

**Program KPIs and Benchmarks with analysis for
each indicator**

2016-17

SI.1 Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate students, respectively, on a five- point scale in an annual survey).

KPI Table

KPI:		NCAAA KPI Reference Number: S1.1		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.22	4.30	4.28	4.3	4.30
Analysis (list strengths and recommendations):				
<p><i>The overall rating of the Stakeholders about the awareness of mission statement and objectives is recorded as 4.28 during the year 2015-16. Since this survey was conducted in the year 2014-15 and there is not before 2014 year data, the target for the academic year has been fixed based on 2015-16 data. Based on this value, the internal benchmark has been fixed as 4.28 for the academic year 2015-16. The target is set to equal to Internal benchmark (i.e. 4.30). While analyzing the 2016-17 data, it is found that the overall rating of the stakeholders about the awareness of mission statement and objectives is observed as 4.22 in the five point scale. The observed result is slightly lower than the target set for the year 2015-16. Since the actual result is found to be lower than the set target and the internal benchmark, the committee decided to fix the new target benchmark as same previous year 4.30.</i></p>				
Strengths				
<ul style="list-style-type: none"> <i>The mission statement is consistent with the college mission statement.</i> <i>Both Students and Faculty members are highly aware of the mission statement and objectives of the department which helps the department administration to move further towards the accomplishment of its mission.</i> 				
Recommendations				
<ul style="list-style-type: none"> <i>Mission statement is being used by the Department for evaluation of progress towards the goals and objectives of the program; however, the Department needs many improvements. It is recommended to conduct this survey by involving all the stakeholders (including advisory board) in a consistent manner to ascertain their level of awareness about the mission and objectives of the college.</i> <i>To further increase the awareness of the mission statement, continued dissemination efforts should be done through displaying the mission statement on poster or panaflex wall charts in college corridor and students' lounge area and adding the statement to the reading material provided to the students during orientation.</i> <i>A comparable external bench mark should be sought.</i> 				
Sources: This KPI was calculated based on Survey from graduating students and teaching staffs				
Attachment: S.1.6 Questionnaire program mission Faculty 2016-17				
S.1.7 Result of survey evaluation Graduating Students S.1.8 Result of survey evaluation Faculty teaching staff				

*** Explain:**

1. Why this internal benchmark provider was chosen?

The internal benchmarking has performed using the two years trend data of the civil engineering department as specified by the NCAAA. Therefore, the stakeholders' survey results of the Department of Civil Engineering about its mission statement and Objectives are chosen as internal benchmark provider.

2. How was the benchmark calculated?

In 2014-15 and 2015-16, the awareness questionnaire was conducted for faculty and teaching staff members and graduating students only. In 2016-17, the survey was conducted for faculty and teaching staff members, graduating students and alumni as well. The questionnaire was anonymous. Its items were close-ended and participants were asked to respond on a five-point scale of rating (1 minimum to 5 maximum). The overall score was calculated based on the average of responses to all items in the questionnaire. The survey was conducted starting 2015-16, and hence data for only one year is available to calculate the internal benchmark. Target benchmark was set based on the past year average rating plus an increase of 5% as decided by the Department steering committee

3. Name of the internal benchmark provider.

Department of Civil Engineering, KKU

**** Explain:**

1. Why this external benchmark provider was chosen?

The external benchmarking was chosen based on stakeholder's' awareness ratings of the Mission Statement and Objectives compare with one of the international institution and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

CE department at UIC

S2.1 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 graduated students).

KPI Table

KPI: NCAAA KPI Reference Number: S2.1 Institutional KPI Reference Number: _____				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.93	4.00	3.97	4.7	4.00
Analysis (list strengths and recommendations): <p><i>Stakeholder evaluation (by the last two years' students) of the Policy Handbook, including administrative flow chart and job responsibilities is expressed as 3.97 and 3.93 in the five point scale during the academic years 2015-16 and 2016-17 respectively. Based on that, the internal benchmark is fixed as 4.0 and same target is fixed for 2016-17 academic year due to not achieve the target. The department of civil engineering has gone through several phases from significant lack of policies to development of individual operational areas' policies and lately to students' policies that they must be aware of through the program. Based on the surveyed values, the new target benchmark is kept same for next year for this KPI.</i></p> <p>Strengths</p> <ul style="list-style-type: none"> <i>• There is a policy and procedure college handbook that is available in departments, and also online on the college website.</i> <i>• Significantly satisfaction rate is observed among the students with the policy handbook.</i> <p>Recommendations</p> <ul style="list-style-type: none"> <i>• Review and amendment of policies and regulations for the management of the program periodically</i> <i>• Comprehensive survey (include more stakeholder such as faculty) based on questionnaire for verification of policies and regulations for the management of the program</i> <i>• There is a need to adopt a comparable external benchmark so that reasonable expectations and comparisons can be conducted with KPI derived from our data.</i> 				
Sources: <i>This KPI was calculated based on Evaluation of university experiences by the last two year student (Questionnaire selected for this particular KPI Q1 to Q4 i.e. Guidance and supports)</i>				
Attachment: <u><i>S.2.4 Questionnaire-University experience by the last two years' students</i></u> <u><i>S2.5 Evaluation by the last two year student 1435-36, 1436-37 and 1437-38</i></u> <u><i>S2.6 Evaluation by the last two year student 1437-38</i></u>				

*** Explain:**

1. Why this internal benchmark provider was chosen?

Since it is program accreditation, the internal benchmarking has to be measured out using the three years trend data of the department of civil engineering as specified by the NCAAA. So the department of civil engineering senior students' survey about the adequacy of policy hand book is chosen as internal benchmark provider.

2. How was the benchmark calculated?

The benchmark was measured as average of senior students' (stakeholder) ratings on a scale of 1 to 5. The internal benchmark was estimated as average ratings of the preceding years for students' satisfaction rating. The target benchmark was set based on the internal benchmark value.

3. Name of the internal benchmark provider.

Department of Civil Engineering, KKU

**** Explain:**

1. Why this external benchmark provider was chosen?

The external benchmarking was chosen based on Stakeholder evaluation of the Policy Handbook, including administrative flow chart and job responsibilities compare with one of the international institution and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

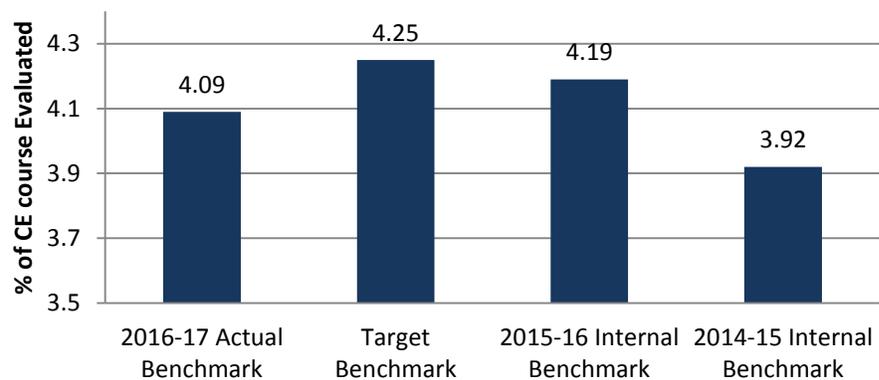
CE department at UIC

S3.1 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.)

KPI Table

KPI:		NCAAA KPI Reference Number: 3.1		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.09	4.25	4.19	4.43	4.25
Analysis (list strengths and recommendations):				
<p><i>This survey was conducted since 2015. The male students' overall rating of Quality of their Learning Experience has been reported as 3.92, 4.19 and 4.09 for the academic years 2014-15, 2015-16 and 2016-17 respectively. It is observed that there is a consistent and concomitant increase, in the mean rating of students rating throughout these three academic years except 2016-17, there is little variation in the mean rating. Based on these values, the internal benchmark is fixed as 4.25 and same is fixed for the next academic year 2017-18. When measuring the current year performance, it is observed that the overall Students' overall rating of Quality of their Learning Experience is observed as 4.09 in the five point scale. Compared to the target rating score (4.25) fixed for the academic years 2016-17, there is a decrease in the mean rating of satisfaction (4.09) observed in the year 2016-17. So, the academic development and quality committee decided to retain the current year target as the new target for the next academic year.</i></p>				
Strengths				
<ul style="list-style-type: none"> <i>Students' rated their Quality of Learning Experience as satisfactory.</i> <i>A consistent increase in students rating about the quality of learning experience has been observed compared to 2014-15.</i> <i>Although mean have decreased to 4.09 as compared to the previous academic year (4.19).</i> 				
Recommendations				
<ul style="list-style-type: none"> <i>It is recommended to continue the efforts put forward by the faculty members and department's administration to make students' learning experience more enriching and productive.</i> <i>It is recommended to sign a contract with external benchmark partner to compare actual results with similar programs of other national university</i> 				

Comparison of benchmarks in relation to Students' overall evaluation on the quality of their learning experiences .



