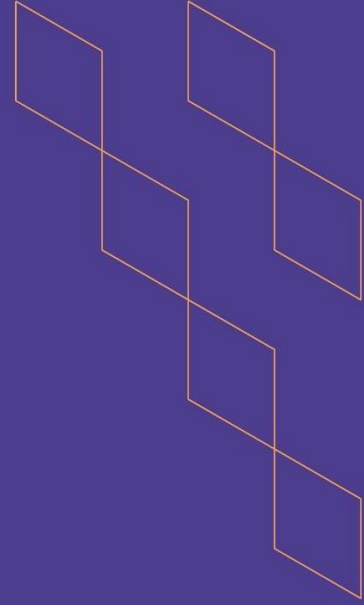




Program Key Performance Indicators — (Postgraduate)





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Introduction

Performance indicators are essential tools for assessing the quality of Academic Programs and monitoring their performance. They contribute to continuous development processes and decision-making support.

The National Center for Academic Accreditation and Evaluation has identified 13 key performance indicators at the program level. All of which are in line with the evolving program accreditation standards for version 2022. These indicators are the minimum to be periodically measured, and the academic program can use additional performance indicators if it believes they are necessary to ensure the program's quality.

It is expected that the academic program measures the key performance indicators by benchmarking using the appropriate tools, such as (Surveys, Statistical data, etc.) according to the nature and objective of each indicator, as well as determining the following levels for each indicator:

- Actual performance
- Targeted performance level
- Internal reference (Internal benchmark)
- External reference (External benchmark)
- New target performance level

A report describing and analyzing the results of each indicator (including performance changes and comparisons according to sites and gender) is expected with precise and objective identification of strengths and aspects that need improvement



Program Key Performance Indicators (451-452)

Standard	Code	Key Performance Indicators	Target Benchmark	Actual Value	Internal Benchmark	External Benchmark (Name the Program)	New Target Benchmark
-2- TEACHING AND LEARNING	KPI-PG-1	Students' Evaluation of Quality of Learning Experience in the program	4	4.39	3.75	4	4
	KPI-PG-2	Students' evaluation of the quality of the courses	4	4.28	3.75	4	4
	KPI-PG-3	Students' evaluation of the quality of academic supervision	4	4.34	3.75	4	4
	KPI-PG-4	Average time for students' graduation	4	4	4	4	4
	KPI-PG-5	Rate of students dropping out of the program	10.00%	0.00%	10.00%	10.00%	10%
	KPI-PG-6	Employers' evaluation of the program graduates' competency	4	NA	4	4	4
-3- STUDENT S	KPI-PG-7	Students' satisfaction with services provided	4	3.95	4	4	4





Standard	Code	Key Performance Indicators	Target Benchmark	Actual Value	Internal Benchmark	External Benchmark	New Target Benchmark
-4- FACULTY MEMBER S	KPI-PG-8	Ratio of students to faculty members	10: 1	2.33: 1	10: 1	10: 1	10 Ratio 1
-6- RESEARCH HAND PROJECT S	KPI-PG-9	Percentage of publications of faculty members	70.00%	83.30%	70.00%	70.00%	70%
	KPI-PG-10	Rate of published research per faculty member	2	7.33	2	2	2.5
	KPI-PG-11	Citations rate in referred journals per faculty member	2	9.63	2	2	2.5
	KPI-PG-12	Percentage of students' publication a. published their research in referred journals. b. presented papers at conferences.	10.00%	0.00%	10.00%	10.00%	10%
			10.00%	0.00%	10.00%	10.00%	10%
	KPI-PG-13	Number of patents, innovative products, and awards of excellence a. Patents and innovative products b. National and international excellence	1	0	1	1	1
1			0	1	1	1	

