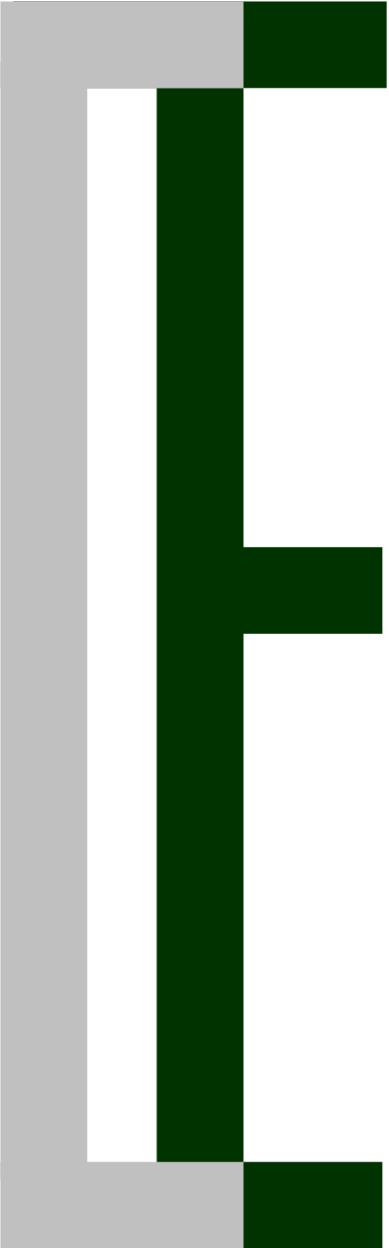


# College of Engineering

## Quality Assurance Manual

1438-39 (H)/ 2017-18 (G)

"To meet the international standards as a source of excellence in engineering learning and center of research in the university"



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## Introduction

The College of Engineering continues to attain significant achievements. The three programs of College of Engineering, viz. Chemical Engineering, Civil Engineering, and Mechanical Engineering have been successfully accredited for six years (until September 30, 2023) by the Engineering Accreditation Commission (EAC) of Accreditation Board for Engineering and Technology (ABET). Receiving ABET accreditation assures that these three programs attain the quality standards of the profession for which the programs prepare graduates. These programs will continuously enhance the quality of education provided to strengthen the Bachelor degree offered by the College of Engineering for the three programs mentioned above. The other two programs viz. Industrial Engineering and Electrical Engineering are in the process of Accreditation in the near future.

According to ABET, the College of Engineering enjoys a particularly high level of institutional support which is evident in the resources provided in human services and facilities. The KKU has implemented a quality control information system which is centrally driven and managed and used operationally at the college level. The university has a strategy focusing on achieving new strengths by the year 2030 that includes a commitment to new research initiatives, the introduction of more graduate programs, and attracting high-quality faculty. The curriculum of all Engineering programs is designed to cover all fundamentals of Engineering and provide sufficient practical knowledge in respective disciplines, to bridge the gap between university and industries. The Program strength consists in the number and variety of laboratories, and the summer training is providing students with practical experience.

Finally, ABET accreditation increases educational opportunities for students and provides graduates with unique job opportunities in local and global companies worldwide. After having achieved ABET Accreditation, the College is under process to seek Accreditation from NCAAA.



## **Significant of Quality Assurance in Education**

Quality is often described as the totality of features and characteristics of a service or product measured against standards. In higher education, evaluation of quality standard is based on the stated mission or purpose of the institution and how well goals and objectives are achieved. Quality in higher education is a multi-dimensional concept, which should embrace all its functions and activities: teaching and learning, learning resources, academic programs, research and development, faculty and staff development, equipment, and community service. Quality assurance should take the form of internal self-evaluation and external review, conducted openly by independent specialists, if possible with international expertise, which is vital for enhancing quality.

## **The Significance of Quality Assurance**

Quality assurance is both a process and a framework that leads to the achievement of excellence and transparency. The process will ensure quality in the attainment of the college's vision and mission leading to college performance aligned with its purpose. The goal is for all institutional functions to perform at an optimum level including academics (teaching, learning, curricula), student support services, physical plant (buildings, classroom environment), research, and service to community and region. With continuous evaluation for quality in all areas, the college will be well-positioned to adapt to changes and provide the highest quality education to students. Based on its desire to ensure a unique status at regional, national and international levels, College of Engineering, King Khalid University is striving to implement quality systems and processes in all of its units.

## Relationship of Quality Assurance to Accreditation

Quality assurance is a continuous process of monitoring outcomes and ensuring quality in all college endeavors. If done correctly, departments will continuously evolve and adapt to changing environmental and societal needs. Accreditation is based on an evaluation done at a specific point in time, highlighting institutional quality and outcomes that demonstrate alignment of purpose with performance. As such quality assurance can be considered as a prerequisite for accreditation, it is an ongoing process whereas accreditation is a snapshot of this activity. Accreditation, at the institutional or program level through NCAAA, or through a specialty accreditor such as ABET usually leads to the awarding of certificate or recognition that the institution or program meets specific standards. Once accrediting, the quality assurance should be the guarantee that the standard measurement in the accreditation process can support in the long term. Therefore, accreditation cannot be said to be complete unless steps are enacted to ensure that the process is continuous and ongoing.