Sources:

This KPI was calculated based on Graduating Students' overall evaluation on the quality of their learning experiences i.e. Program Learning outcomes (PLOs)

Attachment:

[S3.1a Questionnaire- PLOs Graduating Student 1435-36 , 1436-37, 1438-39](#)

[S3.1b Students' overall evaluation on the quality of their learning experiences \(PLOs\)](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

- *Since it is program specific accreditation, the internal benchmarking calculated using the three years trend data of the Bachelor of Civil Engineering as stipulated by the NCAAA. Accordingly, Program Evaluation Survey from final year student about the quality of their learning experiences. The data is collected using manual survey conducted by faculty members who are engaged in course taught CE519 "Graduation project".*

2. How was the benchmark calculated?

- *The Program Evaluation Survey has been carried from the year 2014-5. The average rating of the quality of learning experience by the final year students=Sum of scores divided by the total number of students who participated in the survey. The "internal benchmark" was calculated based on the previous two years performances. Based on the current year score and the internal benchmark, the new target was retained as the current year target.*

3. Name of the internal benchmark provider.

- *Department of Civil Engineering, KKU*

**** Explain: (Not Available)**

1. Why this external benchmark provider was chosen?

The external benchmarking was chosen based on quality of their learning experiences compare with one of the international institution and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

CE department at UIC

S3.2 Proportion of courses in which student evaluations were conducted during the year.

KPI Table

KPI:		NCAAA KPI Reference Number: S3.2		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
31:31	31:31	31:31	All Courses (KFUPM)	31:31

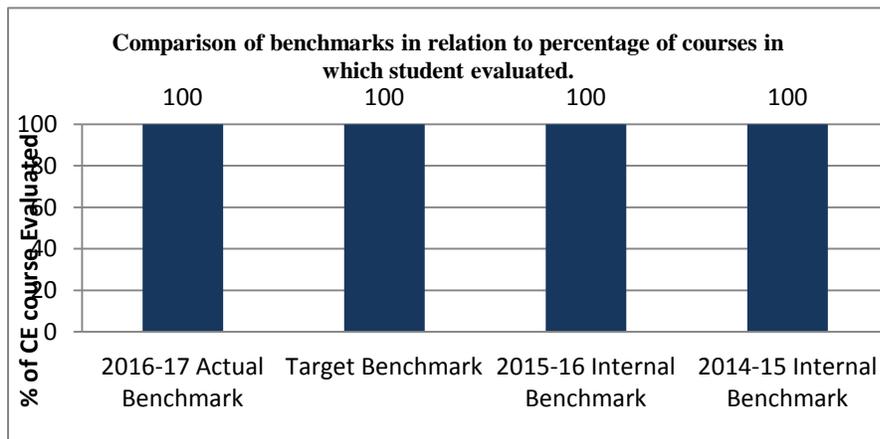
Analysis (list strengths and recommendations):

Strengths

- *Surveys are performed online for every semester involving all the courses included in that semester.*
- *Actual Benchmark values (100% courses evaluated by students/semester) found is equal to (the target benchmark 100%) the target set for this KPI.*
- *The strengths and weaknesses of the courses are communicated with department chairman and course instructors. Recommendations and action plans are attached in course reports to address weaknesses and improve the strengths.*
- *This survey organized fully web based survey application to reduce the errors in paper based survey as well as the data entry.*

Recommendations

- *Students' feedback is an important tool to improve the quality of courses. The Department of Civil Engineering has provided the opportunity to students to evaluate every course at the end of semester.*
- *It is recommended to continue this good practice.*
- *It is recommended to sign a contract with external benchmark partner to compare actual results with similar programs of other national university.*



Sources:

This KPI was calculated based on course evaluation survey by students

Attachment:

[S3.2a Questionnaire Evaluation of the Course by students](#)

[S.2.6 Result of Course evaluation survey by students 1435 to 1437](#)

[S.3.20 Result of Course evaluation survey by students 1435-36](#)

[S.3.21 Result of Course evaluation survey by students 1436-37](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

Since it is program specific accreditation, the internal benchmark calculated using the past three year's trend data of CE program as specified by the NCAAA. Accordingly, the percentage of courses evaluated through course evaluation using web based for the last three data was utilized to calculate the internal benchmark.

2. How was the benchmark calculated?

The benchmark was calculated as percentage of total number of courses with student's evaluation divided by total number of program courses in a concern year. Three years' data were available through this survey to measure the effectiveness of course teaching and process. Internal benchmark was calculated by taking the average for the total number of course evaluation surveys carried out in the past two years (2014-15, 2015-16 & 2016-17). Target benchmark was set by following the past year performance and the new target were fixed by taking into consideration of the current year performance.

3. Name of the internal benchmark provider.

Academic development and Quality Deanship

**** Explain:**

1. Why this external benchmark provider was chosen?

- *One of the best Engineering institution in KSA*

2. How was the benchmark calculated?

- *Student evaluation survey results*

3. Name of the external benchmark provider.

- *Department of Civil Engineering, KFUPM*

S4.1 Ratio of students to teaching staff. (Based on full time equivalents)

KPI Table

KPI:		NCAAA KPI Reference Number: _____		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
1:21	1:20	1: 23	1: 13.45 (KFUPM)	1:18
Analysis (list strengths and recommendations):				
<p><i>It is noticed that the number of teaching staff varies from 2015 to 2017. This is due to increase in number of bridge course students enrolled as well as staff members who joined the college since 2013. The overall actual benchmark is within near to the target Benchmark. Compared to the internal benchmark, the values show same in the number of students per teaching staff. The number of new faculty members expected to be recruited will increase, The new target is, therefore, set at the 1.18.</i></p> <p>Strength</p> <ul style="list-style-type: none"> <i>The students to staff ratio is maintained within target.</i> <i>The actual KPI helps is student-teacher interaction and allows teachers to respond to students' needs.</i> <i>Adequate Capacity of Class room with sufficient facilities</i> <p>Recommendations</p> <ul style="list-style-type: none"> <i>Maintaining a ratio of students to staff confirms that the quality of education offered to students is not negatively affected and that the individual learning needs of students are addressed. It is therefore recommended to recruit more faculty members to maintain the ratio at the set target.</i> <i>Courses should be assist with more teaching assistant and junior teaching staff</i> 				
Sources:				
This KPI was calculated based on ratio of students to teaching staff				
Attachment:				
S3.19 Faculty ratio of civil engineering for last 5 years				
* Explain:				
1. Why this internal benchmark provider was chosen?				
<i>With regards to students, the Deanship of Admission and Registration at the Institutional level maintains and control the data while Vice Deanship for Academic Affairs is responsible for maintaining faculty data-base for the program specific (Department). Hence, both were chosen as internal benchmark provider.</i>				
2. How was the benchmark calculated?				
<i>This benchmark was calculated as ratio of total number of students in the numerator and divided by the number of teaching staff members. Target benchmark was set and approved by Department steering committee. Internal benchmark was based on past two years' students & faculty records from data-base</i>				
.3. Name of the internal benchmark provider.				
<i>Deanship of Admission and Registration, and Vice-Dean of Academic affair, College of Engineering</i>				
** Explain:				
1. Why this external benchmark provider was chosen?				
<ul style="list-style-type: none"> <i>One of the best Engineering institution in KSA</i> 				
2. How was the benchmark calculated?				
<ul style="list-style-type: none"> <i>Average number of student in CE course divided by total number faculty</i> 				
3. Name of the external benchmark provider.				
<ul style="list-style-type: none"> <i>Department of Civil Engineering, KFUPM</i> 				

S.4.2 Students overall rating on the quality of their courses. (Average rating of students on a five point scale on overall evaluation of courses.)

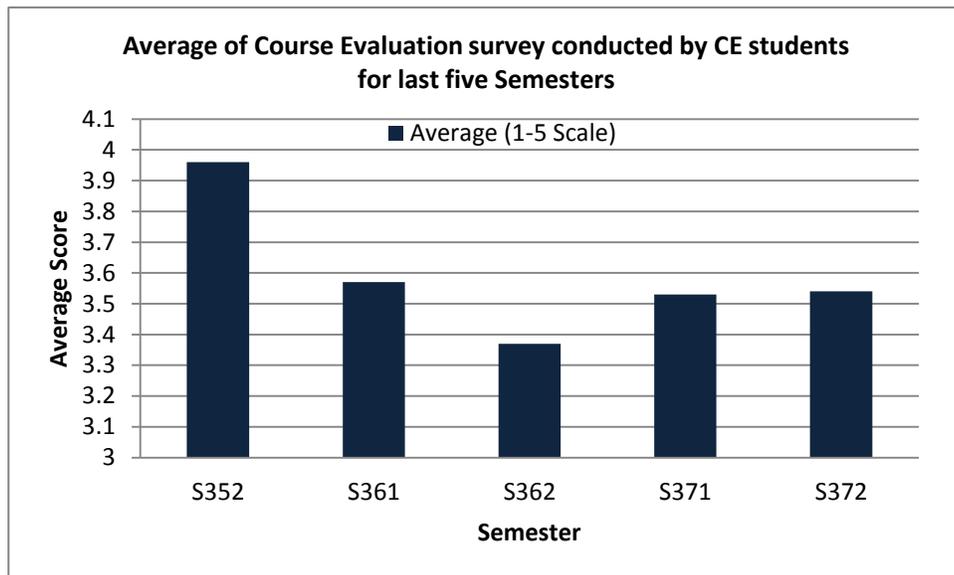
KPI Table

KPI:		NCAAA KPI Reference Number: _____		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.53	4.00	3.47	4.62	4.00

Analysis (list strengths and recommendations):

The actual KPI is less than target but better than the internal benchmark which was calculated based on the average of one academic year's values.