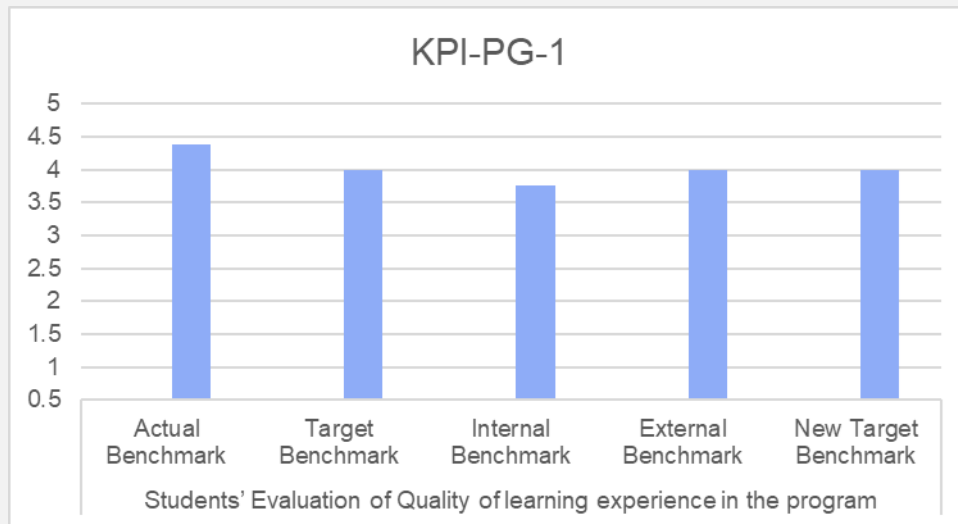




KPI-G-1 Students' Evaluation of Quality of Learning Experience in the program				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.39	4	3.75	4	4

Analysis (list strengths and recommendations):

Actual values were more than target values, internal, and external benchmarks. Therefore, the target has been achieved. This graph also shows that there is continuously improving the quality of the learning experience.



Strength

- *The program has a good level of teaching and learning.*
- *The program has good quality educational services provided to students of the program, student counselling and support, good infrastructure*
- *The target benchmark is high*

Recommendations:

- *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.*
- *Be sure that student Evaluation of Learning and Teaching Questionnaire should be comprised of four factors: assessment and feedback; course organization and presentation; student self-evaluation; and students' level of engagement.*
- *Be sure that teaching evaluation must be conducted based on two related key assumptions. Primarily, teachers are seen as having an influence on student learning. The second one has to do with the students' capacity to provide teachers with feedback to be used for teaching improvement.*

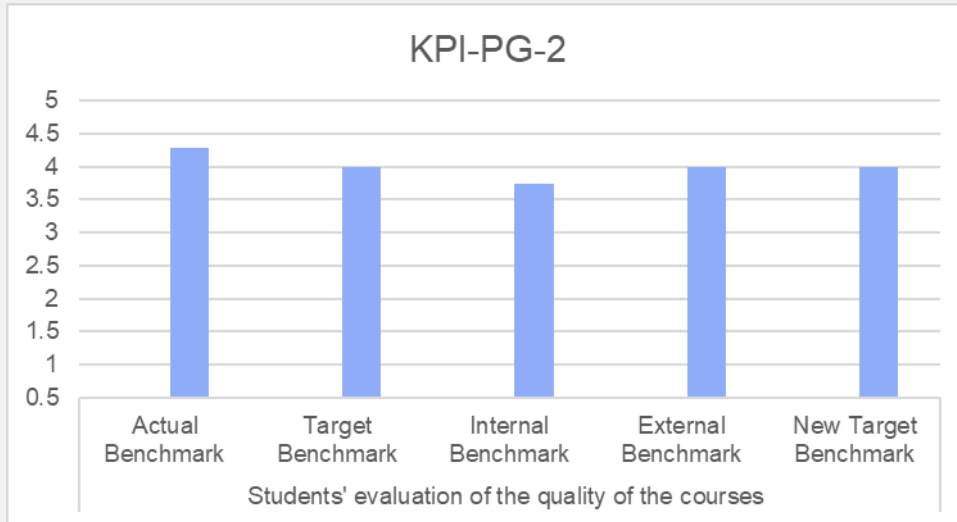




KPI-PG-02 Students' evaluation of the quality of the courses				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.28	4	3.75	4	4

Analysis (list strengths and recommendations):

Actual values were higher than the target values, internal benchmarks, and the external benchmarks. Observing the KPI-2 trend showed the results have increased slightly and the target has been achieved. This graph also shows that there is continuously improving the quality of the students' evaluation of the courses.



