	Group and individual assignment
2.2	Students can <u>analyze</u> the Architectural major aspects Architectural characteristics of Urban Heritage	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving of heritage characteristics of Saudi Southern region, debates	<ul style="list-style-type: none">Quizzes.Problem solving test at the end of topic & semester as well.Students portfolio
2.3	Students will <u>develop</u> their interest to know the importance of Construction techniques and restoration methods of Aseer Stone architecture	Lectures, Guidance and supervision of the individual	<ul style="list-style-type: none">Final Exam



		assignments& tutorials for major aspects of traditional Stone architecture, brainstorming	<ul style="list-style-type: none"> Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the characteristics of Saudi Southern region as Najran area, Hilly areas of Abha-SiratAbidah, Al Baha- ZiAin, Isdar region of the Faifa mountains and the red sea	Peer review for students weekly presentations, Group presentation, special hours to weak student	group assignment includes component for individual contribution, Artwork
3.2	They will <u>illustrate</u> the application of these Trends and developments on Cultural Heritage Conservation in a Urban Heritage	Investigation of student skill & capability for historical terminology about conservation	individual assignments for independent study assessed, peer evaluation
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Architectural characteristics of Saudi Southern region	Participation during the lectures, problem based learning	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the numerous Architectural styles and traditional building material used in the Aseer region	encourage students to help each other, Writing reports & individual presentation	Evaluation of oral presentation using ICT, test questions
4.3	This deep <u>research</u> will help them to communicate construction techniques and restoration methods of traditional Stone architecture	Participation during the lectures, Writing reports	participation assignments, oral discussion
5.0	Psychomotor		
5.1	N.A.		
5.2			





5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#	#												
1.2		#	#		#											
1.3	#	#		#	#											
2.1							#			#						
2.2									#							
2.3							#		#	#						
3.1											#					
3.2											#					
4.1																
4.2															#	
4.3															#	#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

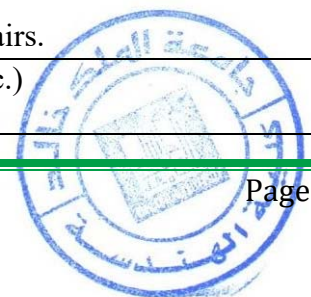


E Learning Resources

1. List Required Textbooks
<ul style="list-style-type: none"> AlQarniMohsin (1998). Traditional rural Architecture of south western of Saudi Arabia (1stEd): (In Press) publisher, Saudi Commission for tourism and antiquities
2. List Essential References Materials (Journals, Reports, etc.)
<ul style="list-style-type: none"> Al Turath Book, Saudi Arabia's Architectural Heritage (1431) by the Saudi Commission for Tourism & Antiquities
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc): None
4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
<ul style="list-style-type: none"> Blackboard, King Khalid University (lms.kku.edu.sa) http://www.arabian-oryx.gov.sa/ https://en.wikipedia.org/wiki/List_of_World_Heritage_Sites_in_the_Arab_States http://www.greatbuildings.com/types/styles/islamic.html http://www.islamicart.com/pages/archcrea/index.htm
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
<ul style="list-style-type: none"> Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.)



- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, sketch book & tools

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Individual assessment of student
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.





5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-26

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Construction Drawings-1 (412-ARC-3)			
2. Credit hours: 3 credit (0L+6T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 7 / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	65
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	35
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- Take field measurements and prepare field sketches from their measurements.
- Read and interpret working drawings.
- Understand the different types of architectural drawings and be able to interpret the information found on each.
- Understand the different types of architectural symbols used on construction drawings and their proper use.
- Develop the necessary drafting skills required to prepare architectural working drawings including site plans, floor plans, foundation plans, elevation, details and sections.
- Develop a basic understanding of construction techniques and how they are presented on a set of drawings

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- A study report on the implication of psychological issues in the shop drawings of buildings.
- Lecture & small group work teaching methods might be involved to generate the ability of students as available on net or power point presentation.
- Final portfolio contains of manual & CAD work (for principles of design) with other tasks.
- Increased use of power point and projector in classroom.
- Increased use of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce the student to the fundamental principles of drafting required in the construction field. Students will learn the proper use of drafting instruments and develop a basic working knowledge of construction drawings. Through the preparation of actual sketches and drawings, the student will develop an understanding of Architectural construction drawings. Students will survey existing conditions and prepare drawings from architectural drawings

1. Topics to be Covered



List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> Basic drafting techniques Scale drawings 	3	18
<ul style="list-style-type: none"> Lettering Line work 	2	12
<ul style="list-style-type: none"> Geometric Construction Foundation drawings 	3	18
<ul style="list-style-type: none"> Floor plans Elevations 	3	18
<ul style="list-style-type: none"> Sections Site Plans 	3	18
	14	84

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned		14x6				84
	Actual						
Credit	Planned		14x3				42
	Actual						

3. Additional private study/learning hours expected for students per week.

4

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		



1.1	<u>Defining</u> the Components of basic drafting techniques..	Lectures and text book	Written exam & Assignment
1.2	<u>Telling</u> the students about the preparation of working drawings.	Fact & theories by individual presentation with wide variety of hands-on student learning activities, interactive classes	Report evaluation & sheet work feedback, midterm exams
1.3	<u>Memorizing</u> the implication of psychological issues in the working drawing of buildings i.e. Floor plan, elevation etc	Small group work,, site visits	Portfolios, Quizzes on completion of each topic& Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the various type of lettering and line work	Lectures and course manual, problem based learning, critical thinking	<ul style="list-style-type: none"> • Evaluation of Manual sheet work • Class assignment • Written test • Case studies
2.2	Students will be able to <u>analyze</u> the detailed section and site plan drawings requirements.	Study notes, debates, experimental architectural design	<ul style="list-style-type: none"> • Quizzes. • Students portfolio • Evaluation of report • Long & short assignments
2.3	Students will <u>develop</u> their interest to know the various building details	Lectures, Guidance and supervision of the individual assignments for theory of working drawings, homework	<ul style="list-style-type: none"> • Final Exam • Project presentation and • Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	They will <u>illustrate</u> the application of this implication of working drawing in architecture.	small group task within courses so they can cooperate and share the skills, encourage students to help each other,	Evaluation of group reports and individual contribution within the group
3.2	Student will be able to <u>show</u> their creative emphasize among components of shop drawings and building details.	Explain and communicate their creative work in class showing student responsibility for assign work, special hours to weak students	<ul style="list-style-type: none"> • Peer or self-assessment • Student portfolio • Final exams • Demonstration • Artwok
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of working drawings through geometrical construction & foundation drawings	Participation during the lectures, Critical discussion of Power point presentation	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the municipality and projects execution drawings.	Assigning individual or group project and presenting the findings orally and in writing whenever appropriate in the courses	Evaluation of oral presentation, videos
5.0	Psychomotor		
5.1	N.A.		



5.2			
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5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1					#											
1.2					#											
1.3					#											
2.1							#	#	#	#						
2.2						#	#	#		#						
2.3						#	#	#	#	#						
3.1											#	#				
3.2											#	#				
4.1															#	
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

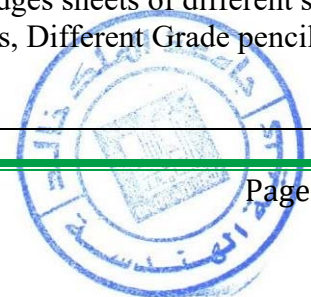




<ul style="list-style-type: none">• Ralph W. Liebing (1999): Architectural Working Drawings 4th Ed: Wiley• Fred Stitt (1998): Working Drawing manual, 1st Ed : McGraw-Hill Education
2. List Essential References Materials (Journals, Reports, etc.) <ul style="list-style-type: none">• Mastering Autodesk VIZ 2005 By Omura, G., Onstott, S. (SybexInc; Bk&CD-Rom edition, 2004)• Interior Design Illustrated by Francis D.K.Ching. (V.N.R. Pub. NY, 1987)
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc. <ul style="list-style-type: none">• Blackboard, King Khalid University (lms.kku.edu.sa)• http://www.slideshare.net/fdjaipur/theory-of-design-9068949• https://en.wikipedia.org/wiki/Design_elements_and_principles• https://en.wikipedia.org/wiki/Shop_drawing• https://www.ape.g.bc.ca/getmedia/96adf0fc-bfe6-4fab-b3f0-1523277e7a53/APEGBC-Guidelines-on-Shop-Drawings.pdf.aspx
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software. <ul style="list-style-type: none">• Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none">• 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none">• Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.



G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Individual assessment of students
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.





المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-27



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture	

A. Course Identification and General Information

1. Course title and code: Interior Design (415-ARC-3)			
2. Credit hours: 3 credit (0L+6T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 7th / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	65
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	35
c. e-learning	<input type="checkbox"/>	What percentage?	
d. correspondence	<input type="checkbox"/>	What percentage?	
f. other	<input type="checkbox"/>	What percentage?	
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To create awareness and exposure to interior design as a discipline closely related to, and supplementing, the field of architecture.
- To gain elementary knowledge and an overview of the aspects of interior design
- To understand various aspects of interior design

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- A study report on the implication of psychological issues in the interior design of buildings.
- Lecture & small group work teaching methods might be involved to generate the ability of students as available on net or power point presentation.
- Final portfolio contains of manual & CAD interior design work (for principles of design) with other tasks.
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Assignments in characteristics of interior elements.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to create awareness and exposure to interior design as a discipline that is closely related to the field of architecture and supplementing it. It would offer an elementary knowledge and overview of the various aspects of interior design.



1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
• Introduction to interior design.	2	12
• History of interior and furniture design.	2	12
• Introduction to Autodesk VIZ.	2	12
• Building a 3D Model from a Concept Sketch.	2	12
• Animating for Design Visualisation.	2	12
• Components of interior space-interior treatment and finishes; lighting and landscaping; furniture.	2	12
• Interior design and exterior presentation	2	12
	14	84

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned		14x6				84
	Actual						
Credit	Planned		14x3				42
	Actual						

3. Additional private study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		



1.1	<u>Defining</u> the Components of interior space-interior treatment and finishes; lighting and landscaping; furniture.	Lectures and text book	Written exam & Assignment
1.2	<u>Telling</u> the students about History of interior and furniture design.	Fact & theories by individual presentation with wide variety of hands-on student learning activities	Report evaluation & sheet work feedback
1.3	<u>Memorizing</u> the implication of psychological issues in the interior design of buildings	Small group work will be there to present the elements & principles of interior design	Portfolios, Quizzes on completion of each topic& Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the psychological issues in the interior design of buildings.	Lectures and course manual, brainstorming, Video tutorial	<ul style="list-style-type: none"> Evaluation of Manual sheet work Class assignment
2.2	Students will be able to <u>analyze</u> the Architectural Building a 3D Model from a Concept Sketch.	Site visits and research, Interactive classes, Engaged students in team work	<ul style="list-style-type: none"> Quizzes. Students portfolio Evaluation of report
2.3	Students will <u>develop</u> their interest to know the History of interior and furniture design.	Lectures, Guidance and supervision, Brainstorming	<ul style="list-style-type: none"> Final Exam Project presentation and Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	They will <u>illustrate</u> the application of this implication of psychological issues in the interior design of buildings and the use of color in architecture.	small group task within courses so they can cooperate and share the skills	Evaluation of group reports and individual contribution within the group
3.2	Student will be able to <u>show</u> their creative emphasize among components of interior space-interior treatment and finishes; lighting and landscaping; furniture.	Explain and communicate their creative work in class showing student responsibility for assign work	<ul style="list-style-type: none"> Peer or self-assessment Student portfolio Final exams
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of Elements of interior.	Participation during the lectures, Critical evaluation of Power point presentation	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the interior and exterior design work.	Assigning individual or group project and presenting the findings orally and in writing whenever appropriate in the courses	Evaluation of oral presentation
5.0	Psychomotor		
5.1	N.A.		
5.2			



5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#			#												
1.2				#	#											
1.3	#			#	#											
1.4	#				#											
2.1						#	#			#						
2.2							#			#						
2.3						#	#			#						
3.1											#	#	#			
3.2											#	#	#			
4.1															#	
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):
Yes, 10 CH/ Week



E Learning Resources

<p>1. List Required Textbooks</p> <ul style="list-style-type: none"> • Interior Design Illustrated by Francis D.K. Ching. (V.N.R. Pub. NY, 1987) • Interior Design by Pile, J. F. (John Wiley and Sons 2004)
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> • Introduction to Interior Design by Steport - De - Van Kness, Logan and Szebely. (Macmillan Publishing Co NY, 1980) • Mastering Autodesk VIZ 2005 By Omura, G., Onstott, S. (Sybex Inc; Bk&CD-Rom edition, 2004)
<p>3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p> <ul style="list-style-type: none"> • Blackboard, King Khalid University (lms.kku.edu.sa) • http://www.slideshare.net/fdjaipur/theory-of-design-9068949 • https://en.wikipedia.org/wiki/Design_elements_and_principles • http://www.slideshare.net/sumiran46muz/elements-of-interior-design-44136635 • http://paulagracedesigns.com/principles-and-elements-of-interior-design/
<p>4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

<p>Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)</p>
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations



3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.





5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-28

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 6 (420-ARC-5)			
2. Credit hours: 5 credit (0L+10T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 8th / 4th Year			
6. Pre-requisites for this course (if any): 410-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To give the students at upper levels of the program the opportunity to deal with a variety of specialised issues from which they are allowed to choose through a selection process. The issues include theoretical, urban design, compositional and technological concerns. Each instructor/tutor formulates his own thematic design problem within this framework, and so the degree of involvement with specific architectural issues varies with each studio section. Since the fourth and third year students work together in these studio sections, each student finds himself in the additional role of working with others with whom they are unfamiliar.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- The course is organized in an architecture studio format with two or three design problems and one integral or separate research problem. Research, analysis and further special investigations occur during the studio time, supported by lectures focusing on the issues. The final projects are of longer duration and are developed in detail
- Increased used of visual presentations for various case studies done by students.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Increased use of power point and projector in class room
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- Group discussion and interactive class environment should be introduced.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Students will select from a range of the studio topics, with offerings depending on faculty expertise. Topics will be drawn from the following: Innovation, materials and fabrication studio; Interdisciplinary studio; Big and complex building studio; Community design studio; Global urban systems studio.

1. Topics to be Covered



List of Topics	No. of Weeks	Contact hours
• Upper level design studio, in which fourth year students register to participate in the vertical design studio	2	20
• Innovation, materials and fabrication studio;	2	20
• Interdisciplinary studio;	2	20
• Big and complex building studio;	3	30
• Community design studio;	3	30
• Global urban systems studio	2	20
	14	140

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned		14x10				140
	Actual						
Credit	Planned		14x5				70
	Actual						

3. Additional private study/learning hours expected for students per week.

7

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>recognize</u> various methodology of Innovation, materials and fabrication studio	Lectures and text book, Series of explanatory sessions, standards literature study	Design problem to express design process on transparent sheet to assess student visualization



1.2	Students will be able to <u>define</u> various climatic influences	individual presentation with wide variety of hands-on student learning activities, Group discussions	Portfolio work (weekly sketch design & explain sheet work feedback), Small group work, case study for requirements.
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the parameters for Interdisciplinary studio	Lectures and text book for understanding form & function & Peer review for student's weekly presentations at urban level, manual drafting work	<ul style="list-style-type: none"> Analytical reports /Class assignment Monitoring the progress of student work on weekly basis Faculty observations (comments on preliminary, pre-final and final stages)
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for architecture design work.	Study notes for research standards & Explanation and examples are given as a feedback to the students in their presentations at urban level	Long and short assignment (manual task of free hand sketching), concept mapping, video analysis.
2.3	Students will <u>develop</u> their interest to know the implication of environment over small scale studios	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking.	Students portfolio will show the criteria of students evaluation for which their design is accurate, effective, economical & environmentally satisfying, final exams.
3.0	Interpersonal Skills & Responsibility		
3.1	To <u>write</u> reports with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	small group design problem within courses so they can cooperate and share the skills, team based learning, special hours to weak students	Evaluation of group reports and individual contribution within the group , sheet Art-work
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity applied to existing big and complex building studio.	Explain and communicate their sense of urban work using elements of urban design i.e. parking, road, lighting, landscaping, infrastructure & services etc.	<ul style="list-style-type: none"> Peer or self-assessment of student at individual and group basis. Assess complete Student portfolio Final exams Explain and communicate the student's results in order to justify their work for any design problem.



4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & design elements to produce the final design output	Group discussion, student's participation in PowerPoint presentation, observation his performance in class room interaction.	Assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format.
4.2	Students can <u>evaluate</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Architecture design case study of existing site in Group or individual task, Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and 3D and other presentation tools	Participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study.
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#			#	#												
1.2				#	#												
1.3	#			#													
2.1							#	#	#								
2.2						#	#		#								
2.3						#	#	#									



المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

3.1												#					
3.2											#	#	#				
4.1														#	#		
4.2													#	#			
5.1																	#

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection of urban project Concept of the urban Project existing seminar Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation of urban project. 	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	16	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

List Required Textbooks

- Pressman Andy (1993): Architecture 101: A Guide to the Design Studio: Wiley
- KasprisinRon (2011): Urban Design: The Composition of Complexity. (1st Ed.): Routledge
- Edward Allen, Joseph Iano(2006): The Architect's Studio Companion: Rules of Thumb for Preliminary Design: John Wiley & Sons

2. List Essential References Materials (Journals, Reports, etc.)

- S Anderson (1986)On Streets: MIT Press





<ul style="list-style-type: none">• Halprin, L. (1972) Design of Cities: MIT Press• Rossi, A(1982)Architecture and the City: MIT Press,
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc): None
4. List Electronic Materials, Web Sites, Facebook, Twitter, etc. <ul style="list-style-type: none">• Blackboard, King Khalid University (lms.kku.edu.sa)• http://www.hampton.com/freshair• http://www.columbiamedical.com/• http://www.mgarchitects.com/• www.greatbuildings.com• www.newschoolarch.edu• www.dexigner.com/directory/cat/architecture/design_studios• www.troutdesign.com
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. <ul style="list-style-type: none">• Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.• Time Saver Standards for urban design issues at city level Software needed: - <ul style="list-style-type: none">• Autodesk Auto CAD.• Autodesk Revit.• Autodesk 3D Max.• Sketch-up.• Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none">• 1 Studio Room for group of 20 students.
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none">• Computer & Data show projectors for digital presentations



3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- faculty assessment of the concern course and effectiveness of teaching delivery.





3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Review of recommended teaching strategies.
- Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Feedback of external reviewer.
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-29

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Construction Drawings-2 (422-ARC-3)			
2. Credit hours: 3credit (0L+6T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 8th / 4th Year			
6. Pre-requisites for this course (if any): 412-ARC-3			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	65
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	35
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To create awareness and exposure to shop drawings as a discipline closely related to, and supplementing, the field of architecture.
- To familiarize the students with the drawings which are prepared for the actual construction/ execution of the buildings.
- To gain elementary knowledge and an overview of the aspects of shop/working drawing.
- To understand various aspects of drawings as presentation, municipal and working drawings.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- A study report on the implication of psychological issues in the shop drawings of buildings.
- Lecture & small group work teaching methods might be involved to generate the ability of students as available on net or power point presentation.
- Final portfolio contains of manual & CAD work (for principles of design) with other tasks.
- Increased use of power point and projector in classroom.
- Increased use of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to create awareness and exposure to shop drawings as a discipline that is closely related to the field of architecture and supplementing it. It would offer an elementary knowledge and overview of the various aspects of shop drawings. Building drawings are to be prepared as part of the contract documents with proper labeling and dimensioning techniques. The drawings shall be based on building design.

1. Topics to be Covered



List of Topics	No. of Weeks	Contact hours
• Introduction to need and relevance of Working Drawing set and municipal drawings and their comparison to presentation drawing	2	12
• Drawings contents study: Plan/s, foundation plan/s, layout plan showing different buildings, internal roads, water supply, sewerage including area drainage plan	2	12
• Introduction to various components and their precise function in a set of working drawing	2	12
• Preparation of check list as guide for list of working drawing	2	12
• Method of representing various contents and specific information in working drawing	2	12
• Preparation of details for various building units.	2	12
• Time problem for specified building units (manually or on computer).	2	12
	14	84

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned		14x6				84
	Actual						
Credit	Planned		14x3				42
	Actual						

3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code	NQF Learning Domains	Course Teaching	Course Assessment
------	----------------------	-----------------	-------------------



#	And Course Learning Outcomes	Strategies	Methods
1.0	Knowledge		
1.1	<u>Defining</u> the Components of shop drawings-interior treatment and finishes; lighting and landscaping; furniture.	Lectures and text book will help students to understand shop drawing parameters, memorization	Written exam & Assignment
1.2	<u>Telling</u> the students about the preparation of working drawings.	Fact & theories by individual presentation with wide variety of hands-on student learning activities, interactive classes	Report evaluation & sheet work feedback, midterm exams
1.3	<u>Memorizing</u> the implication of psychological issues in the working drawing of buildings	Small group work will be there to present the elements & principles of interior design, site visits	Portfolios, Quizzes on completion of each topic& Homework assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between the various se of working drawings as contractual and working drawing.	Lectures and course manual, problem based learning, critical thinking	<ul style="list-style-type: none"> • Evaluation of Manual sheet work • Class assignment • Written test • Case studies
2.2	Students will be able to <u>analyze</u> the Architectural Building a 3D Model from a Concept Sketch.	Study notes, debates, experimental architectural design	<ul style="list-style-type: none"> • Quizzes. • Students portfolio • Evaluation of report • Long & short assignments
2.3	Students will develop their interest to know the various building details	Lectures, Guidance and supervision of the individual assignments for theory of working drawings, homework	<ul style="list-style-type: none"> • Final Exam • Project presentation and • Homework submission
3.0	Interpersonal Skills & Responsibility		
3.1	They will <u>illustrate</u> the application of this implication of working drawing in architecture.	small group task within courses so they can cooperate and share the skills, encourage students to help each other,	Evaluation of group reports and individual contribution within the group
3.2	Student will be able to <u>show</u> their creative emphasize among components of shop drawings and building details.	Explain and communicate their creative work in class showing student responsibility for assign work, special hours to weak students	<ul style="list-style-type: none"> • Peer or self-assessment • Student portfolio • Final exams • Demonstration • Artwok
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of Elements of working drawings.	Participation during the lectures, Critical discussion of Power point presentation	Class participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the municipality and projects execution drawings.	Assigning individual or group project and presenting the	Evaluation of oral presentation, videos

		findings orally and in writing whenever appropriate in the courses	
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1					#											
1.2					#											
1.3					#											
2.1							#	#	#	#						
2.2						#	#	#		#						
2.3						#	#	#	#	#						
3.1											#	#				
3.2											#	#				
4.1															#	
4.2															#	

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test/Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Ralph W. Liebing (1999): Architectural Working Drawings 4th Ed: Wiley
- Fred Stitt (1998): Working Drawing manual, 1st Ed : McGraw-Hill Education

2. List Essential References Materials (Journals, Reports, etc.)

- Mastering Autodesk VIZ 2005 By Omura, G., Onstott, S. (SybexInc; Bk&CD-Rom edition, 2004)
- Interior Design Illustrated by Francis D.K.Ching. (V.N.R. Pub. NY, 1987)

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.slideshare.net/fdjaipur/theory-of-design-9068949>
- https://en.wikipedia.org/wiki/Design_elements_and_principles
- https://en.wikipedia.org/wiki/Shop_drawing
<https://www.apec.g.bc.ca/getmedia/96adf0fc-bfe6-4fab-b3f0-1523277e7a53/APEGBC-Guidelines-on-Shop-Drawings.pdf.aspx>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)



For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Individual assessment of students
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.