## Quality Assurance Committees at the College Level

College of Engineering control quality assurance activities through vice dean, academic development, and quality. Each program has a quality committee to supervise and execute quality activities in their departments. The vice deanship of academic development and quality plays the pivotal role of ensuring the consistency of the system and processes in all departments. The vice deanship will receive from QA units a set of reports, requirements, KPIs and benchmarks for review by the concerned committees before further submission.

**Purpose:** The QA committees aim to apply the principles and methods of continuous quality management and contribute to quality enhancement in a dynamic academic context in each department. QA committees of all departments should follow the same guidelines and principles regardless of whether they deliver programs accredited by NCAAA or other accrediting bodies.



**The scope of QA committees includes the following:**

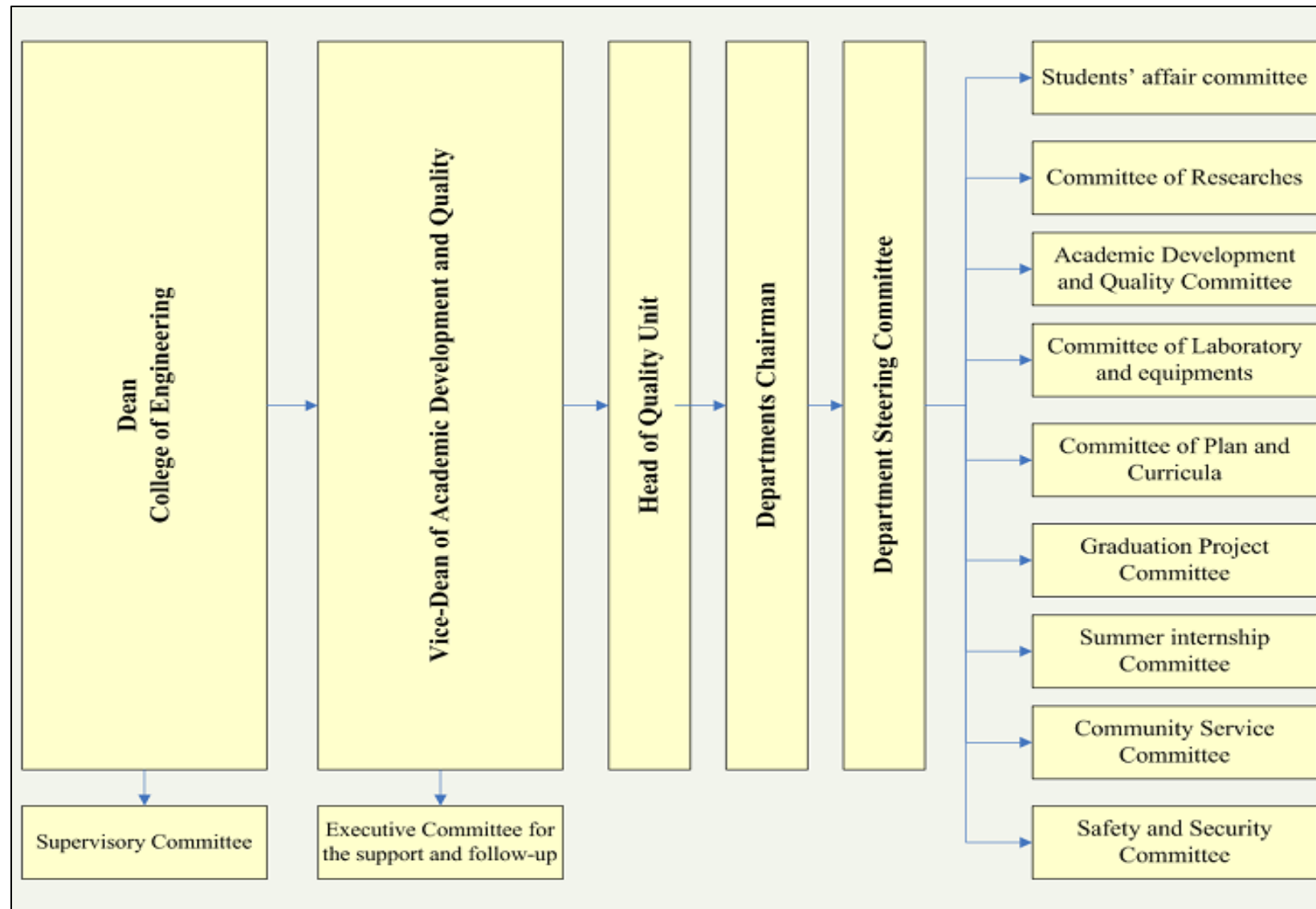
- Apply the principles of quality assurance based on the appropriate national accreditation bodies' standards (e.g., NCAAA) in different academic programs.
- Ensure that the requirements for program accreditation met in a timely manner.
- Assure a systematic implementation of the curriculum or programs, best utilization of learning resources, optimal educational management, and monitor the outcomes of the academic programs.
- Ensure the implementation of a quality program against the appropriate national and international accreditation standards.
- Prepare applications for accreditation.
- Identify gaps in the program, curriculum, assessment, and evaluation to suggest the necessary improvement plans to QA committee.
- Ensure and enforce the presence of quality culture.