Strength

- *There is an improvement in the evaluation of the quality of course by students.*
- *The target benchmark is high*
- *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, considering courses that have problems in students' ratings.*

Recommendations:

- *To improve the quality of courses*
- *To have a meeting with the students and discuss priorities of improvements of the course*
- *To invite the faculty members responsible for courses with low evaluation by the students and see how to improve the quality of their course.*
- *Continuing 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 towards the implications and importance 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 improve.*

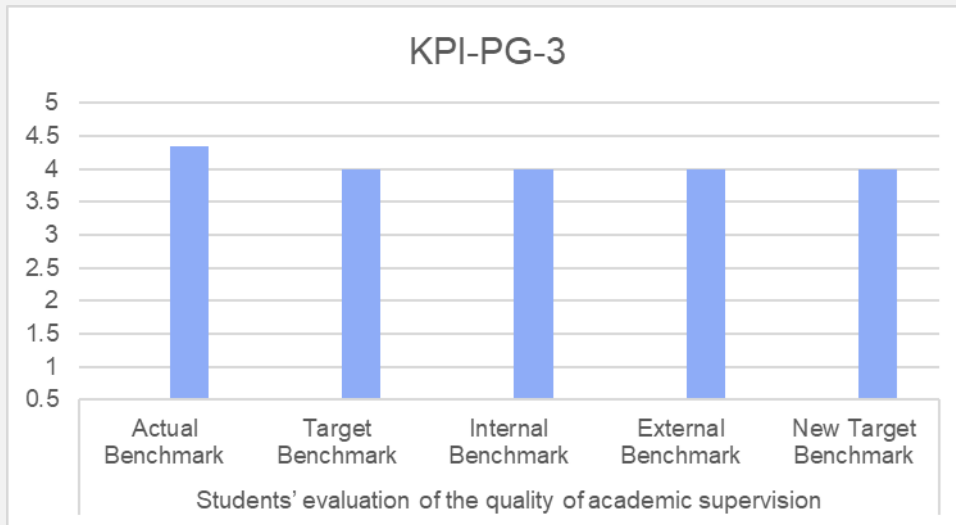


KPI-PG-03 Students' evaluation of the quality of academic supervision

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4.34	4	3.75	-	4

Analysis (list strengths and recommendations):

Actual values were higher than target values, internal benchmarks, and the external benchmarks. Observing the KPI-3 trend showed, the evaluation of the quality of academic supervision has increased slightly and the target has been reached. This value reflects that the students and faculty members are making big effort in the supervision of the master students. The students meet regularly their academic advisors and the faculty members during office hours.



Strength

- *The students are totally satisfied with the quality of the scientific supervision and quality of learning.*

Recommendations:

- *More hard work is required by the students and faculty members also.*
- *More emphasis along with assignments, quizzes and activities should be given to weak students.*

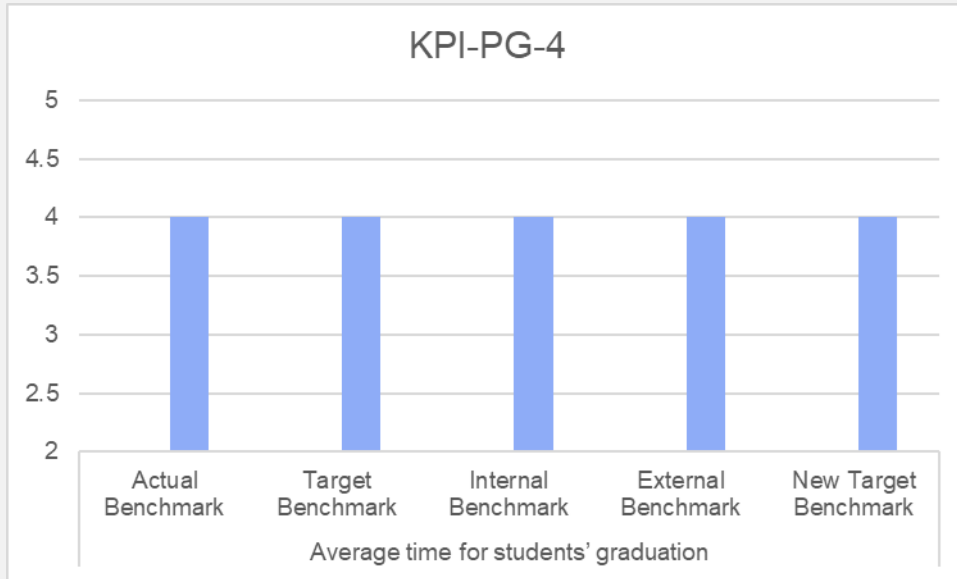


KPI-PG-04 Average time for students' graduation

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
4	4	4	-	4

Analysis (list strengths and recommendations):

Actual values were same (4 semester for graduation) as the target values, internal and external benchmark. Observing the KPI-4 trend showed that the target has been achieved. This value reflects that the faculty members are making big effort by giving more focus to the students while teaching in the lecture to increase the chances so that students can graduate at given span of time. Experienced faculty were assigned to deal with and motivate the first-year students. The students meet regularly their supervisors during the hours of supervision and during the office hours.