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- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-30

Institution: **King Khalid University**

Date: _____



College/Department: **College of Engineering/ Department of Architecture & Planning.**

A. Course Identification and General Information

1. Course title and code: Housing (423-ARC-2)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 8th / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="75"/>
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="25"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To understand the fundamentals of housing design
- To explore the housing and its importance in architecture
- To understand the importance of orientation and topography in housing design

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- examples to familiarize them with the urban character that identifies the housing.
- Lecture & small group work teaching methods might be involved to enhance the awareness about Housing.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to create awareness and exposure to housing and its importance in architecture. It would offer an overview of the Importance of orientation and topography in housing design.

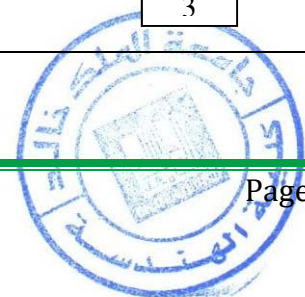




1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
<ul style="list-style-type: none"> • Introduction to housing: <ul style="list-style-type: none"> ○ Definition of 'house' and 'housing'. Housing and its importance in architecture. Housing and its relationship with a neighbourhood and city plan. 	2	4
<ul style="list-style-type: none"> ○ Housing design and site planning; types of new dwelling structures. 	1	2
<ul style="list-style-type: none"> ○ Houses: detached, semi-detached. Flats and multi-storeyed classification according to the type of access: corridor; gallery; direct grouped; and a combination of these access types. 	3	6
<ul style="list-style-type: none"> ○ Selection of sites for housing: considerations of physical characteristics of the site, location factors; legal and financial factors; 	2	4
<ul style="list-style-type: none"> • Importance of orientation and topography in housing design. <ul style="list-style-type: none"> ○ Orientation: direction and factors to be considered: sunlight; spacing of blocks. 	1	2
<ul style="list-style-type: none"> ○ Topography: problems inherent in steeply sloping sites; economic and aesthetic implications of the building along and against the contours; 	3	6
<ul style="list-style-type: none"> ○ Landscaping and topography: effects of plantation in the background and front of buildings on a sloping site 	2	4
	14	28

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2					28
	Actual						
Credit	Planned	14x2					28
	Actual						

3. Additional private study/learning hours expected for students per week.	3
--	---





4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> 'house' and 'housing'.	Lectures, tutorials and text book	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	Students will be able to <u>recognize</u> various concepts of Houses i.e. detached, semi-detached. Flats and multi-storied.	interactive lectures, tutorials and practice	Multiple choice test, class recitation/ tutorial & independent study assignments
1.3	Student will be able to <u>memorize</u> various terminologies of housing design i.e. Orientation, Topography and Landscaping.	Lectures, tutorials and Memorization	Independent study assignment related urban policies.
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference house' and 'housing'	Lectures and sketching task, problem based learning	<ul style="list-style-type: none"> Group and individual assignment Concept mapping
2.2	Students can <u>analyze</u> the elements of housing with site planning	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest for orientation and topography in housing design.	Lectures, Guidance and supervision of the individual assignments& tutorials, discussion strategies	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Case studies
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the difference between urban planning and design and regional planning.	<ul style="list-style-type: none"> Peer review for students, weekly presentations, Group presentation 	<ul style="list-style-type: none"> Group assignment includes component for individual contribution Individual and group



		<ul style="list-style-type: none"> Awareness of time management in completing their reports. Encourage students to help each other 	Presentations <ul style="list-style-type: none"> Logical arguments
3.2	Student will be able to <u>show</u> their draw sketches for urban planning	Investigation of student skill & Participation of students in classroom discussions and presentations; Participation of students in group discussions and presentation of their project and reports	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students can <u>justify</u> the difference between housing planning and design and house planning	Participation during the lectures, Student assignments with course standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	This deep <u>research</u> will help them to communicate professionally to planning parameters of housing	Critical discussion of their work, Writing reports & Student essay writing.	Evaluation of oral presentation, oral exams, test questions
5.0	Psychomotor		
5.1	N.A.		

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#	#	#											
1.2	#		#		#											
1.3	#	#	#	#												
2.1							#		#	#						
2.2							#			#						
2.3							#		#	#						
3.1												#	#			
3.2											#	#				
4.1															#	#
4.2															#	



6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	50%
2	First Mid term	7	10%
3	Second Mid term	12	10%
4	Final Exam	End Semester	30%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Chiara, J.D., Panero, J., Zelnik, M(1995) Time Saver Standards for Housing and Residential Development (2nd Ed): McGraw-Hill.
- Richard Hyde(2008) Bioclimatic Housing: Innovative Designs for Warm Climates:Earthscan,

2. List Essential References Materials (Journals, Reports, etc.)

- Watson, D(2003)Time-saver Standards for Urban Design: McGraw-Hill
- Meinhold Bridgette (2013) Urgent Architecture: 40 Sustainable Housing Solutions for a Changing World: W.W. Norton& company.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.



- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/ftp04/MQ61319.pdf>
- http://archive.org/stream/principlesofcity00lohmrch/principlesofcity00lohmrch_djvu.txt
- <http://www.srmuniv.ac.in/downloads/townplaning.pdf>
- <http://megrevenue.dm.gov.in/acts/land-aquisition-act-1894>.

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
 - Landscaping Time saver standards
 - IGBC Standards

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, sketch book & tools

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)





<ul style="list-style-type: none">• Analysis of students' performance on the tests and final.• Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none">• External reviewer feedback.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-31

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Building Systems and Technologies (428-ARC-3)			
2. Credit hours: 3credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 8th / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To expose the students to the fundamentals of HVAC Services, environmental factors, and sustainable design
- To familiarize the students to the basic design principle systems of various mechanical systems within a building.
- To enhance the understanding, the energy and resource conservation techniques

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Lecture & small group work teaching methods might be involved to enhance the awareness about building materials & construction components.
- .Studio assignments for understanding practical implications.
- Increased use of power point and video tutorial in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Group discussion and interactive class environment should be introduced
- More real life example
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Building system provides an overview of the fundamentals of the design of mechanical, structure & Electrical systems for buildings. This discussion will include the relationships between building envelope design and mechanical system design, particularly with regards to sustainability, energy use and human comfort. Basic components and equipment involved in mechanical systems will be discussed, as well as their place and integration in the development of design concepts. An understanding of mechanical system terminology and an elementary knowledge of sizing procedures and system controls will be developed.



1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Part One: Environmental Basics for Heating, Ventilation and Air Conditioning (HVAC) <ul style="list-style-type: none"> Unit One: Climate, Thermal Comfort & Indoor Environmental Quality (IEQ) Unit Two: Heat Transfer & Heat Loss Calculation – A Quantitative Approach Unit Three: Fenestration and Heat Gain 	4	16
Part Two: HVAC Systems for Buildings <ul style="list-style-type: none"> Unit Four: Small Building HVAC Systems Unit Five: Large Building HVAC Systems I Unit Six: Large Building HVAC Systems II 	4	16
Part Three: Concept Sizing & Sustainable Design <ul style="list-style-type: none"> Unit Seven: HVAC System Concept Sizing Unit Eight: Integrated Building Control Systems Unit Nine: Sustainable Design & Energy Conservation in Mechanical Systems 	4	16
Part Four: Other Mechanical Systems <ul style="list-style-type: none"> Unit Ten: Fire Protection and Life Safety Unit Eleven: Water Use and Conservation 	2	8
	14	56

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2	14x2				56
	Actual						
Credit	Planned	14X2	14X1				42
	Actual						

3. Additional private study/learning hours expected for students per week.	4
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various components of building system.	Active learning -Lectures, tutorials and text book. Class discussion	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>outline</u> an overview of all services in building like Mechanical and sustainable design.	Explanations and examples given in lectures	Individual class assignment
1.3	<u>Memorization</u> of various terminologies of building services component, advanced materials & technology and types along with their behaviors.	Lectures, tutorials and practice	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know about the behavior of environment factors for indoor quality.	Lectures/teaching students how to perceive attentively and critically	Group and individual assignment
2.2	Student can <u>explain</u> the basic difference between building indoor system and outdoor system.	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial (video + practical), Surprise tests to know the level of student for further proactive solution like special hours for the weak students.	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze</u> the construction & installation aspects with all building services	Interactive lectures, Guidance and supervision of the individual assignments& tutorials	<ul style="list-style-type: none"> Final Exam Report submission in group and individual. Supportive notes
3.0	Interpersonal Skills & Responsibility		





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3.1	Students can <u>justify</u> the fundamentals rules of Building Systems and Technologies as per building engineering standards.	Peer review for students weekly presentations, Group / individual presentation.	group assignment includes component for individual contribution, meeting deadlines for the assignment
3.2	They can <u>modify</u> the use of services as per their variant factors of HVAC demands.	Participation of students in classroom discussions and presentations; Participation of students in group discussions and presentation of their project and reports	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Building Systems and Technologies and materials.	Participation during the lectures, Social networking tools- software, Tutorials and practice	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of Lighting, wind and thermal behavior of buildings.	Critical evaluation of their work, Writing reports,	Evaluation of oral presentation using ICT, test questions, videos, Analytical reports
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#		#												
1.2		#			#											
1.3		#		#	#											
2.1							#	#		#						
2.2								#	#	#						
2.3							#	#	#	#						
3.1												#	#			
3.2											#	#	#			
4.1														#		
4.2														#		

6. Schedule of Assessment Tasks for Students During the Semester
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	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks

- McQuiston, Faye, Jerald Parker, and Jeffrey Spitler. Heating, Ventilating, and Air Conditioning Analysis and Design. 6th ed. New York, NY: Wiley, 2004
- Group (Boecker, J., Horst, S., Keiter, T., Lau, A., Scheffer, M., & Toevs, B.), & Reed, B. (2009). The integrative design guide to green building: Redefining the practice of sustainability. Hoboken, NJ: Wiley.
- Building Services Handbook by Fred Hall, Roger Greeno. Routledge 2013
- Neil B. Hutcheon, "Building Science", 2ed, 1989, National Research Council of Canada

2. List Essential References Materials (Journals, Reports, etc.)

- Utilisation of Electric Energy in SI units by Taylor E. O. (Orient Longman, Revised in S.I. units by Rao, V.V.L, 1971)
- The Architect's Guide to Design-Build Services by The American Institute of Architects John Wiley & Sons, 2003
- Brophy, V., & Lewis, J. (2011). A green Vitruvius: Principles and practice of sustainable architectural design, 2nd ed. Washington, DC: Earthscan.



3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <https://ocw.mit.edu/courses/architecture/4-401-introduction-to-building-technology-spring-2006/lecture-notes/>
- https://en.wikipedia.org/wiki/Mechanical_system
- <http://pages.uoregon.edu/ftpfer/SchlFacilities/BuildingSystIntro.html>
- https://en.wikipedia.org/wiki/Building_management_system
- file:///C:/Users/faalali/Downloads/building_system_standards_and_design_guide.pdf
- http://web.mit.edu/11.952/www/S06_Vanke/Vanke_v1/ch5.0_Blg.pdf

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Time Saver Standards

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching





<ul style="list-style-type: none">• Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester• Students Faculty meeting (once during semester)• Faculty-students periodical meeting (during office hours)• Analysis of students' performance on the tests and final.• Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none">• Department assessment by the related instructors & teaching staff• Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching <ul style="list-style-type: none">• Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.• Periodical revision of the method of teaching and the course specifications• Student feedback for learning outcomes
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none">• Check marking by an independent faculty member of student exam sample papers/ student work• Analyzing the marks of student in test & assignment sample by the department staff.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none">• External reviewer feedback.• Periodic review & updating of the syllabus• Statistical analysis of students marks to see the weak & stronger areas of the material given.• Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____

Date Received: _____

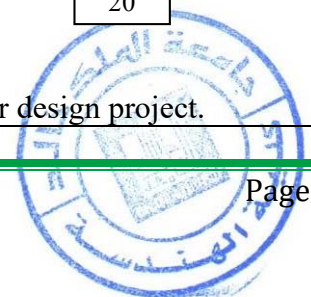


Course Specifications-32

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design - 7 (510-ARC-6)			
2. Credit hours: 6 credit (0L+12T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 9th / 5th Year			
6. Pre-requisites for this course (if any): 420-ARC-5			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
Comments: Other involves instruction at existing site/ case study for design project.			





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B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- In each exercise, the intention is to enable the student to grasp the architectural issues of a given problem. The end objective is presenting a design as the result of an investigation. This studio (in conjunction with the theory seminar and thesis preparation course) has the responsibility for preparing students for the sustained independent investigation required for a thesis. This studio also has the responsibility of facilitating students to demonstrate existing design skills, including: building/project planning; building siting/urban design; building technology/tectonics; the student's general ability to conceive, develop and present a design; aesthetic character.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- The design studio is divided into sections of a maximum of fifteen. The semester is divided into two design exercises, each lasting seven weeks and each with a different instructor. The project or exercise has three phases: (1) discovering what should be investigated; (2) translating an investigation into a design; and (3) presenting a design as a result of an investigation. Students are required to present work in progress at scheduled pin-ups and to formally present at mid-term and before the final board of adjudicators
- Increased used of visual presentations for various case studies done by students.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Assignments of small design work which should also include the model for better understanding of spaces and form.
- Increased use of power point and projector in class room
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- More real life example
- Group discussion and interactive class environment should be introduced





C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Students will select from a range of the studio topics, with offerings depending on faculty expertise. Topics will be drawn from the following: Innovation, materials and fabrication studio; Interdisciplinary studio; Big and complex building studio; Community design studio; Global urban systems studio.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
• Projects formulating four years of architectural education as a preparation for an architectural thesis. Projects demonstrate a students' ability to crystallise and communicate concepts of architectural design studio within the physical environment	14	168
	14	168

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned			14x12			168
	Actual						
Credit	Planned			14x6			84
	Actual						

3. Additional private study/learning hours expected for students per week.

8

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>recognize</u> various methodology of project design.	Lectures and text book , Series of explanatory sessions, standards literature study& project methodology, interactive class.	Class Assignment (design problem to express design process on transparent sheet to assess student visualization),Team presentation
1.2	Students will be able to <u>define</u> various climatic influences	individual presentation with wide variety of hands-on student learning activities, Group discussions, class discussion	Seminar and discussion (weekly sketch design & explain sheet work feedback), Small group work (work on the big task of case study to formulate the requirements)
1.3	<u>Telling</u> the students considerations of behavioral and cultural aspects of architecture	Lectures and text book for understanding cultural aspects, Small group work will be there to present the Preliminary sketch design about culture, one to one class discussion	Portfolios submission Homework assignments, Exams
2.0	Cognitive Skills		
2.1	Student can explain the parameters for Interdisciplinary studio	Lectures and text book&Peer review for students weekly presentations at urban level, critical thinking	Class assignment (design problem with small introduction) Monitoring the progress of student work on weekly basis
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for architecture design work.	Study notes for research standards &Explanation and examples are given as a feedback to the students in their presentations, brainstorming	Case studies, Manual task (for free hand sketching for concept evolution in different type of architecture design issues within a city will be submitted by students to assess their level of cognitive skills), video analysis, Concept mapping
2.3	Students will <u>develop</u> their interest to know the implication of environment over small scale studios	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking, debates among	Students portfolio (show the criteria of students evaluation for which their design is accurate, effective, economical &environmentally satisfying), Analytical report, Final exams



		various group to justify their design work	
3.0	Interpersonal Skills & Responsibility		
3.1	<u>Writing</u> reports with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	Small group design problem, Awareness of time management in completing their reports and design work.	Evaluation of group reports and individual contribution within the group
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity	Explain and communicate, special hours to weak students, Role playing, debates	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem.
3.3	Student will be able to <u>show</u> their general ability to conceive, develop and present a design; aesthetic character.	Group presentation, Incorporating the use and utilization of computer, software, Power point presentations of case study works	Assessment is through coursework, design problem presentation, Group assignment & Individual assignment
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & design elements to produce the final design output	Problem based learning; All students are obliged to present their projects and presentations digitally.	Individual and group presentations (assessment of students presentations), Portfolio submission (interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format)
4.2	Students can <u>evaluate</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Brainstorming, Computer labs, Group or individual task (Architecture design case study of existing site), Instructor of the course and students strive for save utilization of Internet.	Participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study.

		computers, printers and plotters 2D and 3D and other presentation tools	
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#			#	#												
1.2	#			#	#												
1.3	#			#	#												
2.1						#	#	#	#								
2.2						#	#	#	#								
2.3						#	#	#	#								
3.1											#	#	#				
3.2											#	#	#				
3.3											#	#	#				
4.1														#	#	#	
4.2														#	#	#	
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	<ul style="list-style-type: none"> Project and site selection of urban project Concept of the urban Project existing seminar Layout Study Plans study Elevation Study Sections Studies 3D study Review and presentation of urban project. 	As per schedule given to students	10%

2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	16	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

List Required Textbooks

- Pressman Andy (1993): Architecture 101: A Guide to the Design Studio: Wiley
- KasprisinRon (2011): Urban Design: The Composition of Complexity. (1st Ed.): Routledge
- Edward Allen, Joseph Iano(2006): The Architect's Studio Companion: Rules of Thumb for Preliminary Design: John Wiley & Sons

2. List Essential References Materials (Journals, Reports, etc.)

- S Anderson (1986)On Streets: MIT Press
- Halprin, L. (1972) Design of Cities: MIT Press
- Rossi, A(1982)Architecture and the City: MIT Press,

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.hampton.com/freshair>
- <http://www.columbiamedical.com/>
- <http://www.mgarchitects.com/>
- www.greatbuildings.com
- www.newschoolorch.edu
- www.dexigner.com/directory/cat/architecture/design_studios
- www.troutdesign.com

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Time Saver Standards for urban design issues at city level

Software needed:-



- Autodesk Auto CAD.
- Autodesk Revit.
- Autodesk 3D Max.
- Sketch-up.
- Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Studio Room for group of 20 students.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching



- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Review of recommended teaching strategies.
- Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-33

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Project Management (518-ARC-2)			
2. Credit hours: 2credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 9th / 5th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To prepare students with basic management techniques needed for office and project management

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Lecture & small group work teaching methods might be involved to enhance the project management skills.
- Lectures introducing various concepts of Project Management.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to equip students with basic management techniques needed for office and project management.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Project Management: Evolution of management thought; Managing in a global environment; Social and ethical responsibility of project management.	2	4
• Managing work and organisation: Decision-making and the planning functions; the organisation function, the controlling function.	2	4
• Managing people: Human resource management; managing work groups. Leadership: motivation, communication and negotiations. Organisation change and development.	2	4
• Office management and procedure: Organising work: staffing, delegation and decentralisation. Filing and Indexing: the application of IT in office management and procedure. Enterprise Resources Planning (ERP). Customer Relationship Management (CRM).	3	6
• Financial management: Functions of financial management. Financial objectives, analysis and interpretation of financial information. Sources of long term and short term finance.	3	6
• Entrepreneurship: The entrepreneurs' tasks and the specific challenges of entrepreneurship. Design office management.	2	4
	14	28

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2					28
	Actual						
Credit	Planned	14x2					28
	Actual						





3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> & managing work and organization & managing peoples.	Lectures, Class discussion, Visual presentation, Tutorial (video + practical)	<ul style="list-style-type: none">Independent study assignmentMultiple choice testFinal exam
1.2	<u>Telling</u> students with principles of Office management and procedure & Financial management	Lectures, tutorials and practice	Individual assignment Oral discussion, quizzes, and presentation
1.3	<u>Memorizing</u> characteristics and definitions of Project Management	Lectures, tutorials and practice, class discussion	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know the importance of management in order to complete the project within a time frame.	Lectures , critical thinking	Group and individual assignment
2.2	Student can <u>explain</u> the basic difference Project, office and financial management.	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving	<ul style="list-style-type: none">Quizzes.Problem solving test at the end of topic & semester as well.Students portfolio
2.3	Students can <u>analyze</u> the methodology of work procedure in organization with all management of project flow.	Lectures, Guidance and supervision of the individual assignments& tutorials	<ul style="list-style-type: none">Final ExamReport submission in group and individual.

3.0 Interpersonal Skills & Responsibility





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3.1	They will <u>illustrate</u> the application of these management theories and methods to perform the task	Team based learning- Tutorials and practice, Peer review for students weekly presentations, Group presentation, special hours to weak students	group assignment includes component for individual contribution
3.2	Student will be able to <u>show</u> their creative emphasize among various live project sites.	Investigation of student skill, case study of project site, Group discussion	individual assignments for independent study assessed, oral exams, meeting deadlines for the assignments
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of all kind of management systems.	Participation during the lectures, use of social sites in teaching	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	<u>Realizing</u> the interrelationship of various building construction techniques during project life cycle.	Lecture, Critical discussion of their work, Writing reports & dialogue discussion	Student assignment & project work, test question, writing report of project site
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#			#	#											
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1.3	#			#	#											
2.1						#	#	#	#							
2.2						#	#	#	#							
2.3						#	#	#	#							
3.1											#	#	#			
3.2											#	#	#			
4.1															#	
4.2															#	





6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Donnelly, J.H., Gibson, J.L., Ivancevich, J.M. (1998) Fundamentals of Management: Irwin/McGraw Hill
- Project Management Institute (2013): A guide to the project management Body of Knowledge (PMBOK). (5th Ed.) Newtown Square, Pa.: Project Management Institute.

2. List Essential References Materials (Journals, Reports, etc.)

- Kerzner Harold (2012) Project Management: A Systems Approach to Planning, Scheduling and Controlling (10th Ed.): Wiley India Private Limited

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- https://en.wikipedia.org/wiki/Project_management
- <http://www.pmi.org/About-Us/About-Us-What-is-Project-Management.aspx>
- https://www.projectmanagement-training.nl/wpcontent/uploads/2015/05/book_project_management.pdf
- <http://www.free-management-ebooks.com/dldebk-pdf/fme-project-principles.pdf>

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1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

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- Comparison of students' scores on test I, test II and Final exam





2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Individual assessment of students.
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architectural Design-8: Graduation Project (520-ARC-7)			
2. Credit hours: 7 credit (0L+14T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 10th /5th Year			
6. Pre-requisites for this course (if any): 510-ARC-6, 511-ARC-3			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="20"/>
Comments: Existing Case study for proposed project.			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- In each exercise, the intention is for the student to grasp the architectural issues of a given problem. The end objective is to present a design as the result of an investigation. This studio (in conjunction with the theory seminar and thesis preparation course) has the responsibility to prepare students for the sustained independent investigation required for a thesis. This studio also has the responsibility of allowing students to demonstrate existing design skills, including: building/project planning; building siting/urban design; building technology/tectonics; the student's general ability to conceive, develop and present a design; aesthetic character.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Developing skill to handle a project in proper sequence from requirement formulations to design completely.
- Increased used of visual presentations for various case studies done by students.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.
- Assignments of small design work which should also include the model for better understanding of spaces and form.
- Increased use of power point and projector in class room
- Through theory exercises with visual and aesthetic aspects the students will get improve.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria
- Increased use of Visual aids

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This studio emphasizes the comprehensive nature of architectural design. Assigned project programs related to an urban context. The overall intention for this studio is research-driven upper-level elective design studio to develop capacity for research (archival, social, urban etc.) as basis of design; development of initiative, collaboration and peer critique; development of



written and graphic skills. Focus will be defined by the faculty teaching the studio and the student interest.