Further analysis of the courses' ratings show generally low scores given by students. The following figure shows the trend across time for the percentage of students giving a score for all courses. The course survey is conducted at the end of each semester since different courses are offered each semester. During semester S352, the survey conducted by manual, so this result got may be biasness in the survey process or limited courses were evaluated. The trend from S362 the ratings are increasing across time from one semester to the next.



Strength

- *Effective Course Syllabus with defined objectives and learning outcomes*
- *Students' ratings of courses are incorporated into the decision making process starting from course instructors responding to ratings in course reports to Plan and Curriculum Committee giving consideration to courses that have problems in students' ratings.*
- *Corrective actions plan in response to problems that reduce students' rating of courses have a positive effect that is also assessed through improvement in students' ratings of the same course.*

Recommendation

- *Continue with the ongoing process where students' feedback is sought, problems are identified, corrective action is started and effectiveness is reassessed through further feedback.*
- *Students need to be oriented about the implications and important of the ratings they assign to the courses so that they do it with greater care with the intention of providing constructive feedback.*
- *Teaching strategies need to improved*

Sources:

This KPI was calculated based on course evaluation survey by students

Attachment:

[S.2.6 Result of Course evaluation survey by students 1435 to 1437](#)

[S.3.20 Result of Course evaluation survey by students 1435-36](#)

[S.3.21 Result of Course evaluation survey by students 1436-37](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?
 - *Academic development and Quality Deanship is responsible to collect all surveys from students. The two years survey data of CE course survey was used to develop the internal benchmark. Hence, it was chosen as internal benchmark provider.*
2. How was the benchmark calculated?
 - *Average rating of students on a five point scale on overall evaluation of courses (Course management and planning rating)*
3. Name of the internal benchmark provider.
 - *Academic development and Quality Deanship*

**** Explain: (Not Available)**

1. Why this external benchmark provider was chosen?

The external benchmarking was chosen based on Students overall rating on the quality of their courses and compare with one of the international institutions and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.
2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.
3. Name of the external benchmark provider.

CE department at UIC

S4.3 Proportion of teaching staff with verified doctoral qualifications.

KPI Table

KPI:					NCAAA KPI Reference Number: S4.3				
					Institutional KPI Reference Number: _____				
Actual Benchmark		Target Benchmark		Internal Benchmark*		External Benchmark**		New Target Benchmark	
68.42% (13:19)		75%		68.42% (13:19)		93.5% (KFUPM)		75%	
Analysis (list strengths and recommendations):									
<p>The Percentage of teaching staff with verified doctoral qualifications is reported as 68.42% in both academic years 2016-17 and 2015-16. The internal benchmark (68.42%) is calculated based on the last year data. The actual KPI (68.42%) belonging to the year 2016-17 is slightly less than previous year and also less than the target (75%). Also, while considering the score of the external benchmarking partner (93.5%) as per KFUPM website Based on this, the department steering committee decided to keep same target as 75% for the forthcoming academic year..</p> <p>Strength:</p> <ul style="list-style-type: none"> • <i>Compared with the year 2013-14 the percentage of staff with doctoral qualification has improved</i> • <i>Multi-national faculties with excellent academic background in latest thrust area</i> <p>Recommendation:</p> <ul style="list-style-type: none"> • <i>Targeting faculty members with verified doctoral qualifications for recruitment would tip the percentage upwards and would improve the quality of education/program offered to CE students.</i> • <i>Recruitment of more doctoral faculty</i> 									
Sources:									
This KPI was calculated based on proportion of teaching staff with verified doctoral qualifications									
Attachment: S3.22 Lists of faculty (verified doctoral qualifications) and teaching staff									
* Explain:									
1. Why this internal benchmark provider was chosen?									
<ul style="list-style-type: none"> • <i>Vice Deanship for Academic Affairs is responsible for maintaining faculty database for the program. Hence, it is chosen as internal benchmark provider.</i> 									
2. How was the benchmark calculated?									
<ul style="list-style-type: none"> • <i>Proportion of teaching staff with verified doctoral qualifications</i> 									
3. Name of the internal benchmark provider.									
<ul style="list-style-type: none"> • <i>Statistical unit, Vice Deanship for Academic Affairs, College of Engineering.</i> 									
** Explain:									
1. Why this external benchmark provider was chosen?									
<ul style="list-style-type: none"> • <i>One of the best Engineering institutions in KSA, moreover, the strength of students studying in both departments falls within a common range (significantly) requiring a stipulated number of faculty to meet teaching.</i> 									
2. How was the benchmark calculated?									
<ul style="list-style-type: none"> • <i>Proportion of teaching staff with verified doctoral qualifications</i> 									
3. Name of the external benchmark provider.									
<ul style="list-style-type: none"> • <i>Online data, Department of Civil Engineering, KFUPM</i> 									

Retention Rate;

S4.4 Percentage of students entering programs who successfully complete first year.

KPI Table

KPI:		NCAAA KPI Reference Number: S4.4		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
63.12%	70%	66.67%	92%	70%
Analysis (list strengths and recommendations):				
<p><i>Students join the Department of Civil Engineering after they complete the 1st year and score the grades needed to grant them acceptance into the CE program. In their first year at Department of Civil Engineering, students are monitored for completing their courses. This indicator provides insight as to student's abilities and potential to progress in the program. It is a good opportunity to identify who did not achieve and start advising process early. However, Not every student completes the year. The actual KPI (i.e. 63.12%) shows overall decreased compared to the internal benchmark which is the average of the previous year(s) (i.e. 66.67%) and compared to the external benchmark from UIC (i.e. 92%). No new target is set and the current target will be maintained until the situation shows sustained improvement.</i></p>				
Strength				
<ul style="list-style-type: none"><i>Actual values not obtained for this KPI are lower than the set target and also lower than external benchmark provided by the comparable program.</i>				
Recommendations				
<ul style="list-style-type: none"><i>There is a need to identify the courses that is responsible for non-completion of the 1st year of the program.</i><i>To investigate potential causes, course grades and course ratings may need to be analysed for this year specifically.</i><i>Students are fully informed about course requirements in introductory lecture as well as uploaded on university LMS portal</i><i>The system for evaluation of teaching effectiveness in all courses is still depending mainly on student survey, so comprehensive survey are to be evolve to get more database</i>				
Source: Registration and statistical unit, College of Engineering, KKU				
* Explain:				
1. Why this internal benchmark provider was chosen? <i>The Registration unit, College of Engineering and Vice Deanship for Academic Affairs is responsible for maintaining the data related to the examination grades and assessment of students and the Deanship of Admission & Registration at the institutional level which maintain and control data on student's results. Hence, both the stakeholders were chosen as internal benchmark provider.</i>				
2. How was the benchmark calculated? <i>Percentage of students entering programs who successfully complete first of the Bachelor program of civil engineering divided by the number of students enrolled in the first year for a specified year X 100. Based on this formula, the result of 2015-16 was used to develop internal</i>				

benchmark. Target benchmark was set as similar to internal benchmark (700%). The new benchmark was fixed as same.

3. Name of the internal benchmark provider.

The Registration unit, College of Engineering and Vice Deanship for Academic Affairs

**** Explain:**

The external benchmarking was chosen based on Percentage of students entering programs who successfully complete first year and compare with one of the international institutions and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

CE department at UIC

Graduation Rate for Undergraduate Students:

S4.5 Proportion of students entering undergraduate programs who complete those programs in minimum time.