# The Quality Assurance System at College of Engineering

With the active support and commitment of the Dean of the College and Vice dean for academic development and quality unit, the deanship operates as the center for quality assurance for the university. As such, the deanship task with leading the institution in quality assurance activities and infusing a culture of quality in all practices based on the college mission of providing high-quality learning environments, innovative research, and valuable community service.

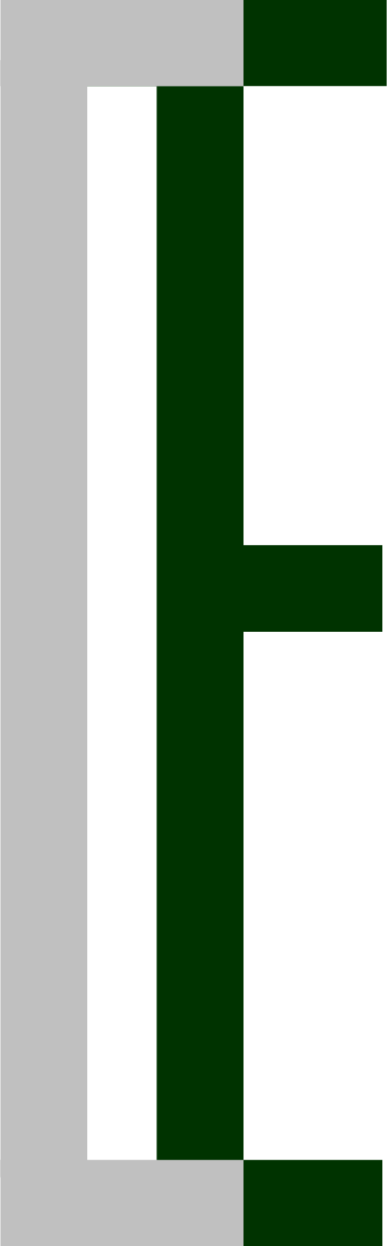
To coordinate these processes in all college activities, quality centers have been established in all programs. This structure allows for all college units, whether large or small, to participate in the planning, assessment, and review, and improvement process, and provide standard reports to academic development and quality unit. For the academic process, reporting is done through course specifications, course reports, surveys, and feedback. Academic programs utilize the National Qualifications Framework for identifying significant learning outcomes by level and discipline. These included in the course and program specifications which. These become the basis for measuring learning outcomes and success of a course or program.

The quality assurance system at College of Engineering, King Khalid University conforms to standards set out by NCAAA with the emphasis on a cycle of planning, review, and implementing changes for improvement as illustrated in the figure below. With proper planning aligned with community needs or national strategic directions new undergraduate and post-graduate programs, research centers, and community partnerships may be developed or existing ones expanded.



**Quality Assurance Framework at College of Engineering, King Khalid University**





Background data and information from the environmental scan permits the college and academic programs to begin a planning cycle by defining and reviewing goals and objectives. It leads to the development of an operational plan that conforms at the unit level with strategies identified in the college strategic plan. Next, the unit plan will implement and goals and objectives will be monitored based on agreed-upon metrics. The deanship is actively involved in this stage of the cycle as it provides data and information for assessment based on stakeholder feedback in the form of surveys and evaluations. These results are summarized and provided for the college departments for use in their plans. Academic units also rely on the deanship for student academic measures of quality to include student progress and success, time to degree, and student to faculty ratio. Both the direct and indirect measures of quality are incorporated into KPIs and delivered to clients. Many KPIs are defined by NCAAA, whereas college and programs develop others.

In addition to the internal use of KPIs for planning and outcomes measurement, they are also utilized by the deanship in providing data and information externally on college's performance. Datasets are provided annually to some university ranking organizations, notably QS World University Rankings, U.S. News & World Report, Webometrics Rankings of World Universities, and Times Higher Education World University Rankings. The cycle of planning, setting goals and objectives, defining measurements, analyzing the results, and making changes in the academic or non-academic unit follows an annual cycle. For NCAAA accreditation, once accredited programs are required to submit a self-study every five years based on this planning and analysis cycle. The programs engage external reviews during the accreditation process but more frequently through the external advisory boards for academic programs. As the center for academic development and quality unit, the vice deanship actively guides unit -level planning and assessment process leading to continuous improvement. Finally, the vice deanship adheres to NCAAA quality criteria including commitment to quality improvement, achievement of quality standards, the effectiveness of services provided and consistency of best practices leading to attainment of all standards.



## About College of Engineering

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 labour 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.

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.