Teaching Methods

The design studio is divided into sections of up to fifteen students. The semester is divided into two design exercises, each lasting seven weeks and each with a different instructor. The project or exercise has three phases: (1) establishing the subject of the investigation; (2) translating an investigation into a design; and (3) presenting a design as a result of an investigation. Students are required to present work in progress reports at scheduled pin-ups and to formally present at mid-term and before the final board of adjudicators.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Projects formulating four years of architectural education as a preparation for an architectural thesis. Projects demonstrate a students' ability to crystallise and communicate concepts of architectural design studio within the physical environment	15	210
• Project and site selection	1	14
• Concept of the Project	1	14
• Layout Study	1	14
• Plans study	2	28
• Elevation Study	2	28
• Sections Studies	2	28
• 3D study	1	14
• Elective Study	1	14
• Review and presentation	2	28
• Model	2	28
Total	15	210

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory/	Practical	Other:	Total
--	---------	----------	-------------	-----------	--------	-------

				Studio			
Contact Hours	Planned			15x14			210
	Actual						
Credit	Planned			15x7			105
	Actual						

3. Additional private study/learning hours expected for students per week.

8

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Student will be able to <u>recognize</u> various methodology of project design.	Lectures and text book, Series of explanatory sessions, standards literature study& project methodology, interactive session in class, Team work	Class assignment(design problem to express design process on transparent sheet to assess student visualization), Oral discussion, Exams
1.2	Students will be able to <u>define</u> various climatic influences over project site.	Individual presentation with wide variety of hands-on student learning activities, individual discussions for different projects,	Seminar and discussion (weekly sketch design & explain sheet work feedback), Small group work and case studies, Performance based evaluation.
1.3	To <u>tell</u> the students considerations of behavioral and cultural aspects of architecture	Lectures and text book for understanding cultural aspects, Small group work methodology, Self-learning project, Site Visits	Applied urban design projects, Portfolios submission Homework assignments Individual work assessment
2.0	Cognitive Skills		



2.1	Student can <u>explain</u> the parameters for studio project	Lectures, class discussion, visual presentations and text book will help students to understand the studio project hierarchy, brain storming	Class assignment (design problem with small introduction /Monitoring the progress of student work on weekly basis
2.2	Students can <u>analyze</u> the utilization of problem solving, sketching and 3D modeling approach for architecture design work.	Study notes for research standards &Explanation and examples are given as a feedback to the students in their presentations at urban level, Experimental Architectural design and its outcomes, site visits	Case studies (manual task of free hand sketching for concept evolution in different type of architecture design issues within a city will be submitted by students to assess their level of cognitive skills), case study evaluation, concept mapping, Additional notes.
2.3	Students will <u>develop</u> their interest to know the implication of environment over project along with building services	Lectures, Guidance and supervision of the individual design problem and Encouraging students the use of analytical and creative thinking. Problem based learning	Students portfolio (to show the criteria of students evaluation for which their design is accurate, effective, economical & environmentally satisfying), concept mapping, video analysis and final exams.
3.0	Interpersonal Skills & Responsibility		
3.1	To <u>write</u> reports with neat and clean sketches of the course assignments following the various design stages as literature case study, area formulation & design and development further.	small group design problem, Awareness of time management in completing their working stages, Special hours to week student,.	Meeting deadlines for the assignment, Evaluation of group reports and individual contribution within the group , Individual and group presentations, Logical arguments, peer evaluation, final exams
3.2	They will <u>illustrate</u> the application of these standard terms and concept into their imaginative work of drawings with considering aesthetic aspects and landscape and environmental design activity	Explain and communicate, Role playing, Team based learning, Lectures	<ul style="list-style-type: none"> • Peer or self-assessment of student at individual and group basis. • Assess complete Student portfolio • Final exams • Explain and communicate the student's results in order to justify their work for any design problem.





3.3	Student will be able to <u>show</u> their general ability to conceive, develop and present a design; aesthetic character.	Group presentation, Incorporating the use and utilization of computer, software, Power point presentations of case study works, Encourage students to help each other	Assessment is through coursework, design problem presentation, Group assignment & Individual assignment
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to Principles of Architectural Design & design elements to produce the final design output	Problem based learning, Social networking tools, Dialoguediscussion's present their projects and presentations digitally, maximum use of various software as per design stages accordingly.	Individual group presentations (assessment of students presentations, interim and final projects are based upon the use of IT and it is not allowed to present their finals and any other presentation during the semester except they are graphically presented and printed through a digital format)
4.2	Students can <u>evaluate</u> the difference between the two cast studies at least on basis of visual, functional and aesthetic aspects of architecture work and can exhibit by a strong verbal/ visual communication with presentation skills.	Site demonstrations, Architecture design case study of existing site in Group or individual task, Instructor of the course and students strive for save utilization of Internet, computers, printers and plotters 2D and3D and other presentation tools	Participation during the lectures and seminars is accounted for their communication, Critical evaluation of PowerPoint presentations, model making & case study.
5.0	Psychomotor		
5.1	Students will be able to <u>prepare</u> the design concept through proper <u>diagram</u> according to their imagination.	Sketching on blackboard or making diagram to enhance their visualizations.	Assignments, concept mapping, drawing sheets.
5.2	Student could <u>draw</u> any complex model of drawings to meet the objectives of design problems.	Individual group art work, students hands on learning activities.	Individual sketching presentations, model making



5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																	
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)																
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1
1.1	#			#	#												
1.2	#			#	#												
1.3	#			#	#												
2.1						#	#	#	#								
2.2						#	#	#	#								
2.3						#	#	#	#								
3.1											#	#	#				
3.2											#	#	#				
3.3											#	#	#				
4.1														#	#	#	
4.2														#	#	#	
5.1																	#
5.2																	#

6. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Project and site selection, Concept of the Project, Layout Study, Plans study, Elevation Study, Sections Studies, 3D study, Elective Study, Review and presentation and model	1-14	50 %
2	Midsem-1	7	10 %
3	Midsem-2	12	10 %
4	Final Exam	End Semester	30 %

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):
Yes, 10 CH/ Week



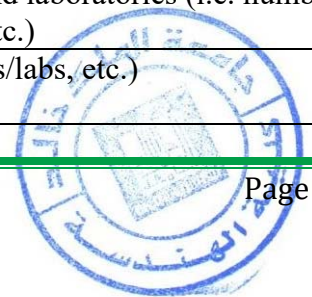
E Learning Resources

<p>1. List Required Textbooks</p> <ul style="list-style-type: none"> • Watson, D (1997) Time-Saver For Architectural Design Data: The reference for architectural fundamentals: McGraw-Hill • Pressman Andy (1993): Architecture 101: A Guide to the Design Studio: Wiley • KasprisinRon (2011): Urban Design: The Composition of Complexity. (1st Ed.): Routledge
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> • Edward Allen, Joseph Iano(2006): The Architect's Studio Companion: Rules of Thumb for Preliminary Design: John Wiley & Sons • Rossi, A(1982)Architecture and the City: MIT Press,
<p>3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p> <ul style="list-style-type: none"> • Blackboard, King Khalid University (lms.kku.edu.sa) • www.greatbuildings.com • www.newschoollarch.edu • www.dexigner.com/directory/cat/architecture/design_studios • www.troutdesign.com
<p>4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard. • Time Saver Standards for urban design issues at city level <p>Software needed:-</p> <ul style="list-style-type: none"> • Autodesk Auto CAD. • Autodesk Revit. • Autodesk 3D Max. • Sketch-up. • Adobe Photoshop

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)



<ul style="list-style-type: none"> • 1 Studio Room for group of 20 students.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, Parallel Bar, Set Square, Cartridges sheets of different size (A1, A2), Transparencies, Graph paper, Sketch Book, Curves & Furniture Templates, Different Grade pencils, Tri-angular scale etc.</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Individual assessment of student for course effectiveness. Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> • Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. • Review of recommended teaching strategies. • Review the NAAB and other academic accreditation boards of the course teaching specifications and assessment. • Periodical revision of the method of teaching and the course specifications • Student feedback for learning outcomes



4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Compare the standards of achievement in the course with standards achieved elsewhere.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback
- A collective jury is held at the end of every semester to review results and outcomes of the course, many points are raised and opinions are given to evaluate the effectiveness of the results students gained.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-35



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Professional Practice (521-ARC-3)			
2. Credit hours: 3 credit (3L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 10th /5th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To expose the students to present trends of architectural practice, valuation and arbitration.
- To understand the basic administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor.
- To explore the aspects of professional conduct, duties and responsibilities, legal rights and procedure of architectural profession.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Lecture & small group work teaching methods might be involved to enhance the awareness about Professional Practice.
- Studio assignments for understanding practical implications of architectural profession.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on Google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course will introduce to students with basic administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor. Legal aspects of modern practice. Ethics of professional practice are emphasized and students learn ethical and legal responsibilities for public health, safety and welfare, property rights, accessibility and other factors affecting design, construction and architectural practice





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• The role of professional bodies such as NCAAA: working, byelaws, categories of membership, election procedure and code of conduct.	2	6
• Professional responsibilities of the architect: copyrights, scale of charges, variation of charges, termination of services, specialised building services, mode of payment.	2	6
• Valuation techniques: elements of valuation and factors affecting valuation.	1	6
• Methods of valuation of landed and building property: purchase and mortgage, comparable cost of sale.	2	6
• Valuation for compensation on acquisition; relevance of the Town Planning Act.	2	6
• Appointment, conduct, powers and duties of arbitrators.	1	3
• Procedure for arbitration: preparation and publication of awards and impeachment.	2	6
• Easement and its definition: features of easements	2	6
	14	42

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x3					42
	Actual						
Credit	Planned	14x3					42
	Actual						

3. Additional private study/learning hours expected for students per week.	2
--	---





4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> the role of professional bodies.	Lectures, tutorials and text book, class discussion	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	<u>Telling</u> the students Professional responsibilities of the architect: copyrights, scale of charges etc.	Lectures, tutorials and practice	Individual assignment Oral discussion, quizzes, and presentation
1.3	Student will be able to <u>memorize</u> Valuation techniques, Methods of valuation & arbitration etc.	Lectures, tutorials and practice.	Multiple choice test, class recitation/ tutorial & independent study assignments.
2.0	Cognitive Skills-		
2.1	Student will be able to <u>explain</u> the basic difference between various professional bodies along with their work and contribution in architecture.	Lectures and Market survey task	Group and individual assignment
2.2	Students will be able to <u>analyze</u> the suitability of valuation methods, procedure for arbitration & easement differences.	Explanations and examples given in lectures, interactive classes	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest to know the concept of professional practice and its relation with various contractor, architect, consultant & engineer etc.	Lectures, Guidance and supervision of the individual assignments& tutorials, brainstorming	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.





3.0	Interpersonal Skills & Responsibility-		
3.1	Students can <u>justify</u> the contribution of professional bodies in society.	Peer review for students weekly presentations, Group presentation	group & individual assignment,
3.2	Student will be able to <u>modify</u> their work as per the demand of professional organization for approval.	Arranging individual and group discussion meeting to solve many problems in the lectures.	Evaluation of group reports and individual contribution within the ,Writing the project report.
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of various professional bodies as per the demand of society.	Participation during the lectures,	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the difference between the various terminology used during the approval from these professional organization.	Critical evaluation of their work, Writing reports & Student essay assignment.	Evaluation of oral presentation,, test questions& writing reports.
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#				#											
1.2				#												
1.3	#			#	#											
2.1						#		#		#						
2.2							#	#	#							
2.3						#	#		#	#						
3.1												#	#			
3.2											#		#			
4.1															#	#
4.2															#	#



6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Andrew Seidel , Joanna Eley & Martin Symes (1995) Architects and their Practices: A Changing Profession: Architectural Press
- Piotrowski, A. and Williams, Julia, 2001 “The Discipline of Architecture”, University of Minnesota Press.
- Rangwala, S C ,1974, “Valuation of Real Properties”, Charotar Book Stall.

2. List Essential References Materials (Journals, Reports, etc.)

- Watson, D. (Editor), 2005, “Time-saver Standards for Architectural Design: Technical Data for Professional Practice”, 8th Ed., McGraw-Hill.
- Eldred, G.W., 2004, “The Beginner’s Guide to Real Estate Investing”, John Wiley & Sons.

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- http://www.designingbuildings.co.uk/wiki/Tender_documentation_for_construction_projects



- http://en.wikipedia.org/wiki/Indian_Contract_Act_1872
- <https://acquisition.gov/far/current/html/FARTOCP16.html>
- <http://admis.hp.nic.in/himpol/Citizen/LawLib/c88.htm>
- <http://en.wikipedia.org/wiki/Arbitration>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, Parallel Bar, Sketch Book, , Different Grade pencils,

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.

3 Processes for Improvement of Teaching





- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications.
- Student feedback for learning outcomes.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specifications of B.Arch Elective Courses (CS)



Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Building Information Modeling (416-ARC-3)			
2. Credit hours: 3 credit (1L+4T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 7th /4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="50"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="50"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To understand the state of the art in computer technologies that can be utilized at different stages of architectural presentation, design, and construction.
- To produce 2D and 3D architectural drawings, complete with annotations, dimensions, hatching, etc. and also to plot drawings in different scales.
- To understand Computer programming to automated drafting function
- To export and import drawings in different formats, to be exchanged with other applications.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- For better understanding of the subject, major amount of work in the Revit, CAD lab by the students.
- Increased use of updated software to improve the work efficiency.
- Through exercises the students will get improve between 2D drawing and 3D modeling.
- Discuss technical skills required for success as an Architect Engineer.
- Increased use of power point and projector in classroom.
- Final portfolio contains of digitized design projects (plans, sections, elevations views- 3D model, etc.) with other tasks.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Building information modelling in Architecture is an introductory course to the field. The course involves a theoretical background on the newest capabilities that computer offer to architects. BIM is the process of using digital models that represents the physical and functional characteristics of a facility. It's a virtual visualization of building modelling and achieved through Autodesk, Revit software.



1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Introduction of various software available for the purposes of modelling like Revit, Auto Desk	3	15
• Introduction to computer programming to automated drafting function	3	15
• Introduction of CAD and BIM as drafting tool.		
• Familiarisation with the use of scanners, printers, plotters etc.	2	10
• Fundamental concepts such as – user interface, parameters, families, massing, rendering and printing.	3	15
• Basic commands for 2D and 3D drawing, editing and modifying techniques.	3	15
	14	70

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x1		14X4			70
	Actual						
Credit	Planned	14x1		14x2			42
	Actual						

3. Additional private study/learning hours expected for students per week.	3
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy			
On the table below are the five NQF Learning Domains, numbered in the left column.			
<p>First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)</p>			
Code	NQF Learning Domains	Course Teaching	Course Assessment



#	And Course Learning Outcomes	Strategies	Methods
1.0	Knowledge		
1.1	<u>Defining</u> various software available for the purposes of documentation presentation and drawing.	Lectures and text book , class discussion	<ul style="list-style-type: none"> Drawing sheet of existing case study to draw manual CAD Lab assignments practiced under supervision in tutorials and CAD lab tasks
1.2	<u>Recognizing</u> their software ability to work on CAD	class discussion class recitation/ tutorial & independent study	Oral discussion, quizzes, and presentation, Homework assignment.
1.3	<u>Recalling</u> students previous memory along their previous software skill	Lectures and Tutorials	Class Assignments
2.0	Cognitive Skills		
2.1	Student will be able to <u>explain</u> the basic difference between CAD and BIM	Lectures/teaching students how to perceive attentively and critically	CAD lab assignments
2.2	Students can <u>analyze the</u> commands between CAD and their implication for create drawings of building in 2D and 3D both	Lectures, Dialogue and class discussion/teaching students to think independently, Tutorial, Surprise tests special hours for the weak students. Lab assignment and independently performing tutorials	<ul style="list-style-type: none"> Quizzes. Problem solving tasks Students portfolio
2.3	Students will be able to develop their interest in drafting methods & to know the different stages of Architectural presentations, design & constructions.	Lectures, Class discussion, Visual presentation, Tutorial (video + practical), Group discussion	<ul style="list-style-type: none"> Final Exam Project presentation and Report submission
3.0	Interpersonal Skills & Responsibility		
3.1	Student will be able to <u>illustrate</u> the application of these software skills into their imaginative work of import drawings, drafting function in different formats	Brainstorming, Peer review for students weekly presentations, Group presentation	Explain and communicate the students results in lectures
3.2	Student will be able to <u>show</u> their drafting work for architecture design work i.e. Plans, elevation, sections & 3D views.	Extra hours to weak student, Explain and communicate .	Lab Assignments, individual drafting work & creativity
4.0	Communication, Information Technology, Numerical		
4.1	<u>Participation</u> through questions and discussion during the lectures & computer lab	Participation during the lectures, interactive class session	Class/ CAD Lab participation assignments & Quizzes, oral discussion



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4.2	Students will be able to <u>interpret</u> the basics of CAD and BIM work relevant to architectural design.	Critical observation of their drafting and modeling work	Evaluation of oral presentation
4.3	Students can <u>evaluate</u> the difference between the real and virtual object at software 3D modeling, analytical rendering, and animation and can exhibit by a strong verbal/ visual communication with presentation skills.	Student assignments with good standards of use of ICT	Test questions, student's assignment and project work evaluation, presentation using ICT.
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1				#	#											
1.2				#	#											
1.3				#	#											
2.1						#	#	#		#						
2.2						#	#	#		#						
2.3						#	#	#		#						
3.1											#	#				
3.2											#	#				
4.1														#		
4.2														#		

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support





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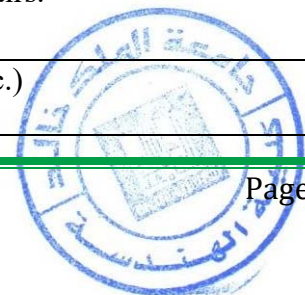
1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks
<ul style="list-style-type: none">• John Elys (2013). CAD fundamentals for Architecture, (1stEd.) London, UK : Laurence King publishing• Noble Douglas and Kensek Karen (2014) Building Information Modelling: BIM in Current and Future Practice, (1stEd) Hoboken, New Jersey : John Wiley & Sons
2. List Essential References Materials (Journals, Reports, etc.)
<ul style="list-style-type: none">• Davies N. and Barnes P.T. (2014) BIM in Principal and In Practices (1st Ed.). Westminster, London : ICE Publishing.
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
<ul style="list-style-type: none">• Blackboard, King Khalid University (lms.kku.edu.sa)• http://www.autodesk.com/products/autocad/overview• http://www.autodesk.com/solutions/building-information-modeling/overview• http://www.ddimagazine.com/• http://www.atlasmagazine.com/photo/lande6/
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
<ul style="list-style-type: none">• Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.• AutoCAD 2D & 3d CD with latest version

F. Facilities Required

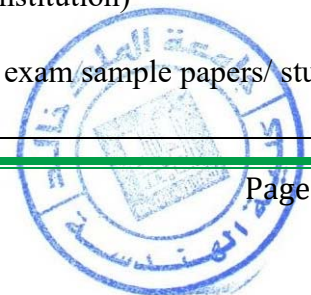
Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none">• 1 Lecture room for group of 20 students with comfortable chairs.• CAD Labs
2. Computing resources (AV, data show, Smart Board, software, etc.)



<ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations • 1 Computer laboratories each for groups of 25 students
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <ul style="list-style-type: none"> • For Studio Class – N.A. • For CAD Lab – AutoCAD & Revit Software

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff • Individual assessment of students. • Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> • Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. • Periodical revision of the method of teaching and the course specifications • Student feedback for learning outcomes
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> • Check marking by an independent faculty member of student exam sample papers/ student work





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- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-2



Course Title	Green Building Design
Course Code//Number	418-ARC-3
No. of Credit / Contact Hours	3/3
Level-Year	7-4
Prerequisite (if any)	None

Brief Course Description

Students learn, analyse and apply the principles of green building design and construction, including incorporating green principles in renovating and remodelling, and preservation of historic structures as well as new buildings.

Course Objectives

- Utilize engineering principles for design and construction of green structures
- Perform detail performance evaluation of a building based on LEED standards
- Understanding the role of Energy in Green buildings.

Course Contents

- Introduction to green building,
- Principles of green design
- Historic perspective on green design
- Systems approach to design
- Green Building programs and how they work
- Green Construction Methods
- Energy conservation
- Thermal and moisture protection
- Passive solar and day lighting
- Attached solar greenhouses
- Landscaping and Water storage
- Energy codes and standards
- Solar water heating and photovoltaic
- Construction practices—resources used and wasted in construction
- Building maintenance issues

Course Assessment

- Mid-Term Tests (Not less than two Exams.) (40 %)
- Assignment Work (10 %)
- Final Exam. (50 %)

Teaching Methods

- Lectures.
- Training exercises (Tutorial + Labs).

Learning outcomes

- Describe and use the basic terms and concepts used in green buildings.
- Recognize and analyze green buildings.
- Identify and define green Building Systems and Technologies and materials.
- Analyze and solve design problems utilizing principles of green building.
- Understanding the need of energy as energy conservation and to identify the thermal behaviour of green buildings.

Textbook

- Vale, Brenda and Robert (1991), 'Green Architecture - Design for sustainable future', UK: Thames and Hudson
- Stang, Alanna & H. Christopher (2010) The Green House – New dimensions in sustainable architecture: Princeton Architectural Press
- David Bergman (2012) Sustainable Design: A Critical Guide (Architecture Briefs), 1st Ed: Princeton Architectural Press

References

- Edwards, Brain (1999) 'Sustainable Architecture', Oxford: Architectural Press.

Internet references

- <http://ecovillage.org.in/wp-content/Downloads/Green-Building-Technology.pdf>
- <https://us.sunpower.com/what-green-building/>
- <http://www.slideshare.net/pulkitshukl/green-building-materials-30035938>
- https://en.wikipedia.org/wiki/Green_building
- <https://sustainabilityworkshop.autodesk.com/buildings/green-building-goals-process>
- http://sallan.org/pdf-docs/CHOWE_GreenBuildLaw.pdf



Course Specifications-3

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Urban Planning (424-ARC-3)			
2. Credit hours: 3 credit (2L+2T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 8th / 4th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="90"/>
b. blended (traditional and online)	<input type="checkbox"/> Yes	What percentage?	<input type="text" value="10"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To conceptualize the Regional and Urban Planning and its importance in architecture
- To understand the planning issues, planning standards: development plan, regional planning and planning legislation

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- The students shall submit informative notes about the urban parameters with their impact.
- Lecture & small group work teaching methods might be involved to enhance the awareness about urban planning.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.
- Portfolios
- More real life example

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

Introduction to history of urban planning and design; history and evolution of public spaces in different contexts, diversity, integration into buildings and landscape.; urban and regional theory and analysis; smart growth; new urbanism; land use/cover planning methods; urban engineering, Infrastructure, transportation, and environmental planning and assessment; sustainable urban development; Urban design issues.