KPI Table

KPI:					NCAAA KPI Reference Number: _____				
					Institutional KPI Reference Number: _____				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark					
33%	35%	30.55%	Not Available	40%					
Analysis (list strengths and recommendations):									
<p><i>Although considerable improvement is seen in the on time completion rate from year 2015-16 to 2016-17, the actual KPI is less than the set target (35%). The current performance (33%) is higher than the internal benchmark (30.55%). Based on this current performance, internal benchmark, the new target for the next forthcoming year is set 40%.</i></p> <p>Strength</p> <ul style="list-style-type: none"> <i>The percentage of students completing the 1st year is high and reflects the students' assessment procedures that are done in the program to ensure the quality of education.</i> <p>Recommendations</p> <ul style="list-style-type: none"> <i>More demanding requirements for admission may need to be in place especially regarding English language and the main basic science courses (Maths, Chemistry, Physics,...) so that higher level of performance can be expected and they can graduate on time.</i> <i>Considerably effective orientation and training programs are need to provide for the different kinds of learning outcomes.</i> 									
Source: <i>The Registration unit, College of Engineering and Vice Deanship for Academic Affairs</i>									
* Explain:									
<p>1. Why this internal benchmark provider was chosen? <i>The Registration unit, College of Engineering and Vice Deanship for Academic Affairs is responsible for maintaining the data related to the examination grades and assessment of students and the Deanship of Admission & Registration at the institutional level which maintain and control data on student's results. Hence, both the stakeholders were chosen as internal benchmark provider.</i></p> <p>2. How was the benchmark calculated? <i>Percentage of students entering programs who successfully complete first of the Bachelor program of civil engineering divided by the number of students enrolled in the first year for a specified year X 100. Based on this formula, the result of 2015-16 was used to develop internal benchmark. Target benchmark was set as similar to internal benchmark (40%). The new benchmark was fixed as same.</i></p> <p>1. Name of the internal benchmark provider. <i>The Registration unit, College of Engineering and Vice Deanship for Academic Affairs</i></p>									
** Explain: (Not Available)									
<p>1. Why this external benchmark provider was chosen?</p> <p>2. How was the benchmark calculated?</p> <p>3. Name of the external benchmark provider.</p>									

S5.1 Ratio of students to administrative staff

KPI

KPI: NCAAA KPI Reference Number: S5.1
 Institutional KPI Reference Number: _____

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
31:1	30:1	33:1	45:1	30:1

Analysis (list strengths and recommendations):

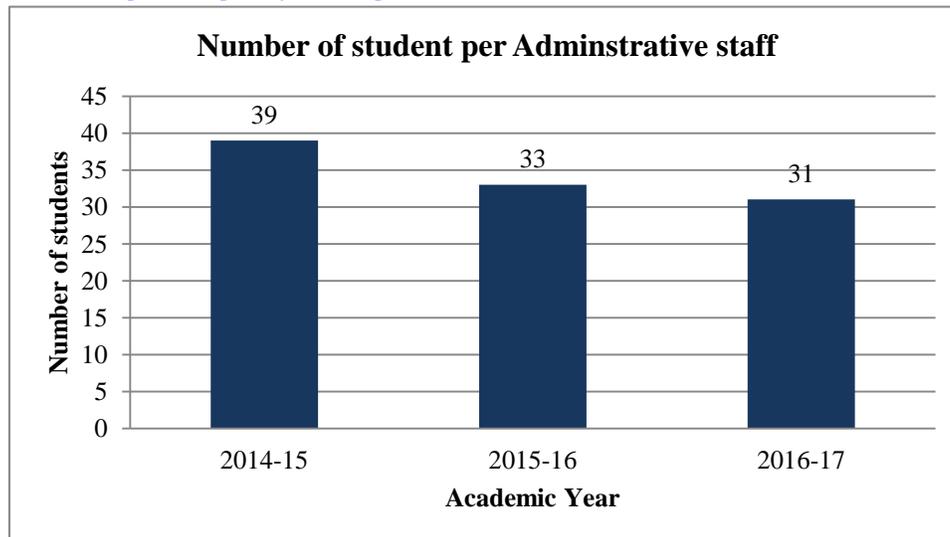
Overall, the ratio of Students to support staff at College of Engineering is significantly constant across the previous two years (2014-15= 39:1; 2015-16= 33:1) in spite of increase in the number of students. The actual benchmark (31:1) for the current academic year (2016- 17) was significantly near with the set target benchmark (30:1) and with the internal benchmark (33:1), which have been calculated based on the previous last years' record. The college of engineering strategic goal to provide adequate learning resources and support to students should enable keeping the target ratio in the coming year by new hiring administrative staff (trained assistants and technicians).

Strengths

- *Monitoring of assisting staff ratio is consistent and the college administration took efforts to keep adequate ratio.*

Recommendations

- *Establish need-analysis study of existing and desired ratio.*
- *Increase the number of administrative staffs*
- *Workshop on Capacity development*



Source: Registration and statistical unit, College of Engineering, KKU

* Explain:

1. Why this internal benchmark provider was chosen?

Vice deanship for Academic Affairs of College of Engineering is responsible to maintain the data of support staff allocated for the student and responsible to maintain student data-base.

2. How was the benchmark calculated?

The ratio calculated as, total number of students divided by total number of support staff.

Internal benchmark was calculated of the years 2015-16. Target benchmark was set by following result of 2016-17 and the new target kept same

3. Name of the internal benchmark provider.

Vice deanship for Academic Affairs, College of Engineering, KKU

**** Explain:** (Not Available)

The external benchmarking was chosen based on Ratio of students to administrative staff and compare with one of the international institutions and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

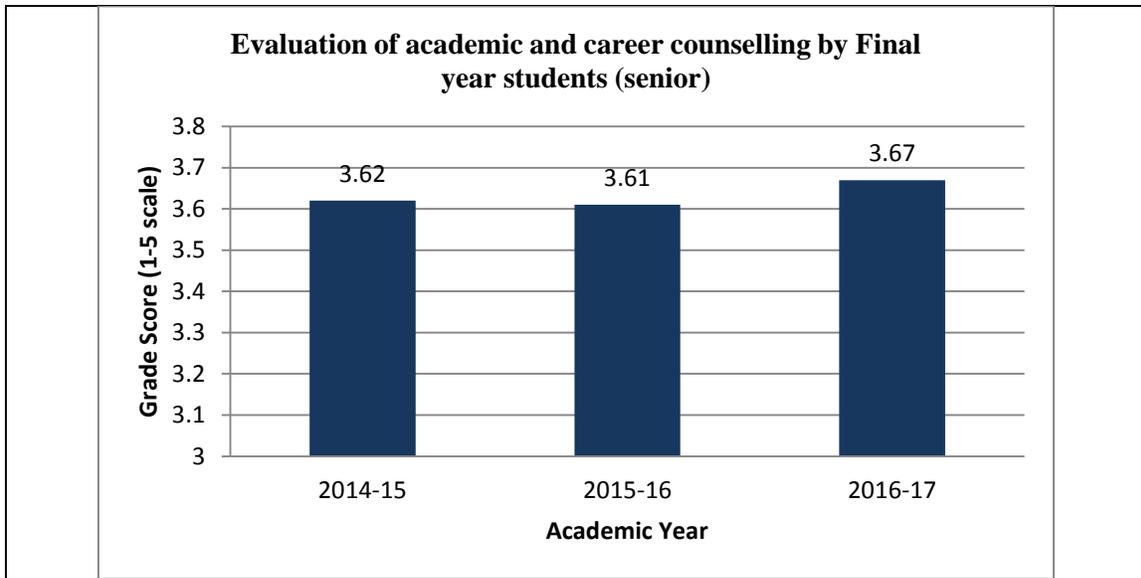
3. Name of the external benchmark provider.

CE department at UIC

S5.3 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).

KPI

KPI:					NCAAA KPI Reference Number: S5.3				
					Institutional KPI Reference Number: _____				
Actual Benchmark		Target Benchmark		Internal Benchmark*		External Benchmark**		New Target Benchmark	
3.67		4.0		3.61		4.80		4.0	
Analysis (list strengths and recommendations):									
<p><i>This Evaluation Survey is conducted on students who were going to be graduated and started their professional internship training. The data for this KPI has been calculated from the students responses related to one specific “item” (calculated based on evaluation of program by the Final Year's students (Question no. 1 to 7 i.e. Guidance and support)). Based on the previous year performance (Year 2014-15: 3.62) and the internal benchmark (Year 2015-16: 3.61), the target is fixed as 4.0 to retain the previous year’s performance. However, the actual performance (2016-17) is measured as 3.67 and it falls below the target. So the committee decided to retain the current target as the new target for the next forthcoming year.</i></p>									
Strength									
<p><i>This conducted regularly which allows for consistent evaluation of the program from fresh graduates’ perspective and senior students.</i></p>									
Recommendations:									
<ul style="list-style-type: none"> • <i>There is an improvement on academic and career counselling. The new graduates’ students are at cross roads to go for practice or apply for civil engineering career. An appropriate approach to guide them to know their options and properly plan for career is much needed at this point. The guidance could be part of final year or during the internship program.</i> • <i>Good results, need to work more in encouragement area, secondly the professors assist to the lectures and teaching assistants to improve their advising and career counselling skills.</i> 									



Sources:

This KPI was calculated based on evaluation of program by the Final Year's students (Question no. 1 to 7 i.e. Guidance and support)

Attachment:

[S2.18 Questionnaire-Evaluation of program by the Final Year's students](#)

[S3.3 Result-Evaluation of program by the Final Year's students 1437-38](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

Using the Manual survey conducts to evaluate the academic and career counseling, targeting final year students or who started their professional internship training. Hence the student affair committee was chosen as internal benchmarking provider.