Strength

- *Departments have well qualified experienced teachers which engage and motivate them.*
- *Departments have world class infrastructure, laboratories, research and innovation cell which help them to foster their ideas into reality.*
- *The students are graduating at a minimum of time.*

Recommendations:

- *Engage students in laboratories.*
- *Motivate students to attend the seminar and regularly plan industrial visits.*

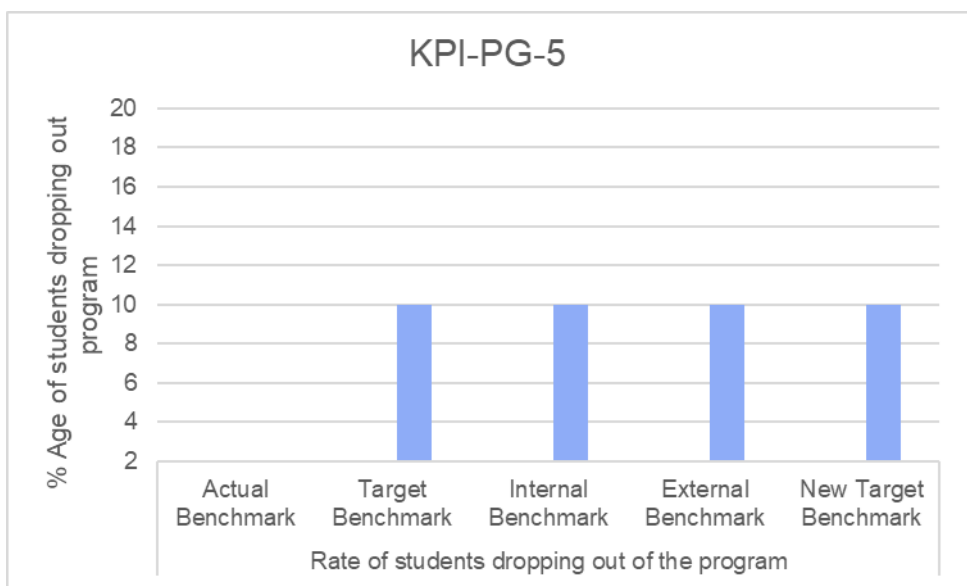


KPI-PG-05 Rate of students dropping out of the program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
0%	10%	10%	-	10%

Analysis (list strengths and recommendations):

Actual values were higher than target values and internal benchmarks and external benchmarks. Regarding the KPI-5 trend showed that the students are not dropping the courses after registration. In addition, this value reflects that the faculty members are making big effort in the supervision of the students, motivating them to appear for lectures..



Strength

- *Departments have well-qualified experienced teachers which engage and motivate them.*
- *Departments have world class infrastructure, laboratories, research and innovation cell which helps them to foster their ideas into reality.*

Recommendations:

- *Engage students in laboratories motivate them to solve more complex numerical problems to increase analytical approach.*
- *Motivate students to attend seminars and conferences.*



KPI-PG-06 Employers' evaluation of the program graduates' competency				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
NA	4	4	4	4
<p>Analysis (list strengths and recommendations):</p> <p><i>The program started in 1444 and post graduate students are still required to complete their degree. Therefore, KPI-PG-06 is not applicable for evaluation in this semester.</i></p>				