1. Topics to be Covered





List of Topics	No. of Weeks	Contact hours
• Introduction to history of urban planning and Infrastructure system.	1	4
• Urban and regional theory and analysis; smart growth; new urbanism; land use planning methods; sustainable urban development	2	8
• Planning issues: Identification of planning problems of land use distribution and change; communication systems; overcrowding; slums; sporadic growth and conurbation.	3	12
• Planning Standards: Formulation of planning standards for land use; density;	2	8
• road and various community facilities at the local and town level.	2	8
• Development Plan: Planning process; concept of master plan, its elements, preparation and implementation	2	8
• Transportation planning	2	8
	14	56

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2=28	14x2=28				56
	Actual						
Credit	Planned	2	1				3
	Actual						

3. Additional private study/learning hours expected for students per week.

3





4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> history of urban planning and infrastructure	Lectures, tutorials and text book	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	Students will be able to <u>recognize</u> various concept of regional planning.	Lectures and tutorials	Multiple choice test, class recitation/ tutorial & independent study assignments
1.3	Student will be able to <u>memorize</u> various terminologies of Transportation Planning.	Lectures and tutorials	Individual assignment Oral discussion, quizzes, and presentation
2.0	Cognitive Skills		
2.1	Student can <u>explain</u> the basic difference urban planning and infrastructure planning	Lectures and sketching task , Tutorial (video + practical), Group discussion	Group and individual assignment
2.2	Students can <u>analyze</u> the elements of planning issues	Explanations and examples given in lectures,	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest for development plan for urban.	Lectures, Guidance and supervision of the individual assignments& tutorials	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>justify</u> the difference between urban planning and design and infrastructure planning	Peer review for students weekly presentations, Group presentation	group assignment includes component for individual contribution





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3.2	Student will be able to <u>show</u> their draw sketches for urban planning infrastructure.	Investigation of student skill & capability for urban sketch design & creativity.	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret</u> the basics of aesthetic and conceptual sketch relevant to urban planning & infrastructure.	Participation during the lectures,	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	This deep <u>research</u> will help them to communicate professionally to planning parameters.	Group discussion, student's participation in PowerPoint presentation, observation his performance in class room interaction.	Evaluation of oral presentation using ICT, test questions
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)																
Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#		#	#												
1.2	#	#		#	#											
1.3	#	#	#		#											
2.1							#		#	#						
2.2						#	#	#	#							
2.3						#		#	#	#						
3.1													#			
3.2													#			
4.1														#	#	#
4.2														#		#





6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- Anis Ur Rahmaan (2011) The Imperatives of Regional and Urban Planning: Concepts and Case Studies from the Developing World:Xlibris Corporation
- Rangwala, S.C. (2013) Town Planning: Charotar Publishing House

2. List Essential References Materials (Journals, Reports, etc.)

- Oke T.R, Mills G, Christen A, Voogt J.A.(2017) Urban climates(1st Ed): Cambridge University Press.
- Randall, A. (2001) Crossroads, Hamlet, Village, Town: Design Characteristics of Traditional Neighbourhoods, Old and New: American Planning Association

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- [Blackboard, King Khalid University \(lms.kku.edu.sa\)](https://lms.kku.edu.sa)
- <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/ftp04/MQ61319.pdf>
- http://archive.org/stream/principlesofcity00lohmrch/principlesofcity00lohmrch_djvu.txt
- <http://www.srmuniv.ac.in/downloads/townplaning.pdf>
- <http://megrevenue.dm.gov.in/acts/land-aquisition-act-1894>.



<p>4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard. • Landscaping Time saver standards • IGBC Standards
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F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • 1 Lecture room for group of 20 students with comfortable chairs.
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Computer & Data show projectors for digital presentations
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <p>For Studio Class - Drawing Boards, sketch book & tools</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> • Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester • Students Faculty meeting (once during semester) • Faculty-students periodical meeting (during office hours) • Analysis of students' performance on the tests and final. • Comparison of students' scores on test I, test II and Final exam
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <ul style="list-style-type: none"> • Department assessment by the related instructors & teaching staff



<ul style="list-style-type: none"> Faculty assessment of the concern course and effectiveness of teaching delivery.
<p>3 Processes for Improvement of Teaching</p> <ul style="list-style-type: none"> Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. Periodical revision of the method of teaching and the course specifications Student feedback for learning outcomes
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> Check marking by an independent faculty member of student exam sample papers/ student work Analyzing the marks of student in test & assignment sample by the department staff.
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none"> External reviewer feedback Periodic review & updating of the syllabus Statistical analysis of students marks to see the weak & stronger areas of the material given. Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Title	Building Performance
Course Code//Number	425-ARC-3
No. of Credit / Contact Hours	3/3
Level-Year	8-4
Prerequisite (if any)	None

1) Brief Course Description

Building Performance introduces the scientific origin fundamental the design, investigation, and evaluation of the building envelope as a separator of different environments. The purpose of this course is to link theoretical knowledge to applications in practice. This approach will support an increase in evidence-based practice.

This course relates building assemblies, components, and materials to different thermal, acoustic, and environment conditions. A building's impact on its own microclimatic conditions and the interactions of building form, orientation, and envelope with building energy consumption are discussed.

2) Course Objectives

- To familiarise students with the basic knowledge of various building system like mechanical, structure & electrical and their application for building performance.
- Introduced the concept of Sustainability and building energy performance.
- Introduction and the use of software available for exploring various building performance systems.

3) Course Contents

Part 1: Factors in the Environment

- Unit 1: Principles in Sustainable Design
- Unit 2: Climate
- Unit 3: Water

Part 2: Concepts and Principles

- Unit 4: Envelope Design for Air and Water
- Unit 5: Thermal Comfort: A Qualitative Approach



- Unit 6: Heat and Thermal Transfer

Part 3: Managing Environmental Factors in Design

- Unit 7 Design for Heating and Cooling
- Unit 8 Passive Solar Energy Systems
- Unit 9 Active Solar Heating and Photovoltaics
- Unit 10 Solar Geometry and Shading
- Unit 11 Passive Cooling
- Unit 12 Site Design Strategies

4) Course Assessment

- | | |
|---|--------|
| • Mid-Term Tests (Not less than two Exams.) | (40 %) |
| • Assignment Work | (10 %) |
| • Final Exam. | (50 %) |

5) . Teaching Methods

- Lectures.
- Training exercises (Tutorial + Labs).

6) Learning outcomes

This course presents both qualitative and quantitative techniques to relate the principles of equilibrium to building design to the climatic factors and principles that influence building performance, including solar radiation, wind, precipitation, temperature, thermal dynamics, and vapor migration.

After completing this course, you should be able to:

1. Discuss the relationships between building performance and environmental and climatic factors.
2. Discuss the concepts of heat transfer, thermal gradients, thermal bridges, air leakage, convection, and stack effect.
3. Predict the responses of common building assemblies and materials to climatic cycles through a systematic analysis of environmental factors including radiation, precipitation, heating, and cooling.
4. Discuss the impact that buildings have on the microclimate of their environment, including such factors as snow drifting, shading and reflection.



5. Relate the performance of windows and mechanical systems in passive and active Building Systems and Technologies.

7) Textbook

- Grondzik, Walter T. / Kwok, Alison G. / Stein, Benjamin / Reynolds, John S. (2014) Mechanical and Electrical Equipment for Buildings, 12th ed. Wiley NY
- group (Boecker, J., Horst, S., Keiter, T., Lau, A., Scheffer, M., & Toevs, B.), & Reed, B. (2009). The integrative design guide to green building: Redefining the practice of sustainability. Hoboken, NJ: Wiley.

8) References

- Brophy, V., & Lewis, J. (2011). A green Vitruvius: Principles and practice of sustainable architectural design, 2nd ed. Washington, DC: Earthscan.

9) Internet References

- <http://www.envinst.conu.edu/~envinst/research/built.html>
- www.terin.org/
- <http://www.pge.com/pec/archives/w98passi.html>
- <http://solstice.crest.org/efficiency/index.shtml>
- en.wikipedia.org/wiki/Weather_and_climate
- http://wiki.naturalfrequency.com/wiki/Shading_Design
- http://erg.ucd.ie/UCDERG/pdfs/mb_shading_systems.pdf
- http://mhathwar.tripod.com/thesis/climaticarch/climatic_architecture.html

Institution: King Khalid University	Date:
College/Department: College of Engineering/ Department of Architecture & Planning.	

A. Course Identification and General Information

1. Course title and code: Architecture Conservation and preservation (513-ARC-2)		
2. Credit hours: 2 credit (2L+0T)		
3. Program(s) in which the course is offered: Bachelor of Architecture		
4. Name of faculty member responsible for the course:		
5. Level/year at which this course is offered: Level 9th / 5th Year		
6. Pre-requisites for this course (if any): None		
7. Co-requisites for this course (if any): None		
8. Location if not on main campus: None		
9. Mode of Instruction (mark all that apply)		
a. traditional classroom	<input checked="" type="checkbox"/> Yes What percentage?	<input type="text" value="80"/>
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes What percentage?	<input type="text" value="20"/>
c. e-learning	<input type="checkbox"/> What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/> What percentage?	<input type="text"/>
f. other	<input type="checkbox"/> What percentage?	<input type="text"/>
Comments:		



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To gain knowledge of the historic development of architectural forms, enabling to analyze historic monuments in stylistic, constructional, contextual, and cultural.
- To evaluate the historical and cultural meaning of conservation/preservation and significance of historic buildings and settings, as a basis of conservation strategies.
- To inspect, record, and make reports intelligible to non-specialist readers of monuments, ensembles, or sites, illustrated by graphic means such as sketches and photographs.
- To understand of the contractual and administrative aspects of conservation projects.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- .
- The students shall submit informative notes about the above world heritage, national heritage and convention heritage site
- Lecture & small group work teaching methods might be involved to enhance the awareness about conservation and preservation of heritage buildings.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- More real life examples.
- Increase use of visual aids in teaching learning process.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This architectural course intended to Heritage Conservation and Preservation and research opportunities in the study of the preservation of historic buildings, districts, and landscapes, as well as the design and management of cultural heritage sites. The program explores heritage on several distinct but related levels. It examines the materiality of heritage resources through documentation, diagnosis, and the design of treatment interventions. It also encourages critical



analysis and assessment of the cultural values that underlie and define preservation policies, laws, and professional norms. Through fieldwork, case studies, and courses that investigate regional, national, and global heritage, the program focuses on the philosophy, policy, technology, economics, and social implications of heritage preservation.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
• Meaning of conservation and preservation, its roles in understanding and influencing the built environment; Importance of heritage buildings.	2	4
• Philosophies and policies of preservation and conservation.	2	4
• “Reading” heritage buildings and landscapes for their cultural meanings;	1	2
• The history of historic preservation and conservation, the development of modern conservation and preservation standards.	2	4
• Protecting historic places and documenting their significance.	2	4
• Historic districts and issues of community identity.	1	2
• Historic preservation as a tool for urban revitalization.	2	4
• Economics of historic preservation and conservation.	1	2
• Careers for professionals in historic conservation and preservation.	1	2
	14	28

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2					28
	Actual						
Credit	Planned	14x2					28
	Actual						

3. Additional private study/learning hours expected for students per week.	3
--	---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Students will be able to <u>define</u> various components of building conservation and preservation	Lectures, tutorials and text book , class discussion	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	To <u>tell</u> the students with the basic concept of heritage buildings history	Lectures, tutorials and practice	Individual assignment Oral discussion, quizzes, and presentation
1.3	To <u>outline</u> an overview of all philosophies regarding the construction of heritage buildings and their importance for preservation and conservation.	Lectures, tutorials and practice	Individual assignment Oral discussion, quizzes, and presentation
1.4	Student will be able to <u>memorize</u> various terminologies of preservation and conservations	Lectures, tutorials and practice, class discussion	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Student can <u>explain the</u> basic difference between the preservation and conservations	Lectures , interactive session in class, debate	Group and individual assignment
2.2	Students can <u>analyze the</u> methods of historic landscape preservation work.	Explanations and examples given in lectures, Assignment based on historic landscape preservation work.	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students will <u>develop</u> their interest in protecting historic places and documenting their significance.	Lectures, brainstorming	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		



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3.1	Students can <u>justify</u> the fundamentals rules of building conservation work.	Peer review for students weekly presentations, Group presentation.	group assignment includes component for individual contribution
3.2	They will <u>illustrate</u> the application of these skills in to show in their heritage building site work.	Investigation of student skill & capability for historical terminology about conservation	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret the</u> basics of conservation and preservation services and materials.	Participation during the lectures,	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	This deep <u>research</u> will help them to communicate professionally to various Architects, Engineers, contractors or owner.	Critical comments of their work, Writing reports & Student essay assignment in college style manual	Evaluation of oral presentation using ICT, test questions
5.0	Psychomotor		
5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1	#	#	#	#												
1.2		#		#	#											
1.3	#	#	#		#											
1.4	#		#	#	#											
2.1										#						
2.2										#						
2.3										#						
3.1											#					
3.2											#					
4.1														#	#	#
4.2														#		#

6. Schedule of Assessment Tasks for Students During the Semester



	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week):

Yes, 10 CH/ Week

E Learning Resources

1. List Required Textbooks

- StrikeJames (1994) Architecture in Conservation: Managing Development at Historic Sites (Heritage: Care-Preservation-Management):Routledge Press.
- Feilden Bernard (2003) Conservation of Historic Buildings (3rd Ed.): Architectural Press.
- AlQarniMohsin (1998). Architectural heritage of Saudi Arabia (1st Ed): Saudi Arabia, Ministry of Municipality of Rural Affair (MOMRA)

2. List Essential References Materials (Journals, Reports, etc.)

- North American International Regional Conference(1982) Preservation and Conservation: Principles and Practices: Natl Trust for Historic

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- [Blackboard, King Khalid University \(lms.kku.edu.sa\)](https://lms.kku.edu.sa/)
- <http://www.arabian-oryx.gov.sa/>
- https://en.wikipedia.org/wiki/List_of_World_Heritage_Sites_in_the_Arab_States

4 Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Heritage Policy and Standards

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- 1 Lecture room for group of 20 students with comfortable chairs.

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computer & Data show projectors for digital presentations

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

For Studio Class - Drawing Boards, sketch book & tools

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester
- Students Faculty meeting (once during semester)
- Faculty-students periodical meeting (during office hours)
- Analysis of students' performance on the tests and final.
- Comparison of students' scores on test I, test II and Final exam

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Department assessment by the related instructors & teaching staff
- Faculty assessment of the concern course and effectiveness of teaching delivery.





3 Processes for Improvement of Teaching

- Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings.
- Periodical revision of the method of teaching and the course specifications
- Student feedback for learning outcomes

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____

Course Specifications-6

Course Title	Geometrical & Parametric Design
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Course Code//Number	517-ARC-2
No. of Credit / Contact Hours	2/2
Level-Year	9-5
Prerequisite (if any)	None

Brief Course Description

This is an advanced course in Architecture graphics. We will begin with a basic introduction/review of geometry concepts as they relate to parametric modelling and communicating technical design. We will also focus on concepts for creating geometry on the screen that will prepare students to use a wide variety of CADD applications and create 3-dimensional objects. In addition to these this information students will also begin to study elementary Architecture principles.

Geometric design concerns with the mathematical description and analysis of shape. Geometric design draws upon the fields such as algebra, geometry, numerical analysis and computer programming.

Course Objectives

- To familiarise students with the basic knowledge of Geometric and parametric design in architecture design process and their application for building functionality.
- Introduced the concept of the basic parametric modelling interface and Geometry terms.
- Introduction and the use of software available for exploring Sketching and Annotation work and Creating assemblies

Course Contents

Part 1: Architecture design process

- Identify the need or problem
- Research the need or problem
- Develop possible solution(s)
- Select the best possible solution(s)
- Construct a prototype
- Test and evaluate the solution(s)
- Communicate the solution(s)
- Redesign

Part 2: The basic parametric modeling interface

- Sketch panel



- Geometric constraints panel
- Dimensional constraints panel
- The feature panel
- Types of files Part 3: Managing Environmental Factors in Design

Part 3: Geometry terms and concepts

Conditions and Entities in geometry

- Line, Ray, line segment, polygon, circle, arc, chord, diameter, radius, involutes, centre, inscribed, circumscribed, tangent, midpoint, bisector, parallel, perpendicular, intersection, quadrant, collinear, coincident, concentric, vertical, horizontal, symmetrical, equal

Part4: Sketching, Annotation and Creating assemblies

- determining what to sketch
- creating the sketch
- applying the constraints
- achieving fully constrained status
- creating features from sketches
- basic guidelines
- outputting a drawing file to paper
- outputting a part file to the part modeller

Course Assessment

- | | |
|---|--------|
| • Mid-Term Tests (Not less than two Exams.) | (40 %) |
| • Assignment Work | (10 %) |
| • Final Exam. | (50 %) |

Teaching Methods

- Lectures.
- Training exercises (Tutorial + Labs).

Learning outcomes

After completing this course, you should be able to:

- To discussions around some of the popular methods for geometry representation such as splines.
- To consider when developing a geometric design system.
- To represent a given object in an efficient way.
- The ability to create alternative designs using parametric representation.



- To generate an optimal design by means of careful consideration of alternative designs in a consistent fashion via the use of numerical optimization techniques.
- To understand the various popular mathematical methods used for shape representation in geometric design.
- To discuss the role of interactive design and parametric design to enhance the processes involved in a geometric design problem.
- To know the use of design optimization to carry out automatic design for function.

Textbook

- Woodbury Robert . (2010) Elements of Parametric Design, 1st ed: Routledge
- Group (Pottmann, H., Asperl, A., Hofer, M., Kilian, A. (2007). Architectural Geometry, 1st Ed. Hoboken: Bentley Institute Press.
- Group (Woodbury, R., Johnson, B., Jabl, W. (2013). Parametric Design for Architecture, 1st Ed : Laurence King Publishing

References

- Dunn, N. (2012). Digital Fabrication in Architecture, 1st Ed : Laurence King Publishing.

Internet References

- <http://www.danieldavis.com/a-history-of-parametric/>
- <https://en.wikipedia.org/wiki/Parametricism>
- <https://www.revolvy.com/main/index.php?s=Parametricism>
- <https://www.revolvy.com/topic/Parametricism&stype=videos>
- <https://ocw.mit.edu/courses/architecture/4-105-geometric-disciplines-and-architecture-skills-reciprocal-methodologies-fall-2012/index.htm>
- <http://cw.routledge.com/textbooks/9780415779876/toc.asp>
- <https://pdfs.semanticscholar.org/dfdd/5bf561d4a0884d710e354b425be7381ddd56.pdf>
- <https://arch.usc.edu/courses/574>

Course Specifications-7

Institution: **King Khalid University**

Date:



College/Department: **College of Engineering/ Department of Architecture & Planning.**

A. Course Identification and General Information

1. Course title and code: Intelligent Buildings (525-ARC-2)			
2. Credit hours: 2 credit (2L+0T)			
3. Program(s) in which the course is offered: Bachelor of Architecture			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 10th /5th Year			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: None			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/> Yes	What percentage?	80
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	20
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			



B Objectives

1. What is the main purpose for this course?

The main purpose of the course is-

- To enhance the understanding of the fundamentals of building services in design
- To familiarize the basic design principle systems for designing building an intelligent.
- To understand the physical requirements of buildings.
- To enhance the understanding, the energy and resource conservation techniques

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Lecture & small group work teaching methods might be involved to enhance the awareness about building services & intelligence concept.
- Studio assignments for understanding practical implications.
- Increased use of power point and projector in classroom.
- Increased used of information technology or web based reference materials for searching exact site location on google earth.
- Continuing monitoring of students assessment using NAAB performance and outcomes criteria.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This architectural course intended to an intelligent building as “one which provides a productive and cost-effective environment through optimization of basic elements: structure, systems, services and management, and the interrelationship between them.” This course also familiarizes the students with building services that support the functioning of a building in the area of electrical wiring, lighting, firefighting, Water and Sanitation. An intelligent building starts with an environmentally friendly design.





1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Intelligent building Definition, need and scope of intelligent building, Technology to design intelligent building, case study with examples, role of services in intelligent buildings	3	6
Building Services: <ul style="list-style-type: none">• Electrical-Common domestic installations: water heater, radiator etc. Types of switches, sockets and fixtures. Protection against overload: short circuit, earth fault, lightening conductors. Optimum consumption of energy has to be used as intelligent building concepts.	4	8
<ul style="list-style-type: none">• Water supply & Sanitation-Sources of water supply. Impurities of water and systems of water supply. Various kinds of water meters. Water storage tanks, their capacity and location. Basic principles of sanitation and disposal of waste matter from buildings	4	8
<ul style="list-style-type: none">• Environmental Design- Energy efficient concept and technology, Green building norms, Sustainable materials, climatic factors responsible for intelligent building.	3	6
	14	28

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	14x2=28					28
	Actual						
Credit	Planned	2					2
	Actual						

3. Additional private study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment



method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<u>Defining</u> various components of building services.	Lectures, tutorials and text book	<ul style="list-style-type: none"> Independent study assignment Multiple choice test Final exam
1.2	<u>Memorization of</u> various terminologies of building services component, advanced materials & technology and types along with their behaviors.	Lectures, tutorials and practice, active learning	Multiple choice test, class recitation/ tutorial & independent study assignments
2.0	Cognitive Skills		
2.1	Students will <u>develop</u> their interest in to know about the behavior environment friendly design.	Lectures and Lab task and video tutorials	Group and individual assignment
2.2	Student can <u>explain</u> the basic concept of intelligent building & building services	Explanations and examples given in lectures, Assignment based on open ended tasks as problem solving	<ul style="list-style-type: none"> Quizzes. Problem solving test at the end of topic & semester as well. Students portfolio
2.3	Students can <u>analyze</u> the construction & installation aspects with all building services	Lectures, Guidance and supervision of the individual assignments& tutorials	<ul style="list-style-type: none"> Final Exam Report submission in group and individual.
3.0	Interpersonal Skills & Responsibility		
3.1	Students can <u>write</u> reports of the course assignments over methods and techniques of intelligent buildings.	Peer review for students weekly presentations, Group presentation, interactive class	group assignment includes component for individual contribution, writing reports
3.2	They can <u>modify</u> the use of services as per their variant factors of demand	Investigation of student skill & capability for building materials, case study with discussion in tutorial	individual assignments for independent study assessed
4.0	Communication, Information Technology, Numerical		
4.1	Students will be able to <u>interpret the</u> basics of aesthetic and conceptual sketch relevant to building services schematic diagrams.	Participation during the lectures, Student assignments with ICT standards	Class/Material Lab participation assignments & Quizzes, oral discussion
4.2	Students can <u>evaluate</u> the effect of Lighting, wind and thermal behavior of buildings and their contribution towards intelligent parameters.	class logical discussion, & Student essay assignment in college style manual, brainstorming	Evaluation of oral presentation using ICT, test questions, Writing reports
5.0	Psychomotor		

5.1	N.A.		
5.2			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)															
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3
1.1		#	#	#	#											
1.2	#	#	#		#											
2.1								#	#	#						
2.2							#	#		#						
2.3							#	#	#							
3.1											#					
3.2											#					
4.1														#	#	
4.2														#	#	

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Class Assignments, Home work (Test//Quizzes) using black board (e-learning), Group Discussion & faculty observation	As per schedule given to students	10%
2	First Mid term	7	20%
3	Second Mid term	12	20%
4	Final Exam	End Semester	50%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week): **Yes, 10 CH/ Week**

E Learning Resources

1. List Required Textbooks

- Clements Derek (2013) Intelligent Buildings: An Introduction: Croome, Routledge.



- The American Institute of Architects (2003) The Architect's Guide to Design-Build Services: John Wiley & Sons.
- Fred Hall & Roger Greeno (2013) Building Services Handbook: Routledge.