## College Vision

To meet the international standards as a source of excellence in engineering learning and center of research in the university

## 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 OBJECTIVES

- Development and innovation of engineering curricula studied to the changing needs in this field
- Configuration of strategic relationship with local and world-wide universities for research partnership and technology transfer
- Encourage and support professional development for staff members and students
- Support education and scientific research by academic services and effective management and technology
- Contributing into the development of the community by preparing and organizing educational programs and trainings in engineering continuously

# Mapping of University and College Mission

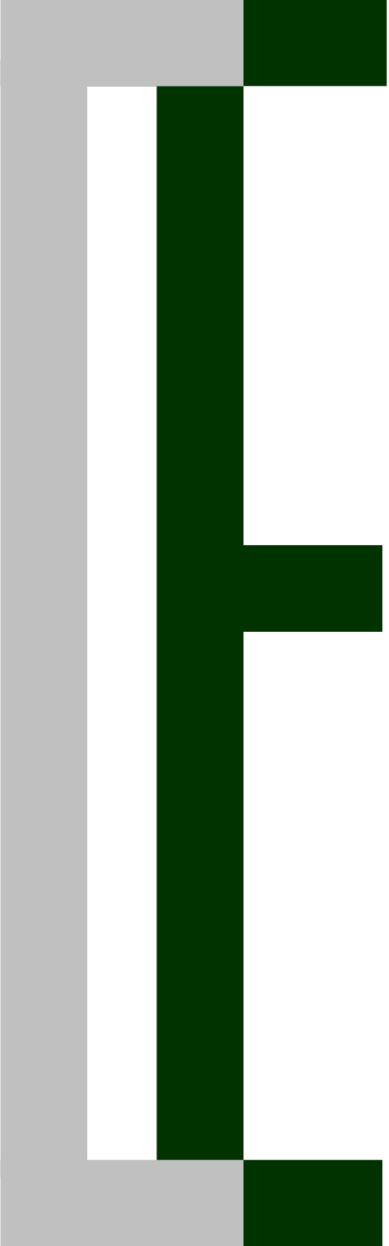
University mission					
King Khalid University commits to providing relevant academic environments for high-quality education, conducting innovative scientific research, providing constructive community services, and maximizing the employment of knowledge techniques.					
University Mission Keywords		Education	Scientific research	Community services	Knowledge techniques
College Mission Keywords	Knowledge and skills	√			
	Modern engineering technologies		√		√
	Development of country's plan			√	

## The Dean, College of Engineering

The Dean, College of Engineering will provide strategic direction, academic planning leadership, and administrative oversight to achieve the highest standards in engineering education and research. Reporting to the Vice President of academic and educational affair, of the university, the Dean will encourage innovative approaches to program and professional training development and delivery, also increase research output and funding support. He will ensure sustainable growth and competitiveness, expand interdisciplinary research programs, and work collaboratively with other stakeholders such as academic, industry and public sector partners to further enhance its national and international stature.

Steadfast to the scholarly life of the faculty and equity, excellence, and diversity, the Dean, will play an important role in the achievement of college's objectives. He is expected to:

- Stimulate and support excellence and integrity in teaching, learning, research, and nurture an environment that encourages faculty/staffs and students to identify and pursue innovation in these activities.
- Lead the academic planning process of the college by initiating discussions, defining priorities, and developing and articulating its vision.
- Supervise and initiate and activities designed to improve teaching skills within the college and ensure that teaching methods are state-of-the-art.
- Provide a leadership in the development of research activity to capitalize the expertise, resources, and interests of the faculty accordance with the University's research strategy.

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- Actively play an essential role in raising funding support to the faculty through government, industry and other funding sources and work collaboratively with other stakeholders viz. academic, industry and public sector partners to further enhance the research profile of the faculty, and expand and improve its infrastructure.
  - Ensure effective communication and engagement with students, faculty and staff members.
  - Also ensure appropriate and efficient organization and assignment of faculty responsibilities, effective management, commitment to faculty development and administration of collective agreements and personnel policies.
  - Ensure recruitment and appointment processes effectively with the aim to attract the highest possible caliber of faculty and staffs and that the process itself is reflective of equity, diversity and University policy.
  - Participate in the development of college strategy and policy.
  - Supervise, monitor and control all academic, curricular, co-curricular, research and community service activities.

## Vice Dean for Academic Affairs

The Vice Dean of academic affairs is the assigned and administrative officer responsible for the effective and efficient operation of the engineering college within the policies, directions, and plans of the university as a whole. The Vice Dean establish and maintain a collegial work environment, support the academic unit towards improved productivity and relevancy, ensuring the academic integrity and curricular coherence of all programs embraced within it.

- To provide overall leadership, direction, advocacy, communication, coordination, and assessment of the academic unit as a whole, and of the sub-units (departments and programs) to it.
- To establish and maintain a cooperative, collegial work climate which enhances communication, trust, and productivity of and among faculty and administrative, secretarial staffs and students.
- To engage in such career counseling of faculty and staff which maintain morale, reward and foster competence and effort, and efficiently deal with problems and issues, which decrease faculty and staff performance.
- To serve as the mediator in resolving problems arising among faculty and their department chairs, faculty, staff and students.
- To ensure that efficient academic advising is provided to all students in their respective majors and within each of the sub-units.
- To ensure that a system of student observation and evaluation of faculty occurs effectively.