2. How was the benchmark calculated?

Internal benchmark was calculated as average of student's ratings on a scale of 1 to 5 (1 minimum and 5 maximum rating score) based on results of the years 2014-15, 2015-16 and 2016-17. Target benchmark was set same as following the year 2014-15 of 4.00.

3. Name of the internal benchmark provider.

Student affair committee, Department of Civil Engineering, KKU

**** Explain:**

The external benchmarking was chosen based on Student evaluation of academic and career counselling and compare with one of the international institutions and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

CE department at UIC

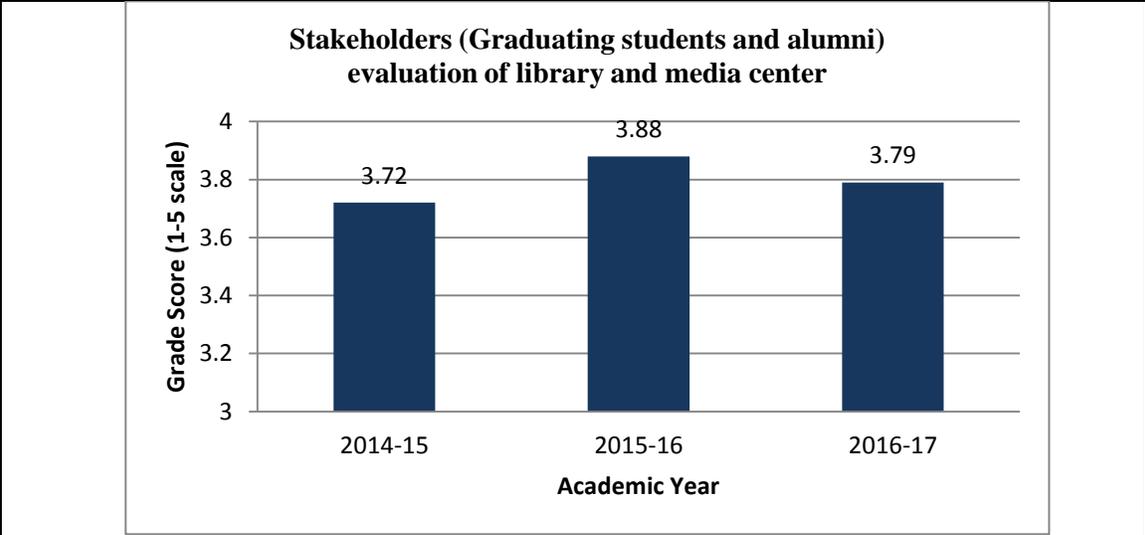
S6.1 Stakeholder evaluation of library and media centre. (Average overall rating of the adequacy of the library & media centre, including:

a) Staff assistance, 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.) .

KPI Table

Stakeholder: Alumni and Final year’s students

KPI:		NCAAA KPI Reference Number: S6.1		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.79	4.00	3.88	Not Available	4.00
Analysis (list strengths and recommendations):				
<p><i>Stakeholder evaluation survey about the adequacy of library and media center has been conducted and it is reported as 3.79 in the five point scale during the year 2016-17. Since the current score reported to be lesser than the target (4.0) and equivalent to the internal benchmark (3.88), the committee decided to keep the new target benchmark same as per last year (4.0) for seeking continuous quality improvement. The detailed analysis showing the opinion of the stakeholders (Alumni and graduating students) below mention figure.</i></p>				
Strengths				
<ul style="list-style-type: none"> • <i>Actual Performance 3.79 is slightly less than the target benchmark (4.0) set for this KPI as well as less than the internal benchmark (3.88) based on previous record.</i> • <i>In general, graduating students were more satisfied with the library services and media center as compared to the Alumni.</i> • <i>The survey was conducted and has average of both stakeholder Graduating students and Alumni).</i> • <i>The availability of online access and borrowing facilities are used to reduce commitment of providing physical resources on site</i> • <i>Up to date computer equipment and software are available to support electronic access to resources and reference material.</i> 				
Recommendations				
<ul style="list-style-type: none"> • <i>It is recommended to encourage students to use textbooks for course material coverage and research assignments.</i> • <i>Develop Department level students’ library and study areas to attract students to develop of self-learning culture</i> 				



Sources: This KPI was calculated based on evaluation of program by the Final Year's students (Question no. 8 to 14 i.e. Learning resources) and evaluation by the graduates who completed study and got their final certificate (Alumni) Question no 32 to 38 i.e. learning resources.

Attachment:

- [S2.18 Questionnaire-Evaluation of program by the Final Year's students](#)
- [S5.4 Questionnaire-Evaluation of University by the Alumni](#)
- [S5.5 Result-Evaluation of program by the Final Year's students 1435-36](#)
- [S5.6 Result-Evaluation of program by the Final Year's students 1436-37](#)
- [S5.9 Result-Evaluation of program by the Final Year's students 1437-38](#)
- [S5.7 Result-Evaluation of University by the Alumni 1435-36](#)
- [S5.8 Result-Evaluation of University by the Alumni 1436-37](#)
- [S2.20 Result-Evaluation of University by the Alumni 1437-38](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?
Stakeholder's evaluation of library services with regards to access of learning resources, general environment and facilitation of library staff was conducted manual by the student affair committee. Since, this was newly introduced survey, therefore only three survey cycles were conducted during the past years. The student affair committee, Department of civil engineering is responsible to conduct the surveys and maintain the data of stakeholder's ratings. Hence, it is chosen as internal benchmark provider.
2. How was the benchmark calculated?
This is calculated (mean of) on the basis of survey conducted from final year's students and alumni
3. Name of the internal benchmark provider.
Student affair committee , Department of Civil Engineering, KKU

**** Explain: Not Available**

1. Why this external benchmark provider was chosen?
2. How was the benchmark calculated?
3. Name of the external benchmark provider.

S7.2. Stakeholder evaluation of the IT services. (Average overall rating of the adequacy of: IT availability, Security, Maintenance, Accessibility, Support systems, Software and up-dates, Age of hardware, and Other viable indicators of service on a five- point scale of an annual survey.)

KPI Table

KPI:		NCAAA KPI Reference Number: S 7.2		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.07	4.00	4.00	Not Available	4.10

Analysis (list strengths and recommendations):

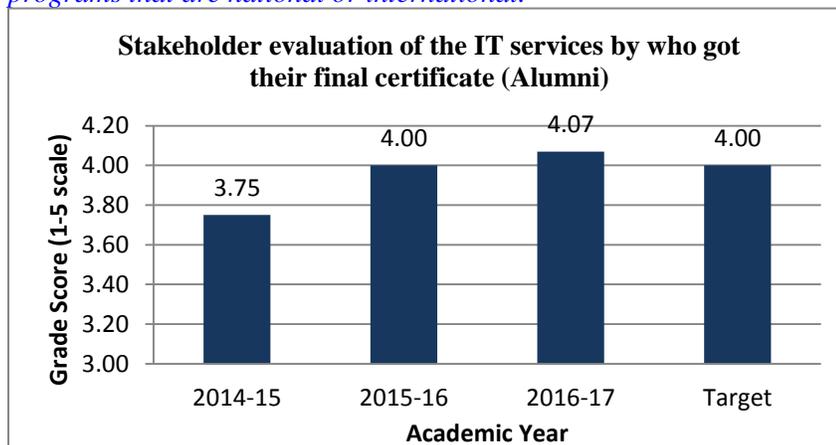
The results show that the actual values obtained for this KPI (4.07) are higher than the set target and the internal benchmark of 4.00 of students who got their final certificates (alumni) are being satisfied with the IT services. The current target is achieved, the committee decided to new target of 4.10 keeping in view of the expansion of infrastructural facilities in the campus.

Strengths

- *The survey is consistent and regularly performed every year*
- *The survey shows improvement than average rates of previous years*
- *Technical support is available for faculty and students using information and communications technology*
- *Security systems are in place to protect privacy of sensitive personal and institutional information, and to protect against externally introduced viruses.*

Recommendations

- *It is recommended that the number of workstations should be increased for the students. In addition, computers available in the lecture halls and library should be regularly checked for the presence of viruses.*
- *External benchmark is recommended to compare actual benchmarks to similar programs that are national or international.*



Sources: This KPI was calculated based on evaluation of program by the graduates who completed study and got their final certificate (Alumni) Question no 65 i.e. facilities and equipment.