2. List Essential References Materials (Journals, Reports, etc.)

- Taylor E. O. (1971) Utilisation of Electric Energy in SI units: Orient Longman, Revised in S.I. units by Rao, V.V.)
- Pachauri, A.K. (1999) Water Supply and Sanitary Installations, Design, Construction and Maintenance: New Age International Ltd)
- Manas Handbook of Plumbing. (Manas Publishers, 2000)

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- Blackboard, King Khalid University (lms.kku.edu.sa)
- <http://www.automatedbuildings.com/news/aug05/articles/ibtpe/ibtpe.htm>
- <http://www.intelligentbuildings.com/>
- http://www.who.int/water_sanitation_health/hygiene/plumbing14.pdf
- <http://www.epa.nsw.gov.au/resources/warr/0842HighRise.pdf>
- http://www.iiees.ac.ir/iiees/education/Graduate/tabadol/hochhaeuser_e.pdf
- <https://law.resource.org/pub/bd/bnbc.2012/gov.bd.bnbc.2012.08.06.pdf>
- http://www.wbdg.org/pdfs/gsa_usc_shell_office.pdf
- <http://www.fairfaxfire.org/content/downloads/NOVA%20HIGH-RISE%20BOOK.pdf>
- <http://www.cmhc.ca/en/inpr/bude/himu/coedar/upload/Fire-Safety-in-High-Rise>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Student should refer to the Blackboard site for imp information, submission details & dates timetable, Course announcement and course lecture notes, posted on blackboard.
- Time Saver Standards



F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> 1 Lecture room for group of 20 students with comfortable chairs.
2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> Computer & Data show projectors for digital presentations
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
For Studio Class - Drawing Boards, Parallel Bar, Graph paper, Sketch Book, Different Grade pencils etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> Confidential completion of required course evaluation questionnaire. Which will be filled by a small group of students once during semester Students Faculty meeting (once during semester) Faculty-students periodical meeting (during office hours) Analysis of students' performance on the tests and final. Comparison of students' scores on test I, test II and Final exam
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> Department assessment by the related instructors & teaching staff Faculty assessment of the concern course and effectiveness of teaching delivery.
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> Workshops on teaching methods, Use of recommended teaching strategies by regular departmental meetings. Periodical revision of the method of teaching and the course specifications Student feedback for learning outcomes





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4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent faculty member of student exam sample papers/ student work
- Analyzing the marks of student in test & assignment sample by the department staff.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- External reviewer feedback.
- Periodic review & updating of the syllabus
- Statistical analysis of students marks to see the weak & stronger areas of the material given.
- Confidential completion of standard course evaluation questionnaire: Students forms will be completed before the final exam.

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____



Course Specifications-8

Course Title	Project Tendering and Contracting
Course Code//Number	524-ARC-2
No. of Credit / Contact Hours	2/2
Level-Year	10-5
Prerequisite (if any)	--

Brief Course Description

This course is to provide comprehensive instruction on key issues which public sector and private sector contracting authorities and contractors need to focus their attention, from early planning to contract tendering and awarding, with emphasis on the applicable law. The issues considered include the definition of objectives, analysis of risks and likely costs; possible contract structures and types of pricing; technical and financial evaluation of potential contractors; invitations to tender; important contractual terms and conditions; preparation and submission of bids; evaluation of bids; and contract award. In summary, this course will review, step by step and in chronological order, the activities which comprise the procurement of a construction project.

Course Objectives

- Conduct the contract preparation and bidding to the contract award process with the knowledge of the relative responsibilities of each party involved.
- Providing students awareness regarding the project tendering and application of contracting.
- To Familiarise students with the contractual terms and conditions; preparation and submission of bids; evaluation of bids; and contract award.
- Enable students to understand the basic concept of standard contract forms.

Course Contents

Part 1: Introduction and Participants' Objectives

- Characteristics of the Construction Industry
- Importance of Tendering in the Construction Industry
- Tendering Systems

Part 2: Preparing Construction Documents



- Project Manual Concept
- Forms of Agreement
- Conditions of Contract
- Methods of Specification
- Specification Writing

Part 3: Bid Documents

- Invitations to Bid
- Instructions to Bidders
- Information Available to Bidders
- Attachments to Bid Forms
- Unit Prices, Alternate Prices, Separate Prices, Itemized Prices, Identified Prices□
1
- Nominated Sub□Contractors and Manufacturers
- Bid Forms and What They Represent

Part4: Selecting Contracting Strategies and Procurement Methods

- Standard Forms
- Stipulated Price Contracts
- Unit Price Contracts
- Cost□Plus□A□Fee Contracts
- Design□Build Contracts
- Construction Management Contracts
- Selecting an Appropriate Form of Procurement to Minimize Disputes
- Designing a Dispute Resolution System

Course Assessment

- | | |
|---|--------|
| • Mid-Term Tests (Not less than two Exams.) | (40 %) |
| • Assignment Work | (10 %) |
| • Final Exam. | (50 %) |

Teaching Methods

- Lectures.
- Training exercises (Tutorial + Labs).

Learning outcomes

After completing this course, you should be able to:



- Distinguish among the types of bid calls and types of contracts
- Use knowledgeably bonds and insurance
- Make productive use of the bidding period while the contractor is putting together a bid
- Reduce surprises with the knowledge of how contractors approach the preparation of their bid, what are their criteria for mark-ups, and what procedures they use to assemble and finalize the bid.
- Use new methods of bidding being contemplated by the industry
- Deal appropriately with the low bid when it exceeds the owner's available financing.
- Select a contractor and get construction underway without delay.

Textbook

- Jaeger, Axel-Volkmar, Hök, Götz-Sebastian. 2009. FIDIC - A Guide for Practitioners.
- Meredith and Mante, Project Management: A Managerial Approach, Wiley 3rd Edition, 1995

References

- FIDIC. 2005. FIDIC Conditions of Contract for Construction of Building and Engineering Works designed by the Employer (Red Book).
- E. Corbett 2005. FIDIC: The Short Form of Contract
- The building laws, the Ministry of Municipalities and Rural Affairs, <http://www.momra.gov.sa>

Internet References

- <http://www.pertecnica.in/contracts-tenders-bidding-in-infrastructure-projects/>
- VCCI-Best-Practice-Guide-for-Tendering-and-Contract-Management
- <http://www.fao.org/docrep/012/i1531e/i1531e04.pdf>
- http://ijiset.com/vol3/v3s3/IJISSET_V3_I3_60.pdf
- https://www.cips.org/Documents/Knowledge/Procurement-Topics-and-Skills/9-Supplier-Bid-Tender-Evaluation/Tendering/How_to_Prepare_and_Evaluate_Tenders-Knowledge_How_To.pdf
- http://www.ebrd.com/downloads/procurement/Works_Jan_2011_Final.pdf



Kingdom of Saudi Arabia

**The National Commission for Academic Accreditation &
Assessment**

**Course Specifications for First Year General
College Courses
(CS)**



MATH & BASIC SCIENCES

Course Title	Math for Architecture	Coordinator			
Course Number	118-MATH-2	Credit Hrs.	2	Contact Hrs.	2
Prerequisites	None	Level/Year		1/1	
Course Objective: Understanding the basics of analytical geometry and algebra. Gain skills to imagine some regular objects in three dimensions. The acquisition of the application of these fundamentals to resolve issues related to previous topics skills.					
Teaching Method: Lectures and tutorial					
Expected Learning Outcome: None					
Course Contents:					
Unit 1		• Engineering: conical sectors, cylindrical and spherical coordinates, analytic geometry in three dimensions that include the straight and level surfaces of the second degree			
Unit II		• Algebra: the theory of algebraic equations and the properties of the roots, matrices, operations on the matrices, some types of matrices, initial row transfer and its software applications, row reduction of matrices and its software applications, determinants and its computerized calculations, some limitations algebraic properties, inverse matrix, linear systems homogeneous and heterogeneous and its computerized solutions. Groups of linear equations, Kramer			
Text Book (s): • Arthur Schultze; Frank Louis Sevenoak," Plane and Solid Geometry ", Adamant Media Corporation, 2004. • David C. Lay, "Linear Algebra and its Applications ", 3rd ed., Addison-Wesley, 2005.					
Reference Book (s): • None					
Mode of Evaluation: • Mid-Term Tests (Not less than two Exams).....(50 %) • Final Exam. (50 %)					



Course Title	Physics	Coordinator			
Course Number	118-PHYS-3	Credit Hrs.	3	Contact Hrs.	4
Prerequisites	None	Level/Year		1/1	
Course Objectives: After the completion of this course, it is expected that the student be able to: 1. Understanding the basics of material properties. 2. Understand the basics of hydrostatics. 3. Understand the basics of sound and light. 4. The application of these basics to resolve problems related to previous topics. 5. Perform some practical experiments.					
Teaching Method: Lectures , tutorial and practical experiments					
Expected Learning Outcome:					
Course Contents:					
Unit 1 Material properties:	Units and dimensions, the physical mechanics, include energy effort, rotational motion of inertia, elastic properties of the materials, hydrostatics and surface tension, viscosity and fluid dynamics.				
Unit II Electrical:	Vector, the electric field, voltage, capacitors and insulating materials, magnetic field, magnetic force, the law of houses and wasvar, Ampere law, electromagnetic induction.				
Unit III Sound:	The nature , types and phenomena of sound.				
Unit IV Optics:	Refraction of light, the reflection of light, lenses and disadvantages.				
Text Book (s): • Richard Wolfson, " Essential University Physics", 2006. • Hugh D. Young, " University Physics ", Volume 2, 2004.					
Reference Book (s): • Hugh D. Young and Roger A. Freedman, " University Physics with Modern Physics", 11th Ed., 2003. • John D. Cutnell and Kenneth W. Johnson, " Physics ", 2003.					
Mode of Evaluation: • Mid-Term Tests (Not less than two Exams).....(30 %) • Practical Work and Assignments (20 %) • Final Exam. (50 %)					

General Education

Course Title	Intensive English Program-1	Coordinator			
Course Number	011-ENG-6	Credit Hrs.	6	Contact Hrs.	12
Prerequisites	None	Level/Year		1/1	
Couse Objective: <ul style="list-style-type: none"> To prepare students to communicate in real life situations. To enhance students proficiency level in English. To enhance their aural comprehension and oral expression. To use the forms and constructions of basic grammatical structures. To enable students to write different forms of composition, such as letters, recommendations, paragraphs, e-mails etc. 					
Teaching Method: Following strategies can be applied in the classroom teaching: <ul style="list-style-type: none"> Activities-based teaching Writing Strategy : Guided, Controlled and Free Reading Strategy : Silent Reading, Model Reading, Reading Aloud and Shared Reading Listening Strategy: Listen-Think-Pair-Share, Questioning, Role-play. Speaking strategy: Students will be given opportunities to speak in the classroom 					
Expected Learning Outcome: <ul style="list-style-type: none"> To acquire the rules of spelling and pronunciation. To know different forms of writing. To acquire the basic grammatical structures of English. To identify different stress and intonation patterns. 					
Course Contents:					
Unit 1:	<ul style="list-style-type: none"> Listening skill focus: Reflecting on listening Speaking skill focus: Asking for help with vocabulary 				
Unit II	<ul style="list-style-type: none"> Listening skill focus: Activating background knowledge Speaking skill focus: Reflecting on speaking 				
Unit III:	<ul style="list-style-type: none"> Topic: Plants; bees Listening skill focus: Activating background knowledge 2 Speaking skill focus: Asking for clarification vocabulary 				
Unit IV:	<ul style="list-style-type: none"> Listening skill focus: Predicting Speaking skill focus: Taking time to think 				
Unit V:	<ul style="list-style-type: none"> Listening skill focus: Listening for main ideas Speaking skill focus: Clarifying 				



Unit VI	<ul style="list-style-type: none"> Listening skill focus: Working out unknown vocabulary Speaking skill focus: Asking for further information
Unit VII	<ul style="list-style-type: none"> Listening skill focus: Identifying speculative language Speaking skill focus: Using expressions to show interest
Unit VIII	<ul style="list-style-type: none"> Listening skill focus: Listening for specific information Speaking skill focus: Elaborating
Unit IX	<ul style="list-style-type: none"> Listening skill focus: Identifying sequencers Speaking skill focus: Saying percentages and fractions
Unit X	<ul style="list-style-type: none"> Listening skill focus: Summarizing Speaking skill focus: Giving presentations
Unit XI	<ul style="list-style-type: none"> Listening skill focus: Listening for examples Speaking skill focus: Giving opinions and responding to opinions
Unit XII	<ul style="list-style-type: none"> Listening skill focus: Identifying important points Speaking skill focus: Rephrasing to check understanding
Text Book (s): <ul style="list-style-type: none"> Blackwell, Angela. Open Forum (1) Academic Listening and Speaking. Oxford: Oxford University Press, 2007 Blass, Laurie. Well Read 1. Oxford: Oxford University Press, 2008. 	
Reference Book (s): <ul style="list-style-type: none"> McCarthy, Michael. Touchstone (1) Student's Book. Dubai: Cambridge and Obeikan, 2009. McCarthy, Michael. Touchstone (1) Workbook. Dubai: Cambridge and Obeikan, 2009. Rivers, Susan. Touchstone (2) Student's Book. Dubai: Cambridge and Obeikan, 2009. (Units 1-6) Rivers, Susan. Touchstone (2) Workbook. Dubai: Cambridge and Obeikan, 2009. (Units 1-6) 	
Mode of Evaluation: <ul style="list-style-type: none"> First written test.....25% Second written test.....25% Final Exam.....50% 	

Course Title	Intensive English Program-2	Coordinator	
Course Number	012-ENG-6	Credit Hrs.	6
Prerequisites	011-ENG-6	Level/Year	2/1
Couse Objective: <ul style="list-style-type: none"> To introduce students to the basic terminology of technology. 			



- To prepare students to communicate in real life situations.
- To enhance students aural comprehension and oral expression.
- To use the forms and constructions of basic grammatical structures.
- To enhance students proficiency level in English.
- To enable students to write different forms of composition, such as letters, recommendations, paragraphs, e-mails etc.
- To enhance students level of reading comprehension

Teaching Method:

The following strategies can be applied in the classroom teaching:

- Activities-based teaching
- Writing Strategy : Guided, Controlled and Free
- Reading Strategy : Silent reading, model reading, reading aloud and shared Reading
- Listening Strategy: Listen-Think-Pair-Share, Questioning, Role-play.
- Speaking strategy: Students will be given opportunities to speak in the classroom,

Expected Learning Outcome:

- To acquire the rules of spelling and pronunciation.
- To know different forms of writing.
- To acquire the basic grammatical structures of English.
- To identify different stress and intonation patterns

Course Contents:

Unit 1:	<ul style="list-style-type: none"> • Listening skill focus: Activating background knowledge • Speaking skill focus: Rephrasing on speaking
Unit II	<ul style="list-style-type: none"> • Listening skill focus: Reflecting on listening • Speaking skill focus: Elaborating to keep a conversation going
Unit III:	<ul style="list-style-type: none"> • Listening skill focus: Predicting • Speaking skill focus: Hesitating and taking time to think
Unit IV:	<ul style="list-style-type: none"> • Listening skill focus: Listening for main points • Speaking skill focus: Using imprecision
Unit V:	<ul style="list-style-type: none"> • Listening skill focus: Working out unknown vocabulary • Speaking skill focus: Asking for further information
Unit VI	<ul style="list-style-type: none"> • Listening skill focus: Identifying organizing phrases • Speaking skill focus: Expressing opinions
Unit VII	<ul style="list-style-type: none"> • Listening skill focus: Intensive listening for numbers • Speaking skill focus: Preparing for presentations
Unit VIII	<ul style="list-style-type: none"> • Listening skill focus: Identifying the purpose of a story or example • Speaking skill focus: Explaining a process
Unit IX	<ul style="list-style-type: none"> • Listening skill focus: Summarizing



	<ul style="list-style-type: none"> • Speaking skill focus: Checking for understanding
Unit X	<ul style="list-style-type: none"> • Listening skill focus: Identifying opinions and supporting arguments • Speaking skill focus: Using repetition for emphasis
Unit XI	<ul style="list-style-type: none"> • Listening skill focus: Identifying key words to understand details • Speaking skill focus: Managing conversation
Unit XII	<ul style="list-style-type: none"> • Listening skill focus: Using phrase to work out meaning • Speaking skill focus: Meaning a group discussion
Text Book (s): <ul style="list-style-type: none"> • . Blackwell, Angela. Open Forum (2) Academic Listening and Speaking. Oxford: Oxford University Press, 2006. • Blass, Laurie. Well Read 2. Oxford: Oxford University Press, 2008. 	
Reference Book (s): <ul style="list-style-type: none"> • Rivers, Susan. Touchstone (2) Student's Book. Dubai: Cambridge and Obeikan, 2009. (Units 7-12) • Rivers, Susan. Touchstone (2) Workbook. Dubai: Cambridge and Obeikan, 2009. (Units 7-12) • McCarthy, Michel. Touchstone (3) Student's Book. Dubai: Cambridge and Obeikan, 2010. • McCarthy, Michel. Touchstone (3) Workbook. Dubai: Cambridge and Obeikan, 2010. 	
Mode of Evaluation: <ul style="list-style-type: none"> • First written test.....25% • Second written test.....25% • Final Exam.....50% 	

Course Title	The Entrance to the Islamic culture	Coordinator	
Course Number	111-IC1-1	Credit Hrs.	2
Prerequisites	None	Level/Year	2/1
Course Objectives: After the completion of this course, it is expected that the student be able to: <ul style="list-style-type: none"> • Entrenched correct doctrine derived from the Quran and Sunnah in the hearts of students. • Understanding the assets of Six faith. 			



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<ul style="list-style-type: none"> Students realize what is contrary to faith or perfection. 	
Teaching Method: Lectures	
Expected Learning Outcome:	
Course Contents:	
Unit 1	The definition of culture and characteristics, and clarify the meaning of faith, and the call to faith, and faith assets.
Unit II	Deism and the unification of divinity and their meaning and their relationship.
Unit III	Methods of the Koran in calling for the unification of divinity, and photos of polytheism and dangerous
Unit IV	Belief in the Angels and the position of the Koran and books of the previous books Belief in the Messengers The definition of heresy and kinds
Text Book (s):	
<ul style="list-style-type: none"> Book guidance to the true belief and the response to the atheism -Dr.alfozan 	
Reference Book (s):	
<ul style="list-style-type: none"> Profiles in Islamic culture-Omar Khatib Unification-Mohammed Abdel Wahab The religion- Mohammed Draz 	
Mode of Evaluation:	
<ul style="list-style-type: none"> Mid-Term-1 Tests(25 %) Mid-Term-2 Tests (25 %) Final Exam. (50 %) 	

Course Title	Islamic Culture-2	Coordinator	
Course Number	112-IC1-2	Credit Hrs.	2
Prerequisites	None	Level/Year	3/2



Course Objectives: After the completion of this course, it is expected that the student be able to: <ul style="list-style-type: none"> • Identify the implications of applying the Islamic regime the lives of individuals communities • Knowledge of rights and rulers in Islamic law • Recognition of human rights in the Islamic systems • To identify the advantages of Islamic economy • Identify the characteristics of the Islamic economy system. 	
Teaching Method: Lectures	
Expected Learning Outcome:	
Course Contents:	
Unit 1 The political side	<ul style="list-style-type: none"> • Advantages of the political system in Islam • State concept in Islam • The purpose of the establishment of the state in Islam • Staff of the Islamic state • External relations of the Islamic countries in case of war and peace
Unit II	<ul style="list-style-type: none"> • The rules of the political system in Islam • Three authorities in the Islamic state • Aspects of the application of Islam in Saudi Arabia • Duties of the Guardian in the Islamic state • Definition of human rights in Islam • Human Rights in Islam • Muslims' relations with non-Muslims in Islam
Unit III The economic side	<ul style="list-style-type: none"> • The concept of Islamic economics • Islamic economic system properties • It targets the Islamic economic system.
Unit IV	<ul style="list-style-type: none"> • Mainstays in Islamic Economics • Banks, its history, and its divisions • Banking transactions • Insurance and its divisions
Text Book (s): <ul style="list-style-type: none"> • The political system in Islam-facilitation to Dr. Saad • Economic System in Islam-Dr Omar Faihan 	
Reference Book (s): <ul style="list-style-type: none"> • The relationship between the ruler and the ruled by Sheikh bin Baz 	



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- Treatment of referees in the Quran and Sunnah to Dr. Abdul Salam Barjas

Mode of Evaluation:

- Mid-Term-1 Tests(25 %)
- Mid-Term-2 Tests (25 %)
- Final Exam. (50 %)

Course Title	Islamic Culture-3	Coordinator	
Course Number	113-IC1-2	Credit Hrs.	2
		Contact Hrs.	2



Prerequisites	None	Level/Year	4/2
Course Objectives: After the completion of this course, it is expected that the student be able to:			
<ul style="list-style-type: none">• Identify the characteristics of the Muslim community• Acquainted with the teachings of Islam in the area of family formation• Acquainted with the teachings of Islam and guidance• The concept of the Muslim community			
Teaching Method: Lectures			
Expected Learning Outcome:			
Course Contents:			
Unit 1	<ul style="list-style-type: none">• The concept of the Muslim community• Rights in Islam• The concept of an Islamic society		
Unit II	<ul style="list-style-type: none">• Muslim community properties• And means of strengthening social ties• The most important social problems		
Unit III	<ul style="list-style-type: none">• Family in Islam• Introductions of marriage• Marriage and his goals		
Unit IV	<ul style="list-style-type: none">• The impact of the marriage contract• And means of strengthening family ties• The most important family issues		
Text Book (s): • Islam and society to Professor Hassan Abdul Ghani			
Reference Book (s): <ul style="list-style-type: none">• Islam and society to Dr. Ahmed Mohammed El-Assal• The assets of the social system in Islam Dr. Muhammad Tahir Ashour			
Mode of Evaluation: <ul style="list-style-type: none">• Mid-Term-1 Tests(25 %)• Mid-Term-2 Tests (25 %)• Final Exam. (50 %)			

Course Title	Islamic Culture-4	Coordinator	
Course Number	114-IC1-2	Credit Hrs.	2
		Contact Hrs.	2



Prerequisites	None	Level/Year	5/3
Course Objectives: After the completion of this course, it is expected that the student be able to: <ul style="list-style-type: none">• Identify intellectual invasion of the Islamic world methods• Understanding the contemporary Muslim world challenges• Prevention of destructive ideologies			
Teaching Method: Lectures			
Expected Learning Outcome:			
Course Contents:			
Unit 1	<ul style="list-style-type: none">• Colonization• Secularism• National		
Unit II	<ul style="list-style-type: none">• Christianization• Orientalism• Freemasonry		
Unit III	<ul style="list-style-type: none">• Zionism• Globalization• Cognitive and technical challenge		
Unit IV	<ul style="list-style-type: none">• Economic challenge• Political challenge• Unit Muslim world• Economic development		
Text Book (s): <ul style="list-style-type: none">• Methods of intellectual invasion of Dr. Ali Abu Gereshsa• Secular Dr. Mohamed Kotb.			
Reference Book (s): <ul style="list-style-type: none">• Critique of Arab nationalism of Sheikh bin Baz• Orientalism and the intellectual background of the conflict of civilization to Dr. Mahmoud Zaqzouq			
Mode of Evaluation: <ul style="list-style-type: none">• Mid-Term-1 Tests(25 %)• Mid-Term-2 Tests (25 %)• Final Exam. (50 %)			