## Vice Dean for Academic Development and Quality

The vice dean for academic development and quality oversees and promotes the quality-integrated system to fulfill the university mission, vision, and objectives. This work entails the adoption of quality principles and coordinating with departments, and programs to ensure their understanding and adherence to the quality culture. Typical duties include:

- Provide leadership for the quality assurance strategy in a manner that aligns with the university's mission and vision.
- Inspire a culture of quality throughout the university.
- Contribute to the achievement of all college objectives relating to quality and academic accreditation.
- Work with teams to develop and refine KPIs at college and program level.
- Provide support to all units of the college towards achieving high quality in all of their activities.
- Review progress and evaluate the performance of the quality and development units in academic and administrative units.
- Contribute toward strategies for evaluating performance and quality assurance.
- Review quality standards to ensure continuous improvement at all levels.
- Present proposals and provide consultation regarding strategies and priorities of quality enhancement.
- Form committees and working groups to manage quality assurance.
- Compile a manual for the management of quality assurance and outcomes assessment.





## Consultants and External Reviewers

Consultants and External Reviewers/Experts are engaged in some subject areas to complement the staff in the deanship of academic quality and development. Experts may have experience in the field of design, implementation, and review of quality assurance systems. Others may have broad experience in learning outcomes assessment, KPIs, deployment, and analysis of surveys and evaluations, strategic and operational planning, performance evaluations, environmental scanning and reporting, and assessment of non-academic units. Consultants are usually hired on an annual basis, as and when required.

## The Strategic Themes of the College of Engineering

Strategic Themes of the Engineering College are:

- Academic Excellence
- Participative Cognitive and Research Environment
- Effective competitive academic programs
- Meeting the requirements and needs of the labor market
- Diversification of sources of income and the optimal resource utilization
- Institutional Development

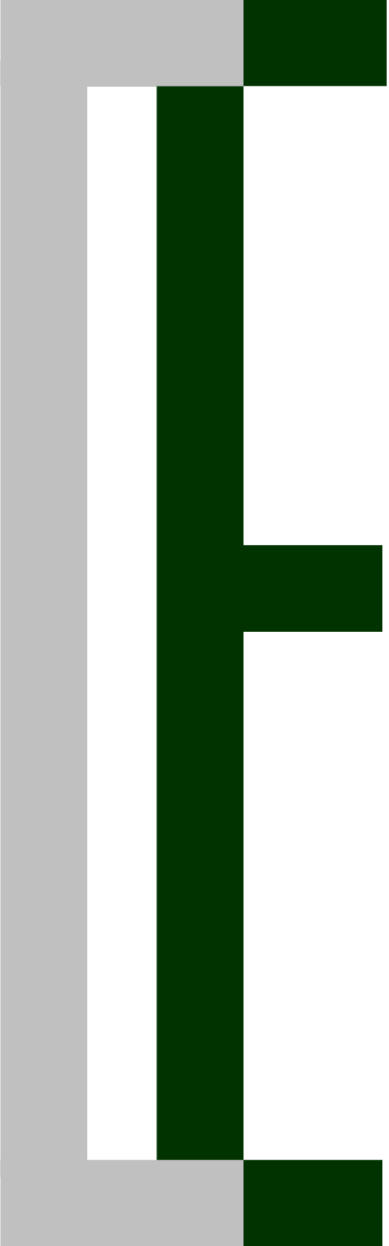
# Committees Assists the Quality Assurance System

Various Committees constituted in respective departments, and their tasks are as follows.

## Quality Committee

### Tasks

- Spreading the quality culture within the department.
- Supervising the strategic plan of the department and monitoring its execution.
- Suggesting the development plans of the department.
- Executing and pursuing the activities of the evaluation and the academic approvals in the department.
- Suggesting the aim and outputs of the learning for the department program and suggesting the ways or the means of achieving these aims and different style of evolution for measuring the outputs or achieving these aims.
- Supervising the preparation of the files of the study curricula containing the following:
  - CV of the teaching staff members.
  - Copy of the appreciation certificates and the rewards of distinguished teaching.
  - A description of the curriculum contents according to the model for the national authorities of evaluation and approval.
  - A sample of the exam questions of the previous curriculum.
  - A sample of the answer papers of the students at the different levels.
- Suggesting the necessary projects to achieve them at the department level.