Attachment:

[S5.4 Questionnaire-Evaluation of University by the Alumni](#)

[S5.7 Result-Evaluation of University by the Alumni 1435-36](#)

[S5.8 Result-Evaluation of University by the Alumni 1436-37](#)

[S2.20 Result-Evaluation of University by the Alumni 1437-38](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

Stakeholder's satisfaction survey regarding the IT services available at the College of Engineering, a newly introduced survey about the user & facility survey was conducted by the Committee of Laboratory and equipments, Department of Civil Engineering. The graduates who completed study (Alumni) satisfaction ratings on a five-point scale were measured. Hence, it is used as internal benchmark provider.

2. How was the benchmark calculated?

Internal benchmark was calculated as average of student's ratings on a scale of 1 to 5 (1 minimum and 5 maximum rating score) based on results of last year's survey of 2014-15. Target benchmark was set following the year 2016-17 on rating 4.07. New target was fixed as 4.10.

3. Name of the internal benchmark provider.

The Committee of Laboratory and equipments, Department of Civil Engineering, KKU

**** Explain: Not Available**

1. Why this external benchmark provider was chosen?

2. How was the benchmark calculated?

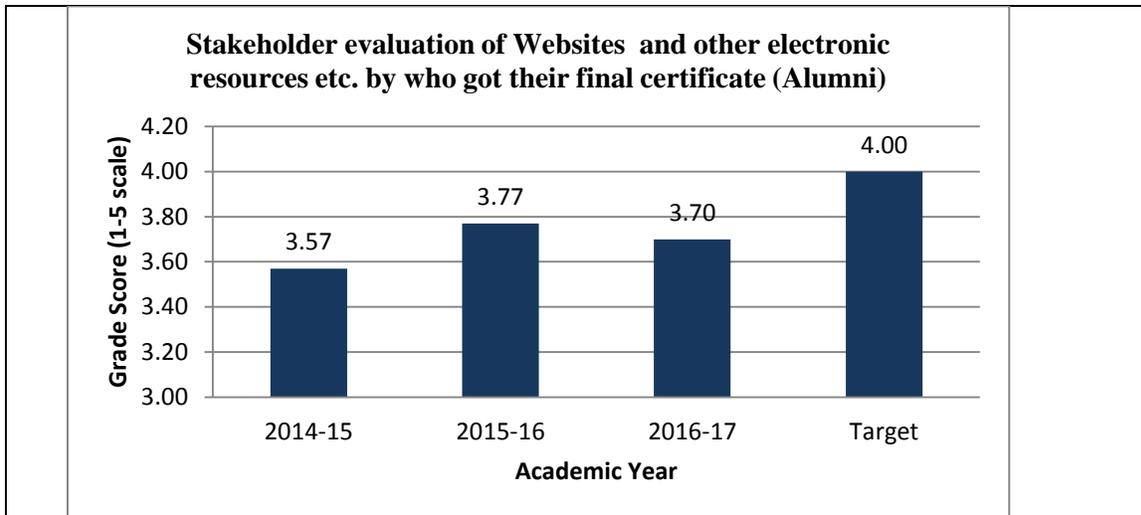
3. Name of the external benchmark provider.

S7.3 Stakeholder evaluation of

- a) Websites,
- b) e-learning services
- c) Hardware and software
- d) Accessibility
- e) Learning and Teaching
- f) Assessment and service
- g) 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 on a five-point scale of an annual survey).

KPI Table

KPI:					NCAAA KPI Reference Number: S7.3				
					Institutional KPI Reference Number: _____				
Actual Benchmark		Target Benchmark		Internal Benchmark*		External Benchmark**		New Target Benchmark	
3.70		4.00		3.77		4.8		4.00	
Analysis (list strengths and recommendations):									
<p><i>The results of the actual values (3.70) obtained are below the set target benchmark for this KPI (4.0) that who got their final certificate (Alumni) being satisfied with e-learning services. Although, the overall satisfaction level has decreased from 3.77 to 3.70 compared to the previous academic year who got their final certificate (Alumni), and it still falls below the target benchmark. It is recommended to arrange more extensive training sessions for students about the effective usage of e-learning services like blackboard etc.</i></p>									
Strength									
<ul style="list-style-type: none"> • <i>Textbooks and other requirements are available with such an adequate quantities before the inception of study</i> • <i>Suitable facilities are available for the individual study, while labs or computer centers and other necessary equipment are provided for.</i> • <i>University provided all students with a manual containing all conduct codes that determines the student rights and liabilities</i> • <i>Evaluation of the student by the staff members is done in fairness and impartiality</i> • <i>University city enjoys a healthy, clean and safe environment</i> 									
Recommendation									
<ul style="list-style-type: none"> • <i>Interaction of staff members with students via the blackboard</i> • <i>External benchmark is recommended to compare actual benchmarks with similar programs both at national or international level.</i> 									



Sources: This KPI was calculated based on evaluation of program by the graduates who completed study and got their final certificate (Alumni) Question no 39 to 57 i.e. Student affairs and services.

Attachment:

[S5.4 Questionnaire-Evaluation of University by the Alumni](#)

[S5.7 Result-Evaluation of University by the Alumni 1435-36](#)

[S5.8 Result-Evaluation of University by the Alumni 1436-37](#)

[S2.20 Result-Evaluation of University by the Alumni 1437-38](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

Stakeholder's satisfaction survey regarding the e-learning resources available at the Department of Civil engineering, a newly introduced survey about the user & facility survey was conducted by the Committee of Laboratory and equipments. Alumni (who recently graduated) satisfaction average ratings were measured on a five-point scale. Hence, it is used as internal benchmark provider.

2. How was the benchmark calculated?

Internal benchmark was calculated as average of student's ratings on a scale of 1 to 5 (1 minimum and 5 maximum rating score) based on results of last year 2015-16. Target benchmark was set following the year 2015-16 on average rating 4.00 and the New target was fixed same as 4.0.

3. Name of the internal benchmark provider.

the Committee of Laboratory and equipments, Department of Civil engineering, KKU

**** Explain:**

The external benchmarking was chosen based on Stakeholder evaluation of Websites, etc. and compare with one of the international institutions and the availability of data as required by the NCAAA. Accordingly, the UIC is chosen as benchmarking partner.

2. How was the benchmark calculated?

This benchmark was calculated based on the similar practice adopted by the benchmarking partner.

3. Name of the external benchmark provider.

CE department at UIC

S9.1 Proportion of teaching staff leaving the institution in the past year for reasons other than age retirement.

KPI Table

KPI:					NCAAA KPI Reference Number: S9.1				
					Institutional KPI Reference Number: _____				
Actual Benchmark		Target Benchmark		Internal Benchmark*		External Benchmark**		New Target Benchmark	
2 out of total 21 faculty		Nil		2 out of total 21 faculty		1 out of total 32 faculty (KFUPM)		Nil	
Analysis (list strengths and recommendations):									
<p><i>An analysis was carried out to found out the proportion of faculty members leaving the department of Civil Engineering and it is reported as 2 out of 21 faculty for the academic year (2014-2015), and it has been remained same 2 out of 21 faculty in (2016-2017). Since the actual benchmark calculated for the academic year is reported as 2 out of 21 faculty. Exploring the reasons for this attrition rate, several issues related to family/personal reasons, health matters, or inability of the faculty member to renew their leave from their university of origin is observed also for pursuing Master and PhD.</i></p> <p>Strengths</p> <ul style="list-style-type: none"> <i>The attrition rate observed was not associated with dissatisfaction or conflicts associated with the quality of work life of the faculty in the College.</i> <p>Recommendations</p> <ul style="list-style-type: none"> <i>It is recommended to continue the efforts to obtain feedback from the teaching staff regarding their job satisfaction in order to rectify their issues and promote sense of ownership in the faculty members.</i> <i>External benchmark is recommended to compare actual benchmarks with similar programs.</i> 									
Sources: Department of Civil Engineering, College of engineering KKU									
* Explain:									
1. Why this internal benchmark provider was chosen?									
<i>Since it is program specific accreditation, the internal benchmark has to be carried out using the past two year's trend data of department of civil engineering as stipulated by the NCAAA. Vice Deanship for Academic Affairs of college of Engineering is responsible to main faculty data-base of the College. Hence, it is chosen as internal benchmark provider.</i>									
2. How was the benchmark calculated?									
<i>Proportion of teaching staff leaving the institution in the past year for reasons other than age retirement.</i>									
3. Name of the internal benchmark provider.									
<ul style="list-style-type: none"> <i>Vice Deanship for Academic Affairs, College of Engineering, KKU</i> 									
** Explain: Not available									
1. Why this external benchmark provider was chosen?									
2. How was the benchmark calculated?									
3. Name of the external benchmark provider.									

S9.2 Proportion of teaching staff participating in professional development activities during the past year.