Course Title	Language Skills	Coordinator	
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Course Number	201-ARAB-2	Credit Hrs.	2	Contact Hrs.	2
Prerequisites	None	Level/Year	1/1		
Couse Objective: <ul style="list-style-type: none">• Development of Students Positive attitude towards the language regarding, reading ,writing, and Performance & the correctness of linguistic expression and avoiding error• To provide the student with a glance at the language and its figure and the history of Arabic arts					
Teaching Method: <ul style="list-style-type: none">• Lectures & E Learning classes• Dialogues and Discussion• Self Learning					
Expected Learning Outcome: <ul style="list-style-type: none">• To identify the types of words• To know the sign of each type of words• To differentiate noun,verb and particle• To be acquainted with how to parse					
Course Contents:					
Unit 1: Introduction to Linguistic Skill+Types of words		<ul style="list-style-type: none">• Introduce student to the course,its main goal and included scientific topics• Noun makers,Verb Makers etc			
Unit II : Parsing of Noun and Verbs		<ul style="list-style-type: none">• Apparent and non Apparent parsing of Nouns• Apparent and non Apparent parsing of Verbs• Major Parsing Sign of movement• Secondary Parsing Sign of movement			
Unit III: Suffixation I		<ul style="list-style-type: none">• Plural Masculine and Plural Feminine			
Unit IV: Suffixation II		<ul style="list-style-type: none">• Six Nouns			
Unit V: Case Ending		<ul style="list-style-type: none">• Nouns Regularities			
Unit VI: Semantics		<ul style="list-style-type: none">• Generalization and Specialization of words• Indication of Nouns and Verbs			
Unit VII: Some Arab Figures		<ul style="list-style-type: none">• Khalid bin Ahmed• Fareehidi• Sibawayh			
Text Book (s): <ul style="list-style-type: none">• The concise of Arabic language grammer,Said AlAfghani ,Mustafa Ameen• The philology and Arabic properties, Mohammad Almubarak					



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- The obvious syntax of Arabic Grammar

Reference Book (s):

- The Arabic Dictionary, D. Raid Zaki Qasim
- The classical councils for Arabic language science and Arts

Mode of Evaluation:

- First written test.....15%
- Second written test.....10%
- Assignment.....25%
- Final Exam.....50%

Course Title	Arabic Editing	Coordinator	Group of teachers
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Course Number	202-ARAB-2	Credit Hrs.	2	Contact Hrs.	2
Prerequisites	None	Level/Year	2/1		
Couse Objective: <ul style="list-style-type: none">• To write the correct spelling according to right rule• Learn techniques of Arabic writing• Avoid frequent errors• Master the use of punctuation					
Teaching Method: <ul style="list-style-type: none">• Lectures & E Learning classes• Dialogues and Discussion• Self-Learning					
Expected Learning Outcome: <ul style="list-style-type: none">• Enable student to write according to writing rules• Learn the techniques of Arabic writing					
Course Contents:					
Unit 1: Introduction to Arabic Writing		<ul style="list-style-type: none">• Introduce student to the course, its main goal and included scientific topics• Clarify the course learning			
Unit II :Hamza		<ul style="list-style-type: none">• Hamza at beginning, middle and end of words			
Unit III: Punctuation		<ul style="list-style-type: none">• Punctuation rules			
Unit IV: Error		<ul style="list-style-type: none">• Common errors			
Unit V: Rules of Writing		<ul style="list-style-type: none">• Essay• Research• Letter• Report• Summary			
Text Book (s): <ul style="list-style-type: none">• The Art of Arabic Writing- Mohammed Saleh Shanti					
Reference Book (s): <ul style="list-style-type: none">• The rule of spelling-Abdul Salam Haroun• Dictionary of Parsing and spelling-Amel Jacob					





- Notebook-Abdul Hadi Harb

Mode of Evaluation:

- First written test.....20%
- Second written test.....20%
- Oral Participation.....5%
- Assignment.....5%
- Final Exam.....50%



FORM-5

Field Experience Specification

Bachelor of Architecture

(New Program)

Field Experience Specifications



Institution: King Khalid University	Date of Report:
College: College of Engineering	Department: Architecture & Planning.
Program: Bachelor of Architecture	Track: N.A.

A. Field Experience Course Identification and General Information

1. Field experience course title and code: Field Training/ 431-ARC-0												
2. Credit hours (if any): None												
3. Level or year of the field experience: After the completion of 8th level (<i>Program CRH should be completed as 120 hours before training as mandatory criteria</i>)												
4. Dates and times allocation of field experience activities. As per training schedule after 8th semester												
a. Dates: _____												
b. Times: _____												
5. List names, addresses, and contact information for all field experience locations*												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 40%;">Name and Address of the Organization</th> <th style="width: 30%;">Name of Contact Person</th> <th style="width: 25%;">Contact Information (email address or mobile)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">a.</td> <td style="height: 30px;"></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">b.</td> <td style="height: 30px;"></td> <td></td> <td></td> </tr> </tbody> </table>		Name and Address of the Organization	Name of Contact Person	Contact Information (email address or mobile)	a.				b.			
	Name and Address of the Organization	Name of Contact Person	Contact Information (email address or mobile)									
a.												
b.												

*This list of organization address will be complete when the students will reach their training period during the completion of their 8 semester. This is depend upon students choice as per their office selection/location, later on this list will be updated according to their location.

B. Learning Outcomes

1. Learning Outcomes for Field Experience in Domains of Learning, Assessment Methods and Teaching Strategy
<p>Program Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning and teaching.</p>



The **National Qualification Framework** provides five learning domains. Learning outcomes are required in the first four domains and sometimes are also required in the Psychomotor Domain.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable learning outcomes required in each of the learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each program learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process.

	NQF Learning Domains and Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	<u>Recognize</u> and practice real computer based problem solution on architecture software i.e. CAD, Max, Photoshop, Revit and Sketch up.	<ul style="list-style-type: none"> • Group Discussion and Seminar. • Site Visits • Self-learning Projects. 	<ul style="list-style-type: none"> • Team Presentations • Portfolios • Assignments
1.2	Ability to <u>describe</u> technical, aesthetic, and conceptual decisions based on architectural and design principles.		
2.0	Cognitive Skills		
2.1	Ability to <u>analyses</u> a given architecture problem, recognize a suitable problem solving methodology; apply the methodology with a meaningful proposal.	<ul style="list-style-type: none"> • Problem based learning. • Critical thinking. • Enables him to recognize the basic technical skills • Enables him to create new solutions to technical problems • Discuss the issues in a realistic training environment. 	<ul style="list-style-type: none"> • Analytical report • Display all the skills gained in the final presentation • Case studies • Discuss the new solution gained in summer training in the final presentation
2.2	Ability to <u>develop</u> their ideas professionally and connect with their intended audience using visual, verbal communication, and presentation skills relevant to their field.		
2.3	Ability to apply knowledge and skill in a particular work environment.		
3.0	Interpersonal Skills & Responsibility		





3.1	Ability to <u>demonstrate</u> the use, analysis and application of an appropriate international architecture standard in a specific situation.	<ul style="list-style-type: none"> Awareness of time management completing their reports. Conduct experiments and write reports individually. Encourage students to help each other. Discuss and participate in solving problems related to architectural design in groups during help sessions made on site. 	<ul style="list-style-type: none"> Logical arguments. Studio/workshop exam Oral exam Demonstration Individual group presentations. Artwork
3.2	Group work experience, Collaborate work and communicate effectively.		
3.3	Ability to take initiatives and to manage a project within a given time frame.	<ul style="list-style-type: none"> Conduct design experiments 	<ul style="list-style-type: none"> Individual group presentations.
4.0	Communication, Information Technology, Numerical		
4.1	Ability to work in a team and <u>interpret</u> ideas with real work team and under supervision, give and receive clear instructions.	<ul style="list-style-type: none"> Lectures. Social networking tools individual presentations. Dialogue discussion Software involvement/Lab work 	<ul style="list-style-type: none"> Laboratory /workshop exam. workshops reports and oral presentations. Videos Quizzes.
4.2	Ability to <u>justify</u> the basic administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor.		
4.3	Ability to effectively <u>communicate</u> solution to problems (oral, visual, written).		
5.0	Psychomotor (N.A.)		

Suggested Learning Outcome Verb, Assessment, and Teaching Methods (to be moved to the end as attachment, or in the help icons)

Learning Domains	Suggested Verbs
Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict,



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	justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

Suggested assessment methods and teaching strategies:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

C. Description of Field Experience Activity





1. Describe the major student activities taking place during the field experience.

- *Collect data, architectural design and techniques, write report with observations and conclusion*
- *Use any new instruments/techniques related to the project*
- *Apply Safety measures practically in the industrial labs*
- *Apply presentation skills*

2. List required assignments, projects, and reports.

After eight weeks of work in industry/institutions, students write a technical report and submit on during two week of the next semester followed by presentation. The report and presentation are evaluated by faculty members (Jury). The host industry also provides its evaluation report for students.

3. Follow up with students. What arrangements are made to collect student feedback?

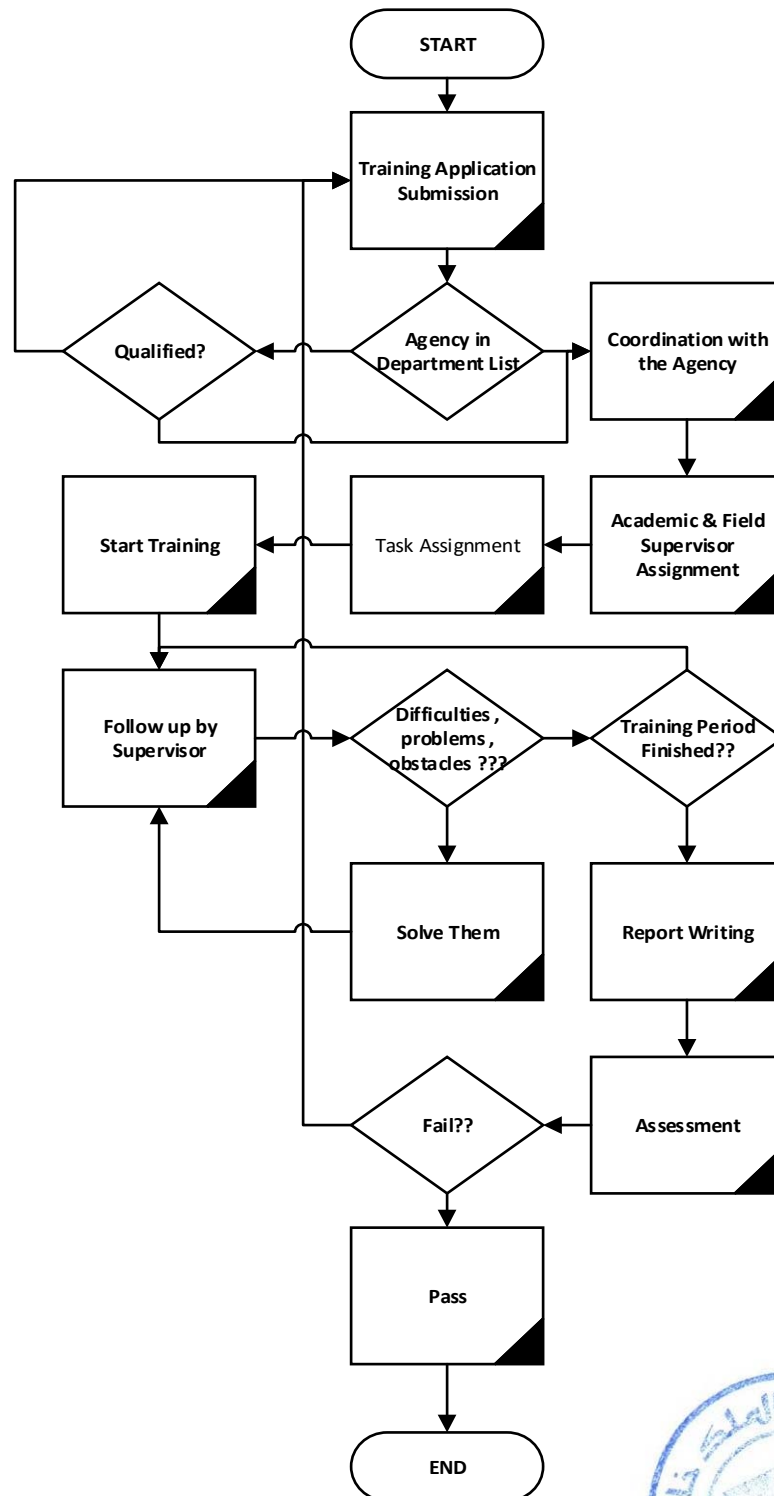
- *Student on training will submit details of his institution/ office where he will be working. Where at the time of joining student will submit his office location.*
- *Student will inform department at intermediate stages of internship work which has some credit.*
- *It may contain an experience letter for the progress of students which will be feedback from office.*
- *Student will submit their report for feedback accordingly.*
- *One or two faculty member will be assigned as a co-ordinator to establish communication among the students during their internship period.*
- *Students will give information to their coordinator periodically via email.*
- *Students will be given a proper format to fill all the details for their office i.e. office/company mail, address, type of projects or nature of duties and responsibilities & site visits etc.*
- *Students will have to come to college in the middle of the internship for conducting a mid-session viva-voce.*





3. Insert a field experience flowchart for responsibility and decision-making (including a provision for conflict resolution).

4.





5. Supervisory Responsibilities.

	Student	Field Teaching Staff	Program Faculty and Teaching Staff
Student Activities			
a. transport to and from site		✓	
b. demonstrate learning outcome performance		✓	✓
c. completion of required tasks, assignments, reports, and projects	✓	✓	✓
Supervision Activities			
a. field site – safety		✓	✓
b. student learning activities		✓	✓
c. learning resources		✓	✓
d. administrative (attendance)		✓	
Planning Activities			
a. student activities		✓	
b. learning experiences		✓	✓
c. learning resources		✓	✓
d. field site preparations		✓	
e. student guidance and support		✓	✓
Assessment Activities			
a. student learning outcomes		✓	✓
b. field experience		✓	✓
c. field teaching staff	✓		
d. program faculty and teaching staff	✓		
e. field site	✓		✓
f. learning resources	✓		✓



b. Explain the student assessment process.

Students are evaluated on their performance and are required to submit a report and present a PowerPoint Presentation about their experience before receiving a grade for summer internship course.

No.	Evaluation topic	Marks
1	Final evaluation (company)	40%
2	Periodic reports	18%
3	Interaction	7%
4	Final report	15%
5	Final presentation and discussion	20%
#	Total Marks	100%

c. Explain the resolution of differences process (If the field teaching staff and the program faculty and teaching staff share responsibility for student assessment, what process is followed for resolving differences between them?)

This will be basis on the final feedback between field teaching staff and the program faculty. Major priority will be given to the field teaching staff in any resolution of different process as students have to complete their internship under the supervision of field staff. Program faculty will assess the field work and will provide him to all the format of assessment needed for students. The another report of students work will be ask through the field staff. The report will include the students' performance timely and follow properly by the program faculty which finally resolve all the differences in assessment for the students.

D Planning and Preparation: (N.A.)

1. Identification of Field Locations

List Requirements for Field Site Locations (IT, equipment, labs, rooms, housing, learning resources, clinical)	List Safety Standards	List Specialized Criteria
<i>Field location can be identified during the 8th semester of the program and this selection is only by the students in Saudi region after their internship proposal submission.</i>		
a.		
b.		
c.		
d.		
e.		

<p>Explain the decision-making process used to determine appropriate field experience locations. <i>There will be some criteria for decision-making process used to determine appropriate field experience locations as follows-</i></p> <ol style="list-style-type: none"> <i>1. Experience of the Architect not less than 10 years and proper registration with any registered body</i> <i>2. The office/firm/company should have at least some years to be established.</i> <i>3. Types of projects</i> <i>4. Should be within KSA</i> <i>5. Should have vacancy for intern trainee of architecture.</i>

2. Identification of Field Staff and Supervisors – ***It Will be decided by the department committee afterwards.***

List Qualifications	List Responsibilities	List Training Required
a.		
b.		
c.		
d.		
<p>Explain the decision-making process used to determine appropriate field staff and supervisors. <i>This selection will be made by the department committee when we need it as after being establishment of the program , at least up to 4th year.(when the internship period will be begin)</i></p>		

3. Identification of Students. Its compulsory for all the students who successfully ***Complete their criteria of some college courses and assignment and after completion of the 8th semester.***

List Pre-Requisite Requirements	List Testing Requirements	List Special Training Required
a.		
b.		
c.		
d.		
<p>Explain the decision-making process used to determine that a student is prepared to enroll in field experience activities:-<i>This is depend upon the successful completion of the program till 8th semester an the performance of the students.</i></p>		

4. Safety and Risk Management. (N.A.)

List Insurance Requirements	List Potential Risks	List Safety Precautions Taken	List Safety Training Requirements



a.			
b.			
c.			
d.			
Explain the decision-making process used to protect and minimize safety risks.			

5. Resolution of Differences in Assessments. If supervising staff in the field location and faculty from the institution share responsibility for student assessment, what process is followed for resolving any differences between them?
Supervising staff in the field location is itself the consultant/firm/company, where students will get internship offer hence certificate of his work from his employer in last. Later on, faculty from the institution will follow the assessment method via portfolio and students work experience along with external examiner during practical viva. Therefore no chances of resolving differences.

E. Evaluation of the Field Experience.

1. Describe the evaluation process and list recommendations for improvement of field experience activities by:

a. Students

Describe evaluation process –

1. ***Certificate of internship followed by the students project work form employer.***
2. ***Preparation of portfolio and report***
3. ***PPT***

List recommendations for improvement

1. ***Focus on more architecture work***
2. ***Applying methods and techniques of actual site in thesis and project work***
3. ***Selection of office as per the scope and interest of the student under guide supervision.***

b. Supervising staff in the field setting

Describe evaluation process- NA

List recommendations for improvement- NA





c. Supervising faculty from the institution

Describe evaluation process

1. *Submitted portfolio and reports under the criteria set by the responsible faculty.*
2. *Employer certificate for the internship completion under the period and timing decided by the department*
3. *Internal marking evaluation and review*
4. *External marking evaluation and review*

List recommendations for improvement

1. *Portfolio presentation may be enhanced*
2. *Presentation technique can be improved*
3. *Communication skill make better by software*

e. Others—(e.g. graduates, independent evaluator, etc.)- NA

Describe evaluation process

List recommendations for improvement- NA

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Field Experience Teaching Staff _____

Program Coordinator: _____

Signature: _____ Date Received: _____





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FORM-7, Facilities required for the program
(The Human and Material Potentials Necessary for the Program)

A - Human Potentials:

	Faculty Members					Administrators, Qualifications and Experience	Technicians, Qualification and Experience
	Demonstrator	Lecturer	Assistant Prof.	Associate Prof.	Prof.		
Available		2	3	1			
Total		2	3	1			
Actual Need	4	6	5	3	4	4	5
Total	4	8	8	4	4	4	5

B - Material Potentials:

	Available	Needed	Available Equipment	Needed Equipment
Classrooms	-	10 Studio 10 Classrooms	-	<ul style="list-style-type: none">• Drawing tables• Projectors• Wall panels
Labs and Workshops	-	5	-	-
Faculty and administrators Offices	-	30	-	-
Library	-	1	-	-

B –Yearly faculty recruitment plan for the need of program:

	Faculty Members					Administrators, Qualifications and Experience	Technicians, Qualification and Experience
Recruitm ent need	Demonstrator	Lecturer	Assistant Prof.	Associate Prof.	Prof.		
Available	0	2	1	1	0	0	0
1438/39	1	1	1	1	1	1	2
1439/40	1	1	2	1	1	1	1
1440/41	1	2	2	1	1	1	1
1441/42	1	2	2	0	1	1	1
Total	4	8	8	4	4	4	5

FORM (1)-Benchmarks - A Matrix for comparing an academic program with other programs at other universities.

Comparison		Proposed program	Local Program (KSA)	Regional program (Adjoining KSA)	International program USA
The Donors	University	King Khalid University (KSA)	King Fahad University of Petroleum and Minerals (KFUPM)	American University of Sharjah (UAE)	Southern California Institute of Architecture
	College	College of Engineering	College of Environmental Design	College of Architecture, Art and Design	Southern California Institute of Architecture
Department/Program		Department of Architecture & Planning/ B. Arch	Department of Architecture/ BS in Architecture	Department of Architecture/ B. Arch	Undergraduate Program/ B. Arch
Number of Credit Hours	Theoretical	168	134	159	156
	Practical	5	6	0	3
	Field Training	8 (weeks)-0	8 (weeks)-1	5 (weeks)-0	4 (weeks)-3
	Project	7	7	6	9 (Units)
Teaching Strategies		Lectures, Group discussions, Seminar, Hands-on student learning activities, Class discussion, Team work, Interactive classes, Self-learning project, Visual presentations, Tutorial (video+ practical), Site visits & research activities, Brainstorming, Debates, Blackboard learning (e-learning), Lab. demonstrations, Role playing, Special hours to week students, Computer Labs, Social networking tools, guest speakers, Sketching on	Lectures; Exercises; Seminars;; quality teaching/learning environment; Experimental Architectural project; Promote Architectural Design courses; Well Qualified faculties; Promotes research and publication activities	Lectures; Exercises; Seminars; Group and individual assignment; Experimental Architectural project; Facilitates Architectural Design courses; ; laboratory demonstration; Well Qualified faculties	Lectures; Group discussion; seminar/symposia; Site visits; mentoring program; laboratory demonstration; Experimental Architectural project; Facilitates the Architectural Design courses program; Well Qualified faculties



	whiteboard, drawing sheets sketch work			
Assessment Methods	<p>Oral discussion, Written tests, Debates, Quizzes, Portfolios, PowerPoint Presentation, Homework, Performance based evaluation, Midterm exams, Final exams, Analytical report, Group/individual presentation, Seminars and Discussions, Oral discussion, Case studies, Long & short assignments, Additional notes, Faculty observations, Concept mapping, Video Analysis, Demonstration, Peer-Evaluation, Artwork , Logical arguments, E – learning homework, Art & Sketching book evaluation, Portfolio for design work, Class sketching, Senior project</p>	<p>Assignments, research projects, and exams of various theory and lecture courses, Design studio assignments and projects, Assignments and projects of computer and application of IT in architecture, Senior project</p>	<p>Assignments, exams of various theory and lecture courses, Design studio assignments and projects, team research on design-related issues; Final project design, seminars and discussions</p>	<p>Assignments, exams of various theory and lecture courses, Design studio assignments and projects, Senior project, seminars and discussions</p>
Strength	<ul style="list-style-type: none"> As this is new program, so strength will have to develop in following areas: Infrastructure, studios will be equipped with architecture Instruments & CAD lab, availability of human & physical resources. Department is attached with civil engineering 	<p>Infrastructure is good, many years to be established, sufficient architecture library, PG courses are also there, already developed course, Sufficient human resource</p>	<p>Design studio, seminars and discussions, Curriculum, Well Qualified faculties</p>	<p>Site visits; mentoring program, Senior projects, Well Qualified faculties, institute is purely architecture oriented, online education system, Courses are at Bachelor, Masters & PhD level</p>
Weakness	<p>Newly start program, need students orientation,</p>	<p>College more oriented towards environmental as Architecture is moreover science of Art</p>	<p>Building Services subjects should be in coordination with arch core subjects</p>	<p>NA</p>



FORM (2) - A matrix for identifying the extent of correspondence of the program targeted learning outcomes with benchmarking and the national framework of qualifications.