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- Preparing the manual and guide of the department and to introduce department and study plan.
  - Receiving the team of the different academic approval authorities from outside the university and quality committees from inside the university and those who visit the department from time to time.
  - Encouraging the department members to initiate suggesting the project and assisting them in activating these suggestions.
  - Supervising the self-evaluation process of different programs for the department and preparing the report of the self-study for the academic programs.
  - Sharing with the quality unit in the faculty in spreading the culture of the quality and academic approval.
  - Organizing and attending lectures and workshops for faculty.
  - Certifying the efforts and the results of the procedures of the academic approval in the department and submitting them to the department chair.
  - Collecting the data and the information, continuously, about the requirement of the academic approval and the quality activities and applying them to the department.
  - Preparing the periodical reports about the levels of the performance in the department and the satisfaction of the beneficiary from every activity.
  - Making periodical meeting to discuss the requirements of the academic program approvals.
  - Preparing files of the academic program description.
  - Performing other tasks assigned by the quality Vice Deanship related to the academic approval and the quality activities.



## Student Advisory Committee

### Tasks

- Directing and instructing the students in the department concerning the subjects and the necessary skills and monitoring the weak students and instructing them academically and psychologically.
- Receiving the student's complaints concerning the curricula or the teaching staff members.
- Studying the problems of the students and suggesting solutions to them.
- Encouraging the students and supporting their activities and organizing the competitions, seminars, general lectures and scientific meetings.
- Suggesting the extra-curricular activities and executing them.
- Presenting suggestions concerning the development of the academic programs in the department.
- Studying the legal breaches of the students and suggesting the punishments to them according to the applied systems.
- Studying the re-correction of the exams in case of differences.
- Ascertaining the effectiveness of the resources of the educational process.
- Coordination with the related sides concerning the cooperative training in the department.
- Carrying out activities decided in department council meetings.



## Scientific Committee

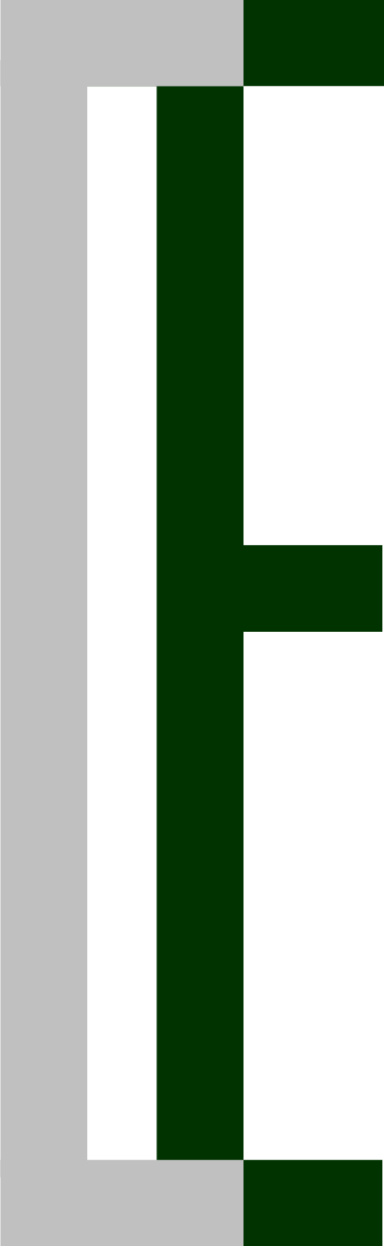
### Tasks

- Preparing periodical studies about the needs of the marketplace in the context of the program of the department.
- To study and review the curricula and to develop it according to the marketplace need.
- Continuous update of the educational policies in the department and studying them.
- Putting plan necessary for activating the demanded educational policies and overcoming different problems in the department.
- Supervising the plan of the development and putting the schedule for its execution at the department level.

## Scholarships and Higher Studies Committee

### Tasks

- Studying the reports presented by the various candidates doing masters or a Ph.D. abroad.
- Studying different applicants presented for recruitment.
- Revising and developing the plans for higher studies in the department.
- Looking after the entrance exams of the students for higher studies in the department and giving recommendations to the department council.
- Presenting the academic instructions to the students regarding higher studies.

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- Studying the applications submitted by students concerning additional chances and re-registration etc. and submitting them to the department council.
  - Studying the suggestions of the master and doctorate dissertations and forwarding them to the department council.
  - Distribution of the study curricula to the teaching staff member in the department.
  - Suggesting the students' number, which may be accepted for the coming years.
  - Putting a system to write, confirm and spreading the scientific research and sharing in the conferences at the department level.
  - Establishing and updating the research database and the projects accomplished by the teaching staff members in the department.
  - Urging the teaching staff members to assist in writing scientific articles in the international scientific magazines.
  - Announcing the research list to the teaching staff members on the electronic website of the department and updating it annually.
  - Evaluating the current program of the higher studies of the department periodically.
  - Carrying out the tasks assigned by the committee of the higher studies and the scientific research in the faculty.
  - Registering the current research projects and the executed ones in the department and announcing their names on the electronic website of the department and its benefit to the society.
  - Putting the list of the supervisors of the teaching staff members in the department for dissertations.
  - Performing annual evaluation to the projects of the scientific research in the department and giving recommendations to the committee of the higher studies and the scientific research in the faculty.