KPI Table

KPI:					NCAAA KPI Reference Number: S9.2				
					Institutional KPI Reference Number: _____				
Actual Benchmark		Target Benchmark		Internal Benchmark*		External Benchmark**		New Target Benchmark	
19 out of 19 faculty		All		19 out of 19 faculty		31 out of 31 faculty (KFUPM)		All	
Analysis (list strengths and recommendations):									
<p><i>From the data, it is observed that the Percentage of teaching staff participating in Department of civil engineering is reported as 100% and 100% for the academic year 2015-16 and 2016-17 respectively. The internal benchmark has been fixed as 100% by the taking the of last year data of the teaching staff participating in continuous professional development. While measuring actual performance for the academic year 2016-17, it is reported as 100% of the faculty participating in continuous professional development activities and it is equal to the target fixed for the year 2015-16. Based on the current year performance and the internal benchmark, the committee decided to retain the target benchmark as new target benchmark and it is fixed as 100%.</i></p>									
Strengths									
<ul style="list-style-type: none"> <i>Actual Benchmark obtained (100%) are found to be equal to the set target benchmark for this KPI (100% teaching staff participating in continuous professional development activities).</i> <i>The College of Engineering is responding to the needs of the faculty with respect to training and development by exposing the entire faculty to Actual Benchmark activities.</i> <i>Periodical review and evaluation of the Consistency in processes for personal and professional development of faculty and other staff</i> 									
Recommendations									
<p><i>It is recommended to continue the efforts to encourage and support the faculty members to attend continuous professional development sessions to refresh and update their knowledge.</i></p>									
Sources: This KPI was calculated based on the evaluation of faculty and teaching staffs CVs									
Attachment									
S9.2a Faculty/Teaching staff CVs									
* Explain:									
1. Why this internal benchmark provider was chosen?									
<i>Vice Deanship for Academic Development and Quality is responsible to conduct and maintain</i>									

the courses of professional development for the teaching staff. Hence, it is chosen as internal benchmark provider.

2. How was the benchmark calculated?

This benchmark was calculated as percentage of number of teaching staff attended the professional development divided by total number of teaching staff for the specified year.

3. Name of the internal benchmark provider.

Vice Deanship for Academic Development and Quality, College of Engineering, KKU

**** Explain:**

1. Why this external benchmark provider was chosen?

- *One of the best Engineering institution in KSA*

2. How was the benchmark calculated?

Proportion of teaching staff participating in professional development activities

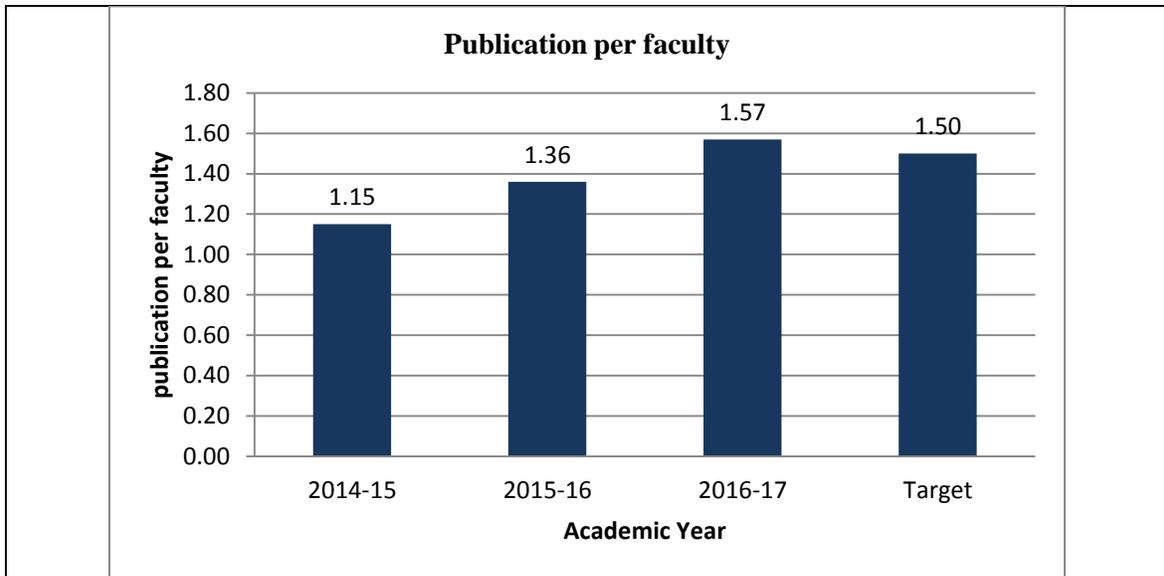
3. Name of the external benchmark provider.

Department of Civil Engineering, KFUPM

S10.1 Number of refereed publications in the previous year per full time equivalent teaching staff. (Publications based on the formula in the Higher Council Bylaw excluding conference presentations)

KPI Table

KPI:				
NCAAA KPI Reference Number: _____				
Institutional KPI Reference Number: _____				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
1.57 publication per faculty (total publication 30 publications by 19 faculty members)	1.50 publication per faculty	1.36 publication per faculty (total publication 26 publications by 19 faculty members)	1.1 publication per faculty (total publication 34 publications by 31 faculty members)	1.75
Analysis (list strengths and recommendations):				
<p><i>The internal benchmark was 1.36; the target benchmark was kept 1.50, in order to encourage the faculty members to publish quality work in refereed journals. There has been a sharp increase in the publications by faculty in 2016-17 compared to previous years. As seen in the below figure the actual benchmark showed slow forward movement from 2014 to 2016 but it became more than compare to 2014- 2015. This could be attributed to a number of factors such as increase in the number of faculty and research grants secured by the faculty, better support for research, awareness of faculty about the available equipment/facilities. Since the target benchmark was achieved in 2016-17, the new target bench mark was raised to 1.75 publications per faculty.</i></p>				
Strengths				
<ul style="list-style-type: none"> • <i>The significant increase in the publication ratio of the faculty members</i> • <i>Notable improvement in the overall publication ratio of department of civil engineering while comparing 2014 and 2016</i> • <i>Highly committed faculty for research and graduation project activities</i> • <i>Encouragement and support is provided to encourage research activity</i> • <i>Sufficient laboratory space and equipment, library and information systems resources are available for academic purpose, however need to be upgraded for research activities</i> 				
Recommendations:				
<ul style="list-style-type: none"> • <i>It is recommended to target publishing in ISI indexed refereed journals</i> • <i>Faculty members have to be seriously involved in research activity.</i> • <i>Follow-up and improvement (not necessarily production) in research productivity may be part of faculty evaluation at the end of the year.</i> • <i>The College has to disseminate the positive outcomes of Faculty Members' Research Performance Evaluation and its impact on their promotional activities</i> 				



Sources: This KPI was calculated based on the evaluation of faculty and teaching staffs CVs Attachment

[S9.2a Faculty/Teaching staff CVs](#)

[S.1.2 Civil Engineering Research Publication Details](#)

*** Explain:**

1. Why this internal benchmark provider was chosen?

Since the research related data of Research committee, Department of Civil Engineering and it maintained by the Vice Deanship for Academic Affairs, both were chosen as internal benchmark provider.

2. How was the benchmark calculated?

The internal benchmark was calculated based on the previous years' data (2015-16). Moreover, by considering the consensus of steering committee meetings, the target benchmark was fixed at 1.75 the value of internal benchmark.

3. Name of the internal benchmark provider.

- *Research committee, Department of Civil Engineering and Vice Deanship for Academic Affairs, College of Engineering*

**** Explain:**

1. Why this external benchmark provider was chosen?

- *One of the best Engineering institution in KSA*

2. How was the benchmark calculated?

Number of refereed publications in the previous year per full time equivalent teaching staff

3. Name of the external benchmark provider.

Department of Civil Engineering, KFUPM

S10.2 Number of citations in refereed journals in the previous year per full time equivalent faculty members.