Comparison Aspects	National Framework of Qualifications	Benchmarking	Suggested Program	Extent of Correspondence %
		Department of Architecture, College of Environmental Design, King Fahad University of Petroleum and minerals Kingdom of Saudi Arabia	Department of Architecture & Planning, College of Engineering, King Khalid University, Kingdom of Saudi Arabia	
Knowledge	<ul style="list-style-type: none"> The ability to recall, understand, and present information, including: <ul style="list-style-type: none"> Knowledge of specific facts and details Knowledge of concepts, principles and theories Knowledge of procedures; steps in a process. 	<ul style="list-style-type: none"> Recognize people's diversified needs, values, behavioral norms, and economics, social and cultural patterns as they relate to creation of the built environment. Recognize contemporary issues related to architecture and practice of architecture. Recognize the need for life-long learning and to be able to engage in it. 	<ul style="list-style-type: none"> <u>Define</u> the fundamentals of the architecture and contemporary issues related to architecture and its practice. <u>Describe</u> the values of environmental conservation and sustainability in Architectural design. <u>Recognize</u> the Architectural characteristics of buildings, minarets, social cultural environment components, awareness of National & Traditional architecture and valuable landmark of Saudi Arabia. <u>Describe</u> the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behaviour & project management etc. <u>State</u> the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline. 	70%
Comparison		Benchmarking	Suggested Program	



Aspects	National Framework of Qualifications	Department of Architecture, College of Environmental Design, King Fahad University of Petroleum and Minerals Kingdom of Saudi Arabia	Department of Architecture & Planning, College of Engineering, King Khalid University, Kingdom of Saudi Arabia	Extent of Correspondence %
Cognitive skills	<ul style="list-style-type: none"> • The ability to.... <ul style="list-style-type: none"> - Apply conceptual understanding of concepts, principles, and theories, - Apply procedures involved in critical thinking and creative problem solving, both when asked to do so, and when faced with unanticipated new situations, - Investigate issues and problems in a field of study using a range of sources and draw valid conclusions. 	<ul style="list-style-type: none"> • Use fundamental design skills. • Demonstrate ability to communicate graphically in a range of media. • Identify, formulate, evaluate and solve architectural problems. • Create building designs with well-integrated systems including constructability. 	<ul style="list-style-type: none"> • <u>Solving</u> problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge. • <u>Evaluate</u> the built and unbuilt spaces based on architecture design, plan and style with their impact on environment. • <u>Develop</u> the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc. • <u>Identify</u> the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects. • <u>Explain</u> the principles used for the appropriate selection of building components and construction materials, based on their performance and interaction with environment. 	65%

Comparison Aspects	National Framework of Qualifications	Benchmarking	Suggested Program	Extent of Correspondence %
		<ul style="list-style-type: none"> Department of Architecture, College of Environmental Design, King Fahad University of Petroleum and minerals Kingdom of Saudi Arabia 	<ul style="list-style-type: none"> Department of Architecture & Planning, College of Engineering, King Khalid University, Kingdom of Saudi Arabia 	
Interpersonal skills & responsibility	<ul style="list-style-type: none"> The ability to: <ul style="list-style-type: none"> Take responsibility for their own learning and continuing personal and professional development, Work effectively in groups and exercise leadership when appropriate, Act responsibly in personal and professional relationships, Act ethically and consistently with high moral standards in personal and public forums. 	<ul style="list-style-type: none"> Recognize societal, professional and ethical responsibilities. Demonstrate an ability to collaborate and work in multi-disciplinary teams. Recognize the diverse roles of the architect and his relationships with clients, consultants and other in the design process. 	<ul style="list-style-type: none"> <u>Illustrate</u> the professional skills and behaviours necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally. <u>Show</u> the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice. <u>Analyse</u> the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project. 	65%

Comparison Aspects		Benchmarking	Suggested Program	Extent of Correspondence %
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	National Framework of Qualifications	Department of Architecture, College of Environmental Design, King Fahad University of Petroleum and minerals Kingdom of Saudi Arabia	Department of Architecture & Planning, College of Engineering, King Khalid University, Kingdom of Saudi Arabia	
Communication, information technology, Numerical	<ul style="list-style-type: none"> The ability to: <ul style="list-style-type: none"> Communicate effectively in oral and written form, Use information and communications technology, and Use basic mathematical and statistical techniques. 	<ul style="list-style-type: none"> Demonstrate ability to use computer and information technology tools and relevant techniques and skills necessary for architectural practice Analyze, evaluate and communicate design constraints data and design alternatives based on architectural criteria and standards using various approaches (manual and digital). 	<ul style="list-style-type: none"> <u>Evaluate</u> different ideas and concepts to select the appropriate alternatives in architectural & urban design projects along with technological aspects of architecture. <u>Demonstrate</u> with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process. <u>Illustrate</u> the values, diverse needs, behavioural pattern, cultures, and physical abilities and the implication of diversification on the architect's responsibilities. 	70%

Explanation of correspondence aspects:: The corresponding aspects between the NQF, Existing program and proposed program is about 70%. This is inferred that the standards of learning outcomes among the programs have good relationship in connection with teaching strategies, program evaluation mechanisms and student assessment procedures for all of the domains of learning as per existing program and the NQF. The gap between the NQF, Existing program and proposed program will be improved by proper reviewing the course content and their outcomes yearly basis. Department committee will check the course report, evaluation, students' performance to maintain the quality of program according to NCAAA, NAAB and other benchmark colleges.

**COMPARISON AND IDENTIFICATION OF GAP FOR PROGRAM LEARNING OUTCOMES
AMONG THE ACCREDITED PROGRAMS AND OTHER COLLEGE B.Arch PROGRAMS**



		King Khalid University Abha	NCAAA(NQF)	NAAB	King Fahad University of Petroleum and Minerals (KFUPM), KSA	American University of Sharjah, UAE	Southern California Institute of Architecture, USA
1	KNOWLEDGE	<u>Define</u> the fundamentals of the architecture and contemporary issues related to architecture and its practice.	1.1. Knowledge of specific facts and details	A.4 Architectural Design Skills: A.6 Use of Precedents:	Recognize contemporary issues related to architecture and practice of architecture.		A.4 Architectural Design Skills: A.6 Use of Precedents:
2		<u>Describe</u> the values of environmental conservation and sustainability in Architectural design.	1.2. Knowledge of concepts, principles and theories	A.7 History and Global Culture:		Analyze and explain the relationship between design and environmental sustainability.	A.7 History and Global Culture:
3		<u>Recognize</u> the Architectural characteristics of buildings, minarets, social cultural environment components, awareness of National & Traditional architecture and valuable landmark of Saudi Arabia.		B.2 Site Design B.8 Building Materials and Assemblies:	Recognize people's diversified needs, values, behavioral norms, and economics, social and cultural patterns as they relate to creation of the built environment.		B.2 Site Design B.8 Building Materials and Assemblies:
4		<u>Describe</u> the theories for ordering systems, historical traditions and Global culture, Scientific & applied research, financial aspects, environmental , structural & building service systems, human behavior& project management etc.	1.3. Knowledge of procedures; steps in a process.	A.5 Ordering Systems B.10 Financial Considerations:		Explain design principles in relationship to the history and theory of architecture.	A.5 Ordering Systems B.10 Financial Considerations:
5		<u>State</u> the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building in collaboration with other engineering discipline.		B.7 Building Envelope Systems and Assemblies:	Recognize the need for life-long learning and to be able to engage in it.	Demonstrate an understanding of the conventions of Building Systems and Technologies and technology.	B.7 Building Envelope Systems and Assemblies:



1	COGNITIVE	Solving problems within the field of architectural design, including research and synthesis of technical, aesthetic, and conceptual knowledge.	2.1 Apply conceptual understanding of concepts, principles, and theories,	B.1 Pre-Design:	D. Use fundamental design skills.	Employ research, analysis and problem solving skills to address unique and fluctuating conditions of design.	B.1 Pre-Design:
2		Evaluate the built and unbuilt spaces based on architecture design, plan and style with their impact on environment.	2.2 Apply procedures involved in critical thinking and creative problem solving, both when asked to do so, and when faced with unanticipated new situations,	B.6 Environmental Systems	E. Demonstrate ability to communicate graphically in a range of media.		B.6 Environmental Systems
3		Develop the skills for Communication, Design Thinking, Visual Communication, Technical Documentation, Investigative, Fundamental Design, Site Design, Life Safety and collaboration etc.	2.3 Investigate issues and problems in a field of study using a range of sources and draw valid conclusions.	A.2 Design Thinking Skills: C.3 Integrative Design:	F. Identify, formulate, evaluate and solve architectural problems.	Employ research, analysis and iterative processes to inform and enrich the process of design.	A.2 Design Thinking Skills: C.3 Integrative Design:
4		Identify the basic scientific characteristics of building materials and technology and advanced technical tools that can be used in architectural engineering projects.		B.5 Structural Systems B.9 Building Service Systems:	G. Create building designs with well-integrated systems including constructability.		B.5 Structural Systems B.9 Building Service Systems:
5		Explain the principles used for the appropriate selection of building components and construction materials, based on their performance		A.3 Investigative Skills		Integrate materials, construction methodologies, site conditions and environmental control systems	A.3 Investigative Skills



		and interaction with environment.				into a comprehensive building design proposal.	
1	INTERPERSONAL	Illustrate the professional skills and behaviors necessary to compete in the global marketplace and recognize the dialectic relationship between people and built environment in the Arab region as well as globally.	3.1 Take responsibility for their own learning and continuing personal and professional development,	B.3. Codes and Regulations: D.5 Professional Conduct:	H. Recognize societal, professional and ethical responsibilities.	Demonstrate an understanding of the standards of professional practice.	B.3. Codes and Regulations: D.5 Professional Conduct:
2		Show the student's performance criteria based on critical thinking and representation, integrated building practices, technical skills and knowledge, leadership and practice.	3.2 Work effectively in groups and exercise leadership when appropriate,	C.2 Integrated Evaluations and Decision-Making Design Process:	I. Demonstrate an ability to collaborate and work in multi-disciplinary teams.	Demonstrate the ability to independently develop design proposals that respond to context.	C.2 Integrated Evaluations and Decision-Making Design Process:
3		Analyze the relation between the project designer, contractor, developer, and the building user through the building process with due considering the financial feasibility of the project.	3.3 Act responsibly in personal and professional relationships. 3.4 Act ethically and consistently with high moral standards in personal and public forums.	C.1 Research: D.4 Legal Responsibilities	J. Recognize the diverse roles of the architect and his relationships with clients, consultants and other in the design process.	Work in teams to conduct research on design-related issues and present results in verbal, written and graphic form.	C.1 Research: D.4 Legal Responsibilities
1	COMMUNICATION	Evaluate different ideas and concepts to select the appropriate alternatives in architectural and urban design projects along with technological aspects of architecture.	4.1 Communicate effectively in oral and written form,	A.1 Professional Communication Skills: D.2 Project Management:	K. Demonstrate ability to use computer and information technology tools and relevant techniques and skills necessary for architectural practice	Articulate, present and discuss design proposal in verbal, written and graphic form.	A.1 Professional Communication Skills: D.2 Project Management:



2	Demonstrate with appropriate and different presentation techniques, using both traditional and digital presentation techniques and modelling expertise (BIM & CAD) to satisfy the project objectives and functions during design process.	4.2 Use information and communications technology, and	B.4 Technical Documentation D.3 Business Practices	L. Analyze, evaluate and communicate design constraints data and design alternatives based on architectural criteria and standards using various approaches (manual and digital).	Employ traditional means of representation, computer aided design, digital and physical modeling and fabrication to develop and communicate design.	B.4 Technical Documentation D.3 Business Practices
3	Illustrate the values, diverse needs, behavioral pattern, cultures, and physical abilities and the implication of diversification on the architect's responsibilities.	4.3 Use basic mathematical and statistical techniques.	A.8 Cultural Diversity and Social Equity: D.1 Stakeholder Roles in Architecture:			A.8 Cultural Diversity and Social Equity: D.1 Stakeholder Roles in Architecture:

Note:-KKU Learning Outcomes has been designed to follow the 2 Nos. Accreditation programs i.e. NCAAA and NAAB. We also considered the 3 other college programs for reference to design our new proposed program of Architecture at Local, Regional and International level B.Arch program. We can see the GAP in others program in relation to other but PLO's of KKU includes all the required academic learning outcomes for the development of the program at Local and International level. The impact of these PLO's can be seen in our graduates. There might be some improvement or changes in GAP later on. It can be reviewed again after implementation of these PLO's in our program and course outcomes, simultaneously we will check the similarity in adopting teaching strategies and teaching methodologies within program Learning outcomes and course learning outcomes. Also ,the gap between the NQF, Existing program and proposed program will be improved by proper reviewing the course content and their outcomes yearly basis. Department committee will check the course report, evaluation, students' performance to maintain the quality of program according to NCAAA, NAAB and other benchmark colleges

PROGRAM EDUCATIONAL OBJECTIVES COMPARISON AMONG LOCAL, REGIONAL AND INTERNATIONAL				
	King Khalid University Abha	King Fahad University of Petroleum and Minerals (KFUPM), KSA	American University of Sharjah, UAE	Southern California Institute of Architecture, USA



1	To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate.	Practice Architecture profession with confidence, global competitiveness, and superior work ethics and character (1, 6, 7)	Provide students with a comprehensive understanding of the historical and theoretical forces that shape architecture (1, 2, 3, 4)	SCI-Arc's pedagogy emphasizes active engagement with the world at large, and the production of works that matter globally, locally, and within the city and community (3, 6, 7)
2	To provide the best educational environment to prepare an efficient graduate who has the knowledge, understanding, skills and abilities to produce his tasks in practical and professional directions with contemporary technologies to meet the needs of the labour market.	Apply professional knowledge and technical skills to produce efficient, creative, and sustainable architectural design solutions (2, 3, 4, 6)	Prepare future architects to make contributions to improving the built environment through leadership, personal engagement and professional practice while respecting human diversity and adhering to ethical standards (3, 5, 6)	SCI-Arc emphasizes a pedagogy that seeks a synthesis in the education of the architect by employing different modes of thinking across different fields of knowledge (1, 2, 6, 8)
3	Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations.	Demonstrate high proficiency in critical thinking, communication, and solving complex design problems (2, 5)	Provide students with the knowledge and skills necessary conceive, develop and communicate complex design proposals (2, 5)	SCI-Arc emphasizes the making of architecture, from conceptual design work to fabrication and construction, including printed and digital matter (1, 2, 5)
4	Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world.	Pursue a life-long learning to meet evolving built environment and architectural challenges facing the society (1, 3, 4, 6)	Foster critical thinking and cultivate an approach to design that values the role of research, analysis and experimentation (2, 4, 5, 8)	
5	Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively.	Be able to pursue advanced study and research at the graduate level (4, 8)	Promote a critical understanding of building technologies and their impact on the built environment (1, 2, 5)	



6	Integrating the educational process with the society to achieve the role of related sciences in the construction and development of the surrounding environment to promote enhancement at all local and international levels.			
7	Supporting and developing relevant fields of science locally, regionally and globally by supporting faculty members and researchers to disseminate their scientific production through specialized publishing houses and conferences.			
8	Supporting scientific research establishments and academic agreements with international universities and research canters.			

The comparison among various universities showing the direct and indirect attachment with the objectives of the proposed Bachelor of Architecture program at King Khalid University, It can be recognized with the similar keywords used in all the referenced universities objectives in order to frame out our program educational objectives for our future graduates. Basically, the essence of all the objectives is to develop knowledge of architecture, technological growth, development of the community, enhancing scientific research, improving skills for the design problem, knowledge of professional services, & sustainable development for our graduate Architects.

Survey for Proposed Academic Program

Bachelor of Architecture at King Khalid University, Abha, KSA

(To be filled out by academician, practitioner & student)

The Bachelor of Architecture (B.Arch.) at King Khalid University is a full-time study program lasting for five years. It is designed to produce a well-trained contemporary architect with strong basic knowledge. Therefore, for this purpose this survey seeks an introduction and evaluation of new program by the academicians, student & practitioners for input on the quality of architecture education which will be imparted in this new program and the level of preparation was made at university. The purpose of this survey is to evaluate the quality of the proposed academic programs. Therefore, we seek your help in completing this survey.

The following are 5 keys criteria which can be measures to evaluate the quality of the proposed academic programs, so, please to what extent do you assess excellence of the academic programs, and does these proposed academic programs are compatible with program vision, aim, mission, objectives to achieve their outcomes.

This questionnaire is divided into six (6) sections:

Section 1: Program Mission

Section 2: Program Objectives

Section 3: Program Learning Outcomes

Section 4: Course Description

Section 5: Internship experience³³

Section 6: General Comments





Measures	Statement	(Just mark ✓ for opinion)				
		Excellent	Good	Average	Fair	Poor
1. Program Mission	1. Applying and developing the knowledge of architectural education and professional practice for the construction of sustainable architecture and urbanization.					
	2. Carries all the cultural and environmental dimensions of the place as well as modern technologies, in addition to providing world-class scientific research that fulfills the aspirations of the Saudi society and meets the needs of future generations.					
2. Program Objectives	1. To achieve leadership in the teaching of different disciplines for the fields of architectural design, construction, urban planning, interior design, project management, and evaluation of real estate.					
	2. Integrating the concept of cultural heritage into the environment and society to gain an educational process that benefits from the place and activate the accumulated experience of previous generations.					
	3. Providing scientific research and advisory support to all public and private sectors to develop the environment, society and preserve the heritage and the identity of Asir region, the Kingdom and the whole Islamic world.					
	4. Providing support and supervision of relevant scientific research to develop the areas of architecture, construction, and serving the built environment effectively.					
	5. Integrating the educational process with the society to achieve the role of related sciences in the					





	construction and development of the surrounding environment to promote enhancement at all local and international levels.					
	6. Supporting scientific research establishments and academic agreements with international universities and research canterers.					
3. Program Learning Outcomes	1. Define the fundamentals of the architecture and contemporary issues related to architecture and its practice.					
	2. Describe the values of environmental conservation and sustainability in Architectural design.					
	3. Recognize the architectural characteristics of buildings, minarets and landmarks of Saudi Arabia.					
	4. Describe the theories and understandings for ordering systems, historical traditions and Global culture & financial considerations, environmental systems, structural systems, building service systems etc.					
	5. State the building techniques, systems, skills of architectural engineers use through various design stages and construction process of building.					
	6. Describe the principles used for the appropriate selection of building components and construction materials.					
	7. Evaluate the built and unbuilt spaces based on architecture design, plan and style with their impact on environment.					
	8. Develop the skills for Communication, Design Thinking, Visual Communication, Technical Documentation etc.					
	9. Identify the basic scientific characteristics of					





	building materials and technology tools.					
	10. The overall program learning outcomes					

4. Course Description	1. Course structure achieves the program learning outcomes.					
	2. The distribution of compulsory and elective courses including (architecture, environment, social science & engineering) support course objectives					
	3. Course description/selection for all subjects will help to achieve the program objectives.					
	4. Contents of curriculum are advanced and meet program objectives.					
	5. Student will gain the practical knowledge from this courses					
	6. The program is effective in enhancing team-working abilities within student and the architectural department					
	7. The overall course sufficiency and efficiency.					

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5. Internship experience effectively enhances	1. Professional development					
	2. Ability to work in teams					
	3. Independent thinking					
	4. Time management skills					
	5. Judgment and discipline skill					
	6. The link between theory and practice					
	7. Computer knowledge					
	8. Oral communication, report writing, presentation skills.					

6. Would you like to provide any other comments or suggestions about this program?





المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

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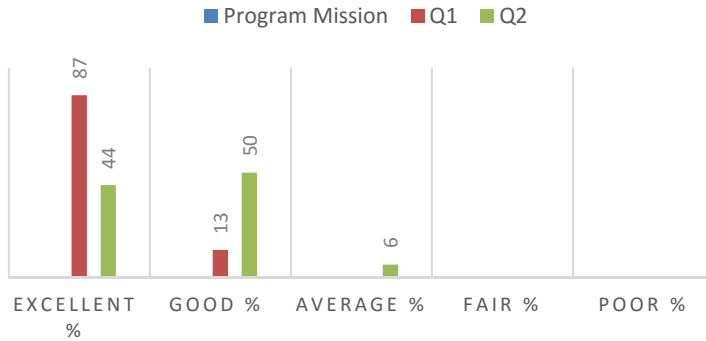
QUESTIONNAIRE ANALYSIS

Program Mission	Excellent %	Good %	Average %	Fair %	Poor %
Q1	87	13			
Q2	44	50	6		



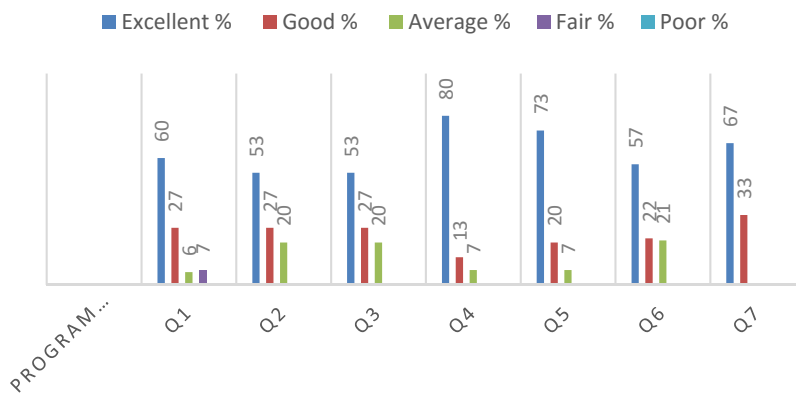


PROGRAM MISSION



Program Objectives	Excellent %	Good %	Average %	Fair %	Poor %
Q1	60	27	6	7	
Q2	53	27	20		
Q3	53	27	20		
Q4	80	13	7		
Q5	73	20	7		
Q6	57	22	21		
Q7	67	33			

PROGRAM OBJECTIVE



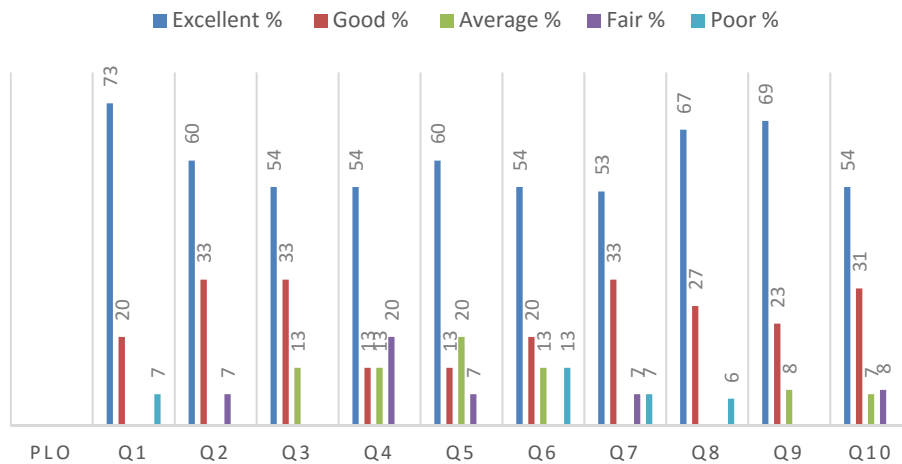
PLO	Excellent %	Good %	Average %	Fair %	Poor %
Q1	73	20			7
Q2	60	33		7	
Q3	54	33	13		
Q4	54	13	13	20	





Q5	60	13	20	7	
Q6	54	20	13		13
Q7	53	33		7	7
Q8	67	27			6
Q9	69	23	8		
Q10	54	31	7	8	

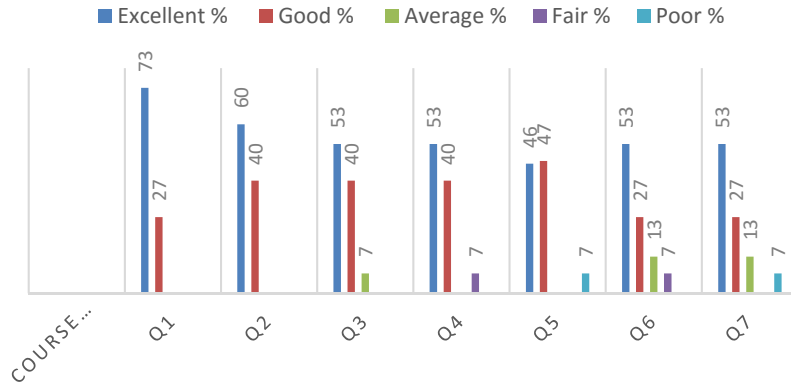
PROGRAM LEARNING OUTCOMES



Course Description	Excellent %	Good %	Average %	Fair %	Poor %
Q1	73	27			
Q2	60	40			
Q3	53	40	7		
Q4	53	40		7	
Q5	46	47			7
Q6	53	27	13	7	
Q7	53	27	13		7

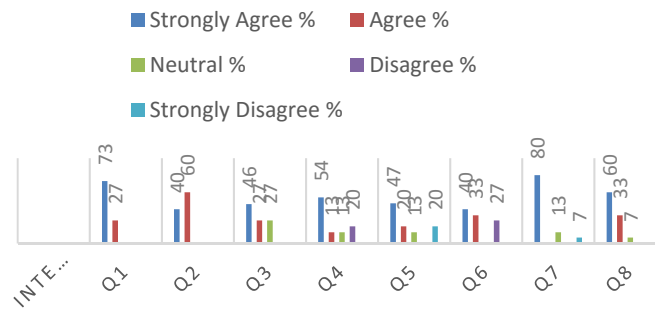


COURSE DESCRIPTION



Internship Experience	Strongly Agree %	Agree %	Neutral %	Disagree %	Strongly Disagree %
Q1	73	27			
Q2	40	60			
Q3	46	27	27		
Q4	54	13	13	20	
Q5	47	20	13		20
Q6	40	33		27	
Q7	80		13		7
Q8	60	33	7		

INTERNSHIP EXPERIENCE



Questionnaire results parameters

Strength

- Well planned curriculum.
- Good efforts behind a good Architectural Plan.