## Purchases and Laboratories Committee

### Tasks

- Providing the lab equipment and students services of the programs.
- Providing the maintenance plans to the lab, equipment, and the student's services.
- Presenting the periodical report to the department chair at the end of every academic year to perform the necessary repairs/amendments.
- Proving the procedures of the safety and security of the lab and lecture halls and presenting a report about them to the department chair.
- Spreading the awareness, preparing and distributing instructional pamphlets to the students for the procedures of the safety for different risks.
- Putting signs of the safety in a definite place in every lab and halls and the emergency telephones.

## Timetable Committee

### Tasks

- Preparing the class timetable at the beginning of each semester.
- Collecting the following information:
  - Teaching load distribution (Individual faculty's teaching load in the department).
  - Sharing teaching load from other departments.
  - Assigning of classrooms and tutorial rooms.
  - Assigning of resources (classrooms, labs, tutorial rooms which are shared by other departments).
  - Department-specific requirements (e.g. Lectures to be arranged only in morning slot, tea break and lunch break times, etc.).
- If the modification is required, preparing the desired templates for the timetables and getting them approved by Chairman.
- Preparing the class timetables in the predefined format.
- Referring to the class timetables, preparing the timetables of individual faculty and labs.
- Mailing all the timetables of the individual faculty and labs to all the staff, giving them three days to correct any discrepancies.
- Preparing the final class, individual and laboratory timetables and get them approved by the chairman of the department.
- The Theory and lab timetables should be submitted one signed copy to the concern department chairman and the concerned faculty member/ lab in charge.





## Student Senior Projects Committee

### Tasks

- Develops learning outcomes for the projects.
- Evaluating the eligibility of the students as per the guidelines to undertake the graduation projects.
- Control the uniform distribution of graduation projects.
- Monitors the progress of projects.
- Assessment, evaluation, and implement of the projects completed by the students as per the college's project criteria.
- Ensures the mechanism for regular assessment and grading of all projects.
- Liaisons with national and private industry sectors.
- Motivates students to develop professional and technical skills.
- Monitoring the students' summer training program.
- Collects the student-industry feedbacks.
- Evaluating the student performance.



## Social Activities Committee

### Tasks

- To receive the projects executed by the department and its members and the results of the contributions of these projects to the community service and the development plans.
- To encourage and develop the spirit of entrepreneurship in the students to maximize the return of the community service role through seminars and leaflets in coordination with the relevant committees in the department.
- To deepen the communication between the college and the bodies in charge of the development plans in the Kingdom of Saudi Arabia.
- To set compelling programs to enhance the relationship between the department and the local society and to pursue its implementation.



## Undergraduate Syllabus Committee

### Tasks

- To give suggestions for modification of the study plan for UG programs to achieve the quality requirements.
- Study and compare among our study plan with those in the other local, regional, and international universities to indicate the points of weakness and strength.
- Modify the syllabus content of the academic courses to improve their outcomes that conform to the program outcomes.
- Estimate the facilities and the financial and human resources needed to achieve the program outcomes.
- Make the connection between the package of academic programs suggested from the department and reinforce their coincidence among them, such as the connection between Bachelor, Diploma, MS.C, and Ph.D. programs to achieve the requirements of the job market and, educational and learning quality

## Postgraduate Syllabus Committee

### Tasks

- The arrangement between different academic departments of faculty to initiate post graduate programs for different departments.
- Prepare and organize regulations of post-graduation after discussion with different academic departments and faculty.

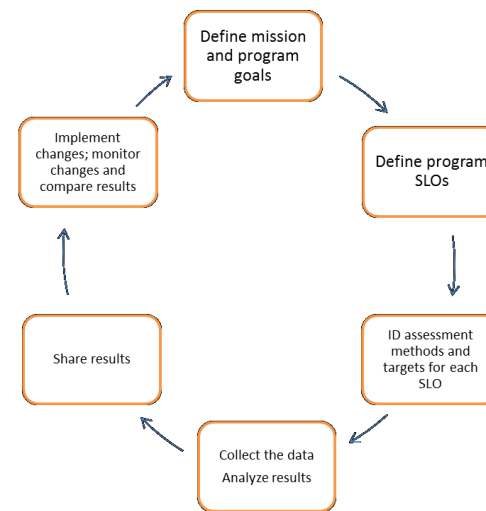
## NQF Domains and Codes Assigned

ABET Code	Domain	NCAAA Code	Student Learning Outcomes (SLOs)
--	A	a1	Knowledge of mathematics, science and engineering fundamentals relevant to engineering, together with in-depth knowledge of mechanical engineering
--		a2	Knowledge of societal, health, safety, legal, management, sustainability and cultural issues and the consequent responsibility reverent to mechanical engineering practices.
<b>a</b>	B	b1	an ability to apply knowledge of mathematics, science and engineering
<b>b</b>		b2	an ability to design and conduct experiments, as well as to analyze and interpret data
<b>c</b>		b3	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
<b>e</b>		b4	an ability to identify, formulate, and solve engineering problems
<b>h</b>		b5	the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
<b>k</b>		b6	an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
<b>i</b>	C	c1	a recognition of the need for, and an ability to engage in life-long learning
<b>d</b>		c2	an ability to function on multidisciplinary teams
<b>f</b>		c3	an understanding of professional and ethical responsibility
<b>j</b>		c4	a knowledge of contemporary issues
<b>g1</b>	D	d1	an ability to communicate effectively (written)
<b>g2</b>		d2	an ability to communicate effectively (oral)
<b>Knowledge A Cognitive Skills B Interpersonal Skills &amp; Responsibility C Communication, Information Technology, Numerical Skills D</b>			