KPI Table

KPI:		NCAAA KPI Reference Number: S10.2												
		Institutional KPI Reference Number: _____												
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark										
20.58 (citation per faculty (total 391 citations of 19 faculty members))	20.00	17.42 (citation per faculty (total 331 citations of 19 faculty members))	22.4 citation per faculty (total 695 citations of 31 faculty members)	25										
Analysis (list strengths and recommendations):														
<p><i>The actual benchmark value is higher than the target and the internal benchmark. While observing the citation trend of three years (2014 to 2016), the citations of faculty and teaching staff has shown a considerable increased. One things to keep consider that number of citations is dependent on time and quality or impact of research paper, therefore the articles published in 2014-15 have higher number of citations compared to articles published in 2016 or 2017. The department of civil engineering has put forth number of significant initiatives to enhance high quality publications faculty members and also to increase the consistency and stability the faculty members' publications</i></p>														
Strength														
<ul style="list-style-type: none"> <i>The citations are based on research gate</i> <i>It is recommended to the faculty to open account in research gate and update accordingly in order to get higher citation</i> 														
Recommendations:														
<p><i>There is needs to be followed by targeting journals with high impact factor for publication since these are the most likely to help in research citation. At the same time, teaching staff should be encouraged to publish exclusively in peer reviewed journal (ISI journal)</i></p>														
<div style="text-align: center;"> <table border="1"> <caption>Citation per faculty as per research gate</caption> <thead> <tr> <th>Academic Year</th> <th>Citation per faculty</th> </tr> </thead> <tbody> <tr> <td>2014-15</td> <td>13.25</td> </tr> <tr> <td>2015-16</td> <td>17.42</td> </tr> <tr> <td>2016-17</td> <td>20.58</td> </tr> <tr> <td>Target</td> <td>20.00</td> </tr> </tbody> </table> </div>					Academic Year	Citation per faculty	2014-15	13.25	2015-16	17.42	2016-17	20.58	Target	20.00
Academic Year	Citation per faculty													
2014-15	13.25													
2015-16	17.42													
2016-17	20.58													
Target	20.00													

Sources: This KPI was calculated based on statistics available for citation in *research gate*
Attachment

S10.3 Faculty and Teaching staffs registration in Research gate

*** Explain:**

1. Why this internal benchmark provider was chosen?

Since the research related data of department of civil engineering is maintained by research committee and the Vice Deanship Academic Affairs through research gate, both these Vice deanships were chosen as internal benchmark provider.

2. How was the benchmark calculated?

Number of citations in refereed journals in the previous year per full time equivalent faculty members as per the research gate

3. Name of the internal benchmark provider.

Research committee, Department of Civil Engineering and the Vice Deanship Academic Affairs , college of Engineering

**** Explain:**

1. Why this external benchmark provider was chosen?

One of the best Engineering institution in KSA

2. How was the benchmark calculated?

Number of citations in refereed journals in the previous year per full time equivalent faculty members

3. Name of the external benchmark provider.

Department of Civil Engineering, KFUPM

S10.3 Proportion of full time member of teaching staff with at least one refereed publication during the previous year.

KPI Table

KPI:				
NCAAA KPI Reference Number: S10.3				
Institutional KPI Reference Number: _____				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
10:19	19:19	8:19	Not Available	19:19
Analysis (list strengths and recommendations):				
<p><i>The actual KPI is better than internal benchmark (previous year) and less than the set target. Moreover, this KPI shows improvement from one year to the next over the last year. Despite the steady growing trend for the previous year, Department of Civil Engineering consistent with university's objectives and implantation rules for faculty evaluation and promotion. Since the target benchmark was not achieved in 2015-16, the new target bench mark was kept same 19:19.</i></p> <p>Strengths:</p> <p><i>There is a steady increase in the number of teaching staff</i></p> <p>Recommendation</p> <ul style="list-style-type: none"> <i>Forming research groups or research group project that can collectively publish as co-authors will have a direct effect on improving the KPI.</i> <i>More emphasis should be laid on the importance of publications during appraisal of faculty and teaching staff performance (FPP), as well as nominations for recognition and rewards.</i> <i>Encouragement and support is provided to encourage research activity</i> <i>Sufficient budget and facilities to conduct of research should be granted</i> <i>The involvement of teaching staff and student in research should be visible through the publication of the research works.</i> 				
Sources: This KPI was calculated based on the evaluation of faculty and teaching staffs CVs				
Attachment				
S9.2a Faculty/Teaching staff CVs				
* Explain:				
1. Why this internal benchmark provider was chosen?				
<i>Since the research related data maintained by Research Committee, Department of Civil Engineering and Vice Deanship for Academic Affairs therefore both were chosen as internal benchmark provider.</i>				
2. How was the benchmark calculated?				
<i>Proportion of full time member of teaching staff with at least one refereed publication</i>				
3. Name of the internal benchmark provider.				
<i>Research committee, Department of Civil Engineering and Vice Deanship for Academic Affairs, College of Engineering</i>				
** Explain: (Not Available)				
1. Why this external benchmark provider was chosen?				
2. How was the benchmark calculated?				
3. Name of the external benchmark provider.				

S10.4 Number of papers or reports presented at academic conferences during the past year per full time equivalent faculty members.

KPI Table

KPI:				
NCAAA KPI Reference Number: S 10.4 Institutional KPI Reference Number: _____				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
6/19	5/19	3/19	10	7/19
Analysis (list strengths and recommendations):				
<p><i>The actual benchmark value achieved the target. Based on the previous years' data and the agreement department steering committee meetings, the target benchmark was set high as internal benchmark. Although the absolute number of conference presentations slightly increased, the average number per faculty member did not increase due to the busy in other academic activities. By considering the number of faculty and teaching staff, three years trend in the number of papers presented at conferences and also to maintain the ratio, the new target was set 7/19.</i></p> <p>Strength:</p> <ul style="list-style-type: none"> <i>Regardless of annual faculty transition (joining and resigning), the ratio related to number of papers presented at conferences per fulltime teaching staff for the period of three years is well maintained.</i> <p>Recommendations:</p> <ul style="list-style-type: none"> <i>Encourage faculty participation in conferences which will improve the research profile of the Department, college as well as the university in terms of professional ranking.</i> <i>Department should support the faculty by research funding and by providing relaxation in teaching load</i> 				
Sources: This KPI was calculated based on the evaluation of faculty and teaching staffs CVs				
Attachment S9.2a Faculty/Teaching staff CVs				
* Explain:				
1. Why this internal benchmark provider was chosen? <i>Since the research related data maintained by Research Committee, Department of Civil Engineering and Vice Deanship for Academic Affairs therefore both were chosen as internal benchmark provider.</i>				
2. How was the benchmark calculated? <i>Number of papers or reports presented at academic conferences during the past year per faculty members</i>				
3. Name of the internal benchmark provider. <i>Research committee, Department of Civil Engineering and Vice Deanship for Academic Affairs, College of Engineering</i>				
** Explain:				
1. Why this external benchmark provider was chosen? <ul style="list-style-type: none"><i>One of the best Engineering institution in KSA</i>				
2. How was the benchmark calculated? <i>Proportion of full time member of teaching staff with at least one refereed publication</i>				
3. Name of the external benchmark provider. <i>Department of Civil Engineering, KFUPM</i>				

S11.1 Proportion of full time teaching and other staff actively engaged in community service activities.

KPI Table

KPI:		NCAAA KPI Reference Number: S 11.1		
		Institutional KPI Reference Number: _____		
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
100%	100%	100%	100% (KFUPM)	100%
Analysis (list strengths and recommendations):				
<ul style="list-style-type: none"> • <i>Promotion norms at the department are based on the quality contributions of the individual faculty members in relation to teaching, research and community services.</i> • <i>The civil engineering club of KKU offers educational services to the surrounding community and the nearby region.</i> • <i>More Involvement of the local industries and employers to participate in advisory committees</i> • <i>There requires a specific strategic plan for improving the community service activities at the department of civil engineering</i> 				
Sources: This KPI is based on the information provided by the community services committee at the department level.				
* Explain:				
1. Why this internal benchmark provider was chosen? <i>Since the research related data maintained by Community Service Committee, Department of Civil Engineering and Vice Deanship for Academic Affairs therefore both were chosen as internal benchmark provider.</i>				
2. How was the benchmark calculated? <i>Number of papers or reports presented at academic conferences during the past year per faculty members</i>				
3. Name of the internal benchmark provider. <i>Community Service Committee, Department of Civil Engineering and Vice Deanship for Academic Affairs, College of Engineering</i>				
** Explain:				
2. Why this external benchmark provider was chosen? <ul style="list-style-type: none"> • <i>One of the best Engineering institution in KSA</i> 				
2. How was the benchmark calculated? <i>Proportion of full time teaching and other staff actively engaged in community service activities</i>				
4. Name of the external benchmark provider. <i>Department of Civil Engineering, KFUPM</i>				

Whole Program Analysis of KPIs and Benchmarks: (list strengths and recommendations)

Strengths

- *Performed student assessment through grading of students tests, assignments and projects report by using rubrics to ensure that the planned range of domains of student learning outcomes are addressed.*
- *Staff members are making regular assessment for students and helping those students who are not academically good.*
- *Staff members receive students in their offices during office hours to answer their questions and queries about courses.*
- *Scheduling of training for faculty related to students' assessment are done under the guidance of deanship of quality KKU.*
- *Appropriate procedures are adopted to deal with situations where standards of student achievement are inadequate or inconsistently assessed.*
- *Performance and results of assessments of students are uploaded on university LMS portal*

Recommendations for Improvement

- *Continuous monitoring of student assessments using rubrics are performed to ensure that the planned range of domains of student learning outcomes is taken fully in account.*
- *Effective procedures need to be established to ensure that work submitted by students is actually done by the students concerned.*
- *Well-planned training for faculty related to student assessment*
- *Regular online monitoring of performance and results of assessments of students*
- *Following up students for attending all classes and increasing their awareness within classes.*