- Program objectives covering major aspects of technology, scientific research and sustainable development and also referred at national and international level.
- Learning outcomes are framed according various accreditation board and other national and international college.
- KKU has a well-established Engineering department which will support to the multidisciplinary subjects in architecture curriculum.
- Course specification for all the architecture subjects are well prepared and can be revised later as needed by the assigned faculty.

Weakness:

- To add more structural courses and construction drawing basics
- Sustainable design need to be improved.
- CAAD "Computer Aided Architectural Design" might be incorporated.
- Model making lab
- Availability of staff
- There was a problem concerning how to interpret some NCAAA terminologies and relate the objectives, learning outcomes of NAAB, NCAAA or with other colleges but the effort was made to achieve the criteria of all the above

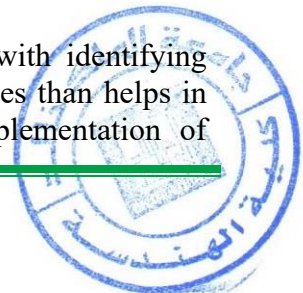
Recommendation:

- Should be focused on more communication skill as this is a new program
- Awareness regarding the need to be created to create interest of the students
- Collaboration of European colleges should be emphasized to get effective output
- Well-equipped Fabrication lab for 3D modelling should be built.
- A well advanced library should be established for better learning environment.
- Structure, CAAD and sustainability subjects might be added in future during curriculum development.
- Realistic constraint should be adopted for making the architecture study to experience live problem of Saudi society
- Training program should be introduced to students for power point presentation, MS office, and other basic software.

Final Conclusion

Proposed Bachelor of Architecture Program evaluation based on above questionnaire was most effective & excellent in prompting meaningful conversations about the quality of the program among academicians, practitioners and students. Respondents feel strongly that program evaluation effectively leads to support the quality parameters and future of students after achieving the Goals and objectives for this proposed program.

Respondents more strongly agreed that program evaluation assists with identifying strengths and weaknesses in departmental structures and responsibilities than helps in stimulating use of evidence in analyzing criteria after proper implementation of



Architecture Program Missions, objectives, learning outcomes, This deeply analyzing of program will cause improvement in future for students' academic and social development.

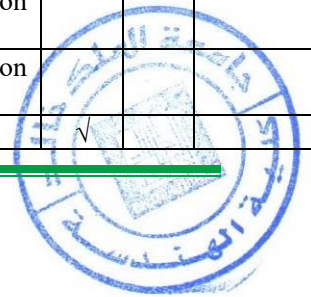
Results indicate by the academic and professional reviewer for program that it will contribute most to the country's future development plans which will also enhance the credibility of students at national and international level. As per designed program, student will learn architecture & technology at academic and professional level.

Form (A)

A verification list of the components and procedures followed in constructing the academic plan and program.

"This Form is utilized by the Curriculum and Planning Committees of the Departments, Colleges, University, and the Deanship of Academic Development and Quality at the University".

No	Item	Yes	No	Notes
1	An application was submitted to approve a new plan or develop a current one.	√		
2	A working team was formed to set a plan for the proposed program.	√		
3	A training session was held to develop the academic plans and programs for the working team			
4	The plan was officially approved by the department council session held on .../.../....			
5	The plan was officially approved by the college council session held on .../.../....			
6	The qualifications national framework was adopted.	√		



7	A set of approved academic plans and programs at local and international Universities has been utilized (Form 1).			
8	Stakeholders viewpoints have been utilized (Attach relevant questionnaires, workshops, and working groups).			
9	Questionnaires were administered to students to get their opinions about the academic plan or program (Questionnaires, workshops, interviews, and e-mails should be attached)			
10	Questionnaires were administered to graduates to get their opinions about the academic plan or program (Questionnaires, workshops, interviews, and e-mails should be attached)			
11	The targeted learning outcomes of the program have been identified (information and skills identified by National framework of qualifications).	√		
12	The plan includes a field training course (as much as possible).	√		
13	The practical aspect has been intensified in some courses.	√		
14	The academic program specification has been included.	√		
15	The academic course specification has been included.	√		
16	The course language instruction has been determined			
17	The form of human and material potentials necessary for the program has been included.	√		
18	The minimum number of credit hours has been determined.	√		
19	The College or program vision, mission, and goals have been determined.	√		
20	The plan has been refereed by two specialists at least.			
21	The name of graduate qualification has been determined.			
22	Admission conditions have been determined.	√		
23	Employers employing graduates are determined.			
24	A matrix for identifying learning outcomes of the program courses has been prepared.	√		
25	A matrix for identifying the extent of the program correspondence with the qualifications national framework and benchmarking has been prepared (Form 2)	√		

Form (B)

Evaluating an Academic Program Specification

"This form is utilized by the curriculum and planning committees of the Departments, Colleges, and University"

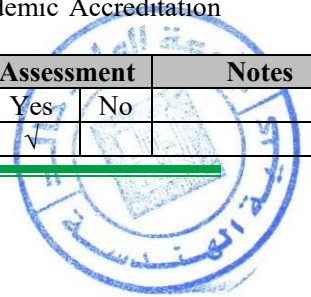
University: KKU **College:** Engineering (Main campus) **Department:** Architecture and Planning

Program Name: Architecture **Degree granted:** Bachelor of Architecture **Total of credit hours:** 168

Tick (√) where is appropriate.

- If the item is not applicable, please explain in "the Notes Column):
- The Specifications of the National Commission of Assessment and Academic Accreditation can be used as a guide.

No	Description	Details	Assessment		Notes
			Yes	No	
1	Program title and code	-	√		





1		- Total credit hours needed for completion of the program	√		
		- Award granted on completion of the program	√		
		- Major tracks/pathways or specializations within the program	√		
		- Intermediate exit points and awards	√		
		- Professions or occupations for which students are prepared.	√		
		- Program co-coordinator	√		
		- Location if not on main campus or locations if program is offered in more than one location.	√		Main Campus
2	Program Context	- Explain why the program is needed	√		
		- Relationship (if any) to other programs offered by the institution/college/department.	√		
		- Do students who are likely to be enrolled in the program have any special needs or characteristics that should be considered in planning the program?	√		
		- What should be done in the program to respond to these special characteristics?	√		
3	Program Mission				
		- Program Mission Statement	√		
		- List any major changes or strategic new developments planned for the program within the next three to five years to help achieve its mission.	√		See the program Goals stating about the new development
4	Program Structure and Organization	1- Program Description: - A program or department manual should be available for students or other stakeholders and a copy of the information relating to this program should be attached to the program specification. - This information should include required and elective courses, credit hour requirements and department/college and institution requirements, and details of courses to be taken in each year or semester.	√		Is all included in General study plan in the beginning of a document and same also has been sent for survey. Detail manual will be prepared after getting the approval from external reviewer, department and college committee and quality of deanship.



		2- Development of Special Student Characteristics or Attributes: <ul style="list-style-type: none"> List any special student characteristics or attributes beyond normal expectations that the institution, college or department is trying to develop in all of its students. For each special attribute indicate the teaching strategies and student activities to be used to develop it and the evidence to be used to assess whether it has been developed in all students. 	NA		Based on the students' performances, it can be judge only after getting admission by the students.
		3- Required Field Experience Component: <ul style="list-style-type: none"> A more detailed field experience specification comparable to a course specification should also be prepared in a separate document for any field experience required as part of the program. Brief description of the field experience activity List the major intended learning outcomes for the program to be developed through the field experience At what stage or stages in the program does the field experience occur? (e.g. year, semester) Time allocation and scheduling arrangement. (e.g. 3 days per week for 4 weeks, full time for one semester). Number of credit hours. 	√		
		4- Project or Research Requirements (if any): <ul style="list-style-type: none"> Brief description. List the major intended learning outcomes of the project or research task. At what stage or stages in the program is the project or research undertaken? (e.g. year, semester) Number of credit hours. Summary description of provisions for student academic advising and support. Description of assessment procedures (including mechanism for verification of standards). 	√ - - -		(7 credit hours)
		5- Development of Learning Outcomes in Domains of Learning: <p>a. Knowledge :</p> <ul style="list-style-type: none"> Summary description of the knowledge to be acquired. Teaching strategies to be used to develop that knowledge. Methods of assessment of knowledge acquired. <p>b. Cognitive skills:</p> <ul style="list-style-type: none"> Summary description of the knowledge to be acquired. 	√		





		<ul style="list-style-type: none"> - Teaching strategies to be used to develop that knowledge. - Methods of assessment of knowledge acquired. <p>c. Interpersonal Skills and Responsibility</p> <ul style="list-style-type: none"> - Summary description of the knowledge to be acquired. - Teaching strategies to be used to develop that knowledge. - Methods of assessment of knowledge acquired. <p>d. Communication, Information Technology and Numerical Skills:</p> <ul style="list-style-type: none"> - Summary description of the knowledge to be acquired. - Teaching strategies to be used to develop that knowledge. - Methods of assessment of knowledge acquired. <p>e. Psychomotor Skills):</p> <ul style="list-style-type: none"> - Summary description of the knowledge to be acquired. - Teaching strategies to be used to develop that knowledge. - Methods of assessment of knowledge acquired. 			
		<p>6- Admission Requirements for the program:</p> <ul style="list-style-type: none"> - A handbook or bulletin description of admission requirements including any course or experience prerequisites is attached. 	√		
		<p>7- Attendance and Completion Requirements:</p> <ul style="list-style-type: none"> - A handbook or bulletin description of requirements for attendance, progression from year to year, and program completion is attached. 	√		
5	Regulations for Student Assessment and Verification of Standards	<ul style="list-style-type: none"> - Regulations or policies for allocation and distribution of grades. 	√		As per KKU regulations
		<ul style="list-style-type: none"> - What processes will be used for verifying standards of achievement 	√		
	Student Administration	<p>a. Student Academic Counseling:</p> <ul style="list-style-type: none"> - Arrangements to be made for academic counseling and advice for students, including both scheduling of 	√		As per KKU regulations



6		faculty office hours and advice on program planning, subject selection and career planning (which might be available at college level) are described. b. Student Appeals: <ul style="list-style-type: none"> - Regulations for student appeals on academic matters, including processes for consideration of those appeals are attached. 			
7	Text and Reference Material	<ul style="list-style-type: none"> - The process to be followed by faculty in the program for planning and acquisition of text, reference and other resource material including electronic and web based resources are illustrated. 	√		
		<ul style="list-style-type: none"> - The processes to be followed by faculty in the program for evaluating the adequacy of book, reference and other resource provision are mentioned. 	√		
8	Faculty and other Teaching Staff	a. Appointments: <ul style="list-style-type: none"> - The process of employment of new teaching staff are summarized 	√		
		b. Participation in Program Planning, Monitoring and Review: <ul style="list-style-type: none"> - The process for consultation with and involvement of teaching staff in monitoring program quality, annual review and planning for improvement. c. Professional; Development: <ul style="list-style-type: none"> - Arrangements made for professional development of teaching staff to improve their skills in teaching are mentioned. - Arrangements made for other professional development of teaching staff including knowledge of research and developments in their field of teaching are mentioned. d. Preparation of New Teaching Staff: <ul style="list-style-type: none"> - The process used for orientation and/or induction of new, visiting or part time teaching staff to ensure full understanding of the program and the role of the 	√		



		<p>course(s) they teach as components within it is described.</p> <p>e. Part Time and Visiting Teaching Staff:</p> <ul style="list-style-type: none"> - A summary of Program policy on appointment of part time and visiting teaching staff is provided. 			
9	Program Evaluation and Improvement Processes	<p>a. Effectiveness of Teaching:</p> <ul style="list-style-type: none"> - Processes used to evaluate and improve the strategies planned for developing learning in the different domains of learning are mentioned. - Processes used for evaluating the skills of teaching staff in using the planned strategies are mentioned. 	√		
		<p>b. Overall Program Evaluation:</p> <p>a. Strategies will be used in the program for obtaining assessments of the overall quality of the program and achievement of its intended learning outcomes from:</p> <ul style="list-style-type: none"> - current students and graduates of the program . - independent advisors and/or evaluator(s). - employers and/or other stakeholders. <p>b. Key performance indicators which will be used to monitor and report annually on the quality of the program are mentioned.</p> <p>c. Processes that will be followed for reviewing these assessments and planning action to improve the program are mentioned.</p>	√		



Form (c)

Course Specification Evaluation Form

**"This Form is utilized by the curriculum and plans committees at the Department, ,
College, and University"**

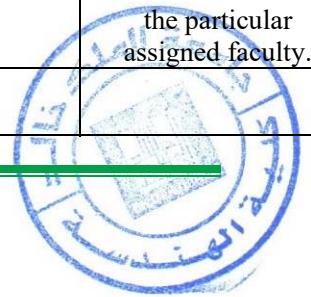
University: KKU **College:** Engineering (Main campus) **Department:** Architecture and Planning

Program Name: Architecture **Degree granted:** Bachelor of Architecture **Total of credit hours:** 168

Tick (√) where is appropriate.

- If the item is not applicable, please explain in "the Notes Column):
- The Specifications of the National Commission of Assessment and Academic Accreditation can be used as a guide.

No	Description	Details	Assessment		Notes
			Yes	No	
1	Course Identification and General Information	1. Course title and code	√		
		2. Credit hours	√		
		3. Program(s) in which the course is offered.	√		
		4. Name of faculty member responsible for the course			It will be mentioned once program will begin and subjects will be allocated to the particular assigned faculty.
		5. Level/year at which this course is offered	√		



		6. Pre-requisites for this course (if any).	√		If applicable
		7. Co-requisites for this course (if any)	√		If applicable
		8. Location if not on main campus	√		Main campus
2	Objectives	1. A Summary of the main learning outcomes for students enrolled in the course is given.	√		
		2. Briefly, list any plans for developing and improving the course being implemented are described.	√		
3	Course Description	1. Topics to be Covered are listed.	√		
		2. Course components are mentioned.	√		
		3. Additional private study/learning hours expected for students per week are determined.	√		
		4. Development of Learning Outcomes in each Domain of Learning is indicated as follows: a. Knowledge domain: - A Description of the knowledge to be acquired is given. - Teaching strategies to be used to develop that knowledge are determined. - Methods of assessment of knowledge acquired are determined. b. Cognitive Skills: - Cognitive skills to be developed are identified. - Teaching strategies to be used to develop these cognitive skills.	√		Psychomotor skills are applicable only for design, sketching subjects.



		<ul style="list-style-type: none"> - Methods of assessment of student cognitive skills. <p>c. Interpersonal Skills and Responsibility:</p> <ul style="list-style-type: none"> - Description of interpersonal skills and capacity to have responsibility to be developed is given. - Teaching strategies to be used to develop these skills and abilities are determined. - Methods of assessment of students interpersonal skills and capacity to carry responsibility are determined. <p>d. Communication, Information Technology and Numerical Skills:</p> <ul style="list-style-type: none"> - A description of the skills to be developed in this domain is given. - Teaching strategies to be used to develop these skills are determined. - Methods of assessment of student numerical and communication skills <p>e. Psychomotor Skills (if applicable):</p> <ul style="list-style-type: none"> - Description of the psychomotor skills to be developed and the level of performance required is given. - Teaching strategies to be used to develop these skills are determined. - Methods of assessment of student psychomotor skills are determined. <p>5. A Schedule of Assessment Tasks for Students During the Semester is given.</p>			
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4	Student Support	- Arrangements for availability of teaching staff for individual student consultations and academic advice are determined. (include amount of time teaching staff are expected to be available each week)	√		
5	Learning Resources	1. Required text(s) are determined.	√		
		2. Essential references are listed.	√		
		3. Recommended books and reference material (journals, reports, etc) are listed.	√		
		4. Electronic materials, web sites etc. are determined.	√		
		5. Other learning material such as computer-based programs/CD, professional standards/regulations are mentioned.	√		
6	Facilities Required	1. Accommodation (lecture rooms, laboratories, etc.) is determined.	√		
		2. Computing resources are determined.	√		
		3. Other resources are listed.	√		
7	Course Evaluation and Improvement Processes	1. Strategies for obtaining student feedback on effectiveness of teaching are determined.	√		
		2. Other strategies for evaluation of teaching by the instructor or by the department are determined.	√		
		3. Processes for improvement of teaching are mentioned.	√		



		4. Processes for verifying standards of student achievement (e.g. by an independent member of the teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution are mentioned).	√		
		5. The planning arrangements for periodically reviewing course effectiveness and planning for improvement are described.	√		

Form (D)

Field Experience Specification Evaluation Form

"This form is utilized by the curriculum and plans committees of the Department, College, and University"

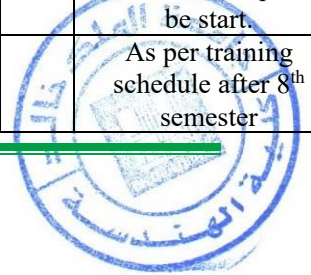
University: KKU **College:** Engineering (Main campus) **Department:** Architecture and Planning

Program Name: Architecture **Degree granted:** Bachelor of Architecture **Total of credit hours:** 168

Tick (√) where is appropriate.

- If the item is not applicable, please explain in "the Notes Column):
- The Specifications of the National Commission of Assessment and Academic Accreditation can be used as a guide.

No	Description	Details	Assessment		Notes
1	Field Experience Course Identification and General Information	1. Field experience course title and code.	Yes √	No	
		2. Credit hours	√		
		3. Program in which this field experience activity is offered	√		
		4. Name of faculty member responsible for administration of the field experience.	√		It will be after the beginning of course, after 8 semester when internship will be start.
		5. Duration and time allocation of the field experience activity	√		As per training schedule after 8 th semester



		6. Level/year at which the field experience is offered .	√		
2	Objectives	1. Summary of the main learning outcomes for students participating in the field experience activity.	√		
		2. Briefly describe any plans for developing and improving the field experience activity that are being implemented.	√		
		2. Learning outcomes in the following domains of learning are determined as follows:			
		a. Knowledge: <ul style="list-style-type: none"> - Description of the knowledge to be acquired. - What will be done to develop that knowledge. - Methods of assessment of knowledge acquired 	√		
		b. Cognitive Skills: <ul style="list-style-type: none"> - Description of cognitive skills to be developed. - What will be done to develop these cognitive skills. - Methods of assessment of skills developed. 	√		
		c. Interpersonal Skills and Responsibility: <ul style="list-style-type: none"> - Description of the interpersonal skills and capacity to have responsibility to be developed. - What will be done to develop these skills and abilities. 	√		



		- Methods of assessment of skills and abilities developed.			
		d. Communication, Information Technology and Numerical Skills: - Description of the numerical and communication skills to be developed. - What will be done to develop these skills. - Methods of assessment of skills developed.	√		
		e. Psychomotor Skills (if applicable): - Description of the psychomotor skills to be developed and the level of performance required. - What will be done to develop these skills. - Methods of assessment of psychomotor skills.	N.A.		
3	Description of Field Experience Activity	1. At what stage or stages during the program does the field experience occur?	√		
		2. Organizational structure .			
		3. Student Activities: Describe the principal activities in which the students will be involved during the field experience.	√		
		4. Student assignments or reports (if any)	√		
		5. Follow up with Students. What arrangements are made for follow up with students to reflect on their experiences and apply what they have learned to future situations? (e.g. Seminars or tutorials, individual consultations, reference in subsequent courses, etc.)	√		
		6. Responsibilities of Supervisory Staff in the Field. Describe the main responsibilities of supervising staff working in the field location. (e.g.	√		



		Planning activities for student development of skills, advice to students, assessment of performance)			
		7. Responsibilities of Supervisory Faculty from the Institution. Describe the main responsibilities of supervising faculty from the institution. (e.g. Consultation, planning with and advice to field supervisors and students, student assessment, time expectations for visits, etc)	√		
		8. Arrangements for student guidance and support	√		
		9. What facilities and support are required in the field experience location? (if any)	√		
4	Planning and Preparation	1. Identification of Field Placements: - The processes used to identify appropriate field placements are mentioned	√		Field location can be identified during the 8th semester of the program and this selection is only by the students in Saudi region after their internship proposal submission.
		2. Preparation of Field Supervisors. - Timing of arrangements made to ensure full understanding of roles and responsibilities of supervising faculty/staff in the field setting are briefly described and indicated.	√		It Will be decided by the department committee afterwards.
		3. Preparation of Student: - Timing of arrangements made for preparation of students for participation in the field experience activity are briefly described and indicated	√		Complete their criteria of some college courses and assignment and after completion of the 8th semester.
		4. Safety and Risk Management : - Processes used to ensure safety and identify potential risks to students, persons with whom they work, or facilities where they will be located, and strategies to	N.A.		



		minimize and protect against those risks are described.			
5	Student Assessment	1. Basis for Assessments: - The major performance criteria or matters considered in deciding student grades are listed.	√		
		2. Field Supervisors Responsibility for Assessment: The responsibility of supervising staff in the field location for student assessment is described.	√		
		3. Supervising Faculty Responsibility for Assessment: The responsibility of supervising faculty from the institution for student assessment is described.			
		4. Resolution of Differences in Assessments: - Processes followed for resolving any differences between staff in the field location and faculty from the institution sharing responsibility for student assessment are listed.	√		
6	Evaluation of the Field Experience	1. Arrangements for evaluation of field experience activity by students, supervising staff in the field setting, supervising faculty from the institution and others are mentioned.	√		supervising staff in the field setting (it's not mandatory)
		2. The planning arrangements for periodically reviewing the effectiveness of the field experience and planning for improvement are described.	√		