# Student Learning Outcomes (SLOs)

## Student Learning Outcomes (SLO) Assessment

College faculty and staff work together to teach students how to think critically, communicate clearly and improve their lives and communities through the attainment of their educational goals. Student Learning Outcomes (SLO) Assessment is a central element in the overall quality of teaching and learning and occurs at three levels: Institutional Learning Outcomes Assessment, Program Level Outcomes Assessment, and Course Level Outcomes Assessment. It provides faculty, the opportunities to monitor the attainment of learning outcomes and to receive feedback for ongoing improvement of academic programs. The goal of Student Learning Outcomes assessment is to improve student learning. The following flowchart illustrates the process that each academic course and program follow in monitoring and improving student learning. It follows six steps in a logical sequence. Assessment results are including in the annual course reports and the program reports.



## Glossary

In any discussion about quality assurance in higher education it is useful to define the terms and phrases that will be used. The following definitions are the commonly accepted ones and should be a useful point of reference for the manual.

**Accreditation** Accreditation in higher education is defined as a collegial process based on self- and peer assessment for public accountability and improvement of academic quality. Peers assess the quality of an institution or academic program and assist the faculty and staff leading to quality enhancement.

**Key Performance Indicator (KPI)** A key performance indicator (KPI) is a metric used to evaluate the success of an institution or one of its units in a particular activity in which it engages.

**Quality** In higher education, this is an ongoing process ensuring the delivery of agreed standards. These agreed standards should ensure that every educational institution where quality is assured has the potential to achieve a high level of quality.

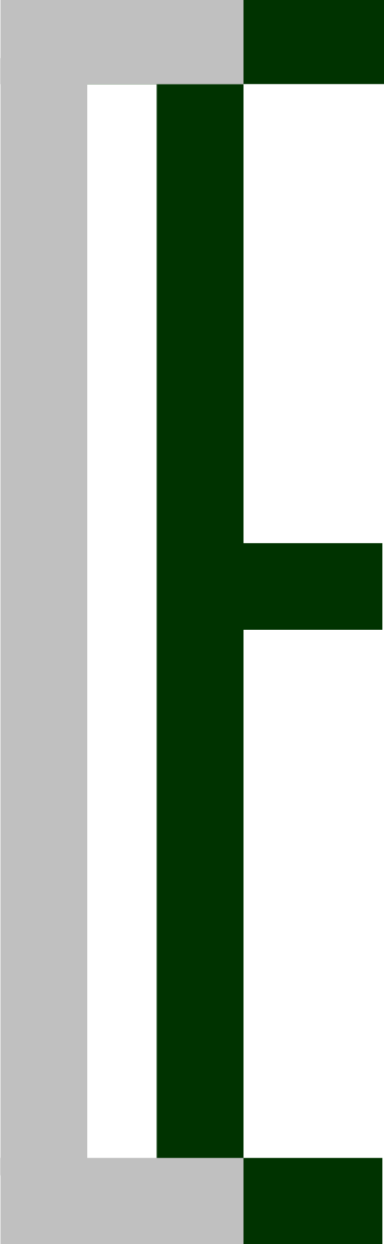
**Quality Assessment** The process of evaluating the quality of educational experience in institutions, in particular, the quality of the student learning.

**Quality Assurance** The means by which an institution can guarantee with confidence and certainty that the standards and quality of its educational mission and vision are being achieved and enhanced.

**Quality Audit** The process of examining institutional procedures for assuring quality and standards and whether the arrangements are implemented efficiently and achieve stated objectives.

**Quality Control** The verification procedures (both formal and informal) used by institutions to monitor quality and standards to a satisfactory standard and as intended.

**Quality Culture** The creation of a high level of internal institutional quality assessment mechanisms and the ongoing



implementation of the results. Quality culture can be seen as the ability of the institution and program to develop quality assurance implicitly in the day to day work and marks a shift from periodic assessment to embedded quality assurance.

**Quality Enhancement** The process of positively changing activities to provide for a continuous improvement in the quality of institutional provision.

**Standards** These describe levels of attainment against which performance may be measured. Attainment of a standard usually implies a measure of fitness for a defined purpose.

## **References**

The Quality Assurance Manual of College of Engineering has been prepared as per requirements and standards of NCAAAA, ABET, and NQF. Following references have been used.

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- Quality Assurance Manual, King Khalid University.

## Engineering College location, King Khalid University Map



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