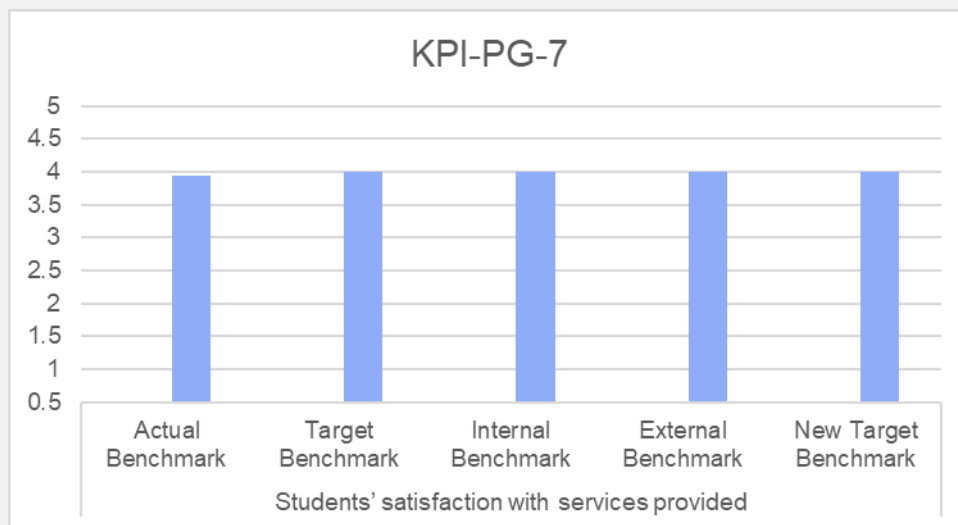


KPI-PG-07 Students' satisfaction with services provided

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.95	4	4	-	4

Analysis (list strengths and recommendations):

Actual values were lower than target values, the internal benchmarks, and the external benchmarks. Observing the KPI-7 trend showed that the results have increased slightly, however the target has not yet been reached. This value reflects that the faculty members and university are making big effort to satisfy with the services of the master students.



Strength

- *The program graduates' proficiency is highly appreciated by the employers.*
- *The knowledge, skills and values acquired by students are at a high level*
- *Surveying the opinions of employers to assess the efficiency of the program graduates periodically (annually).*
- *A graduate from industrial engineering program is motivated to work, develop and self-learn continuously in his field of work.*
- *Satisfied for using world class smart rooms, infrastructures etc.*

Recommendations:

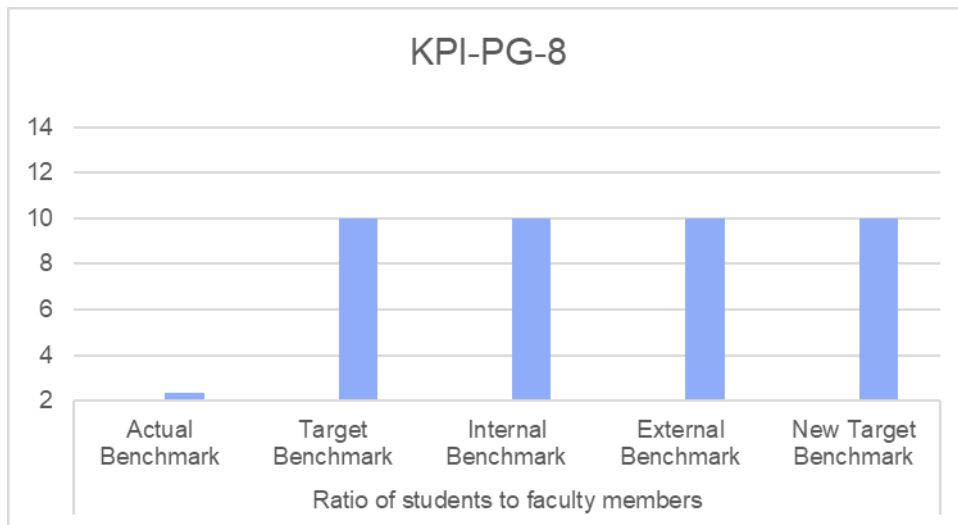
- *Keep in touch with market needs to provide highly qualified graduates*
- *Continuous update of alumni databases.*
- *Develop a variety of means to communicate with graduates and employers.*

KPI-PG-08 Ratio of students to faculty members

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark* * -	New Target Benchmark
2.33:1	10:1	10:1	10:1	10:1

Analysis (list strengths and recommendations):

The actual indicator for ratio of students to faculty members is more than the target benchmark, and the external benchmark. This ratio is improving as shown by the graph. The university is recruiting faculty members throughout the world to support the department and reduce the student's faculty ratio.



Strength

- *With respect to the number of students the quality of teaching and supervising is in a high level.*
- *The actual situation increases student-teacher interaction and allows teachers to respond to students' needs.*
- *Adequate Capacity of Classroom with sufficient facilities*

Recommendations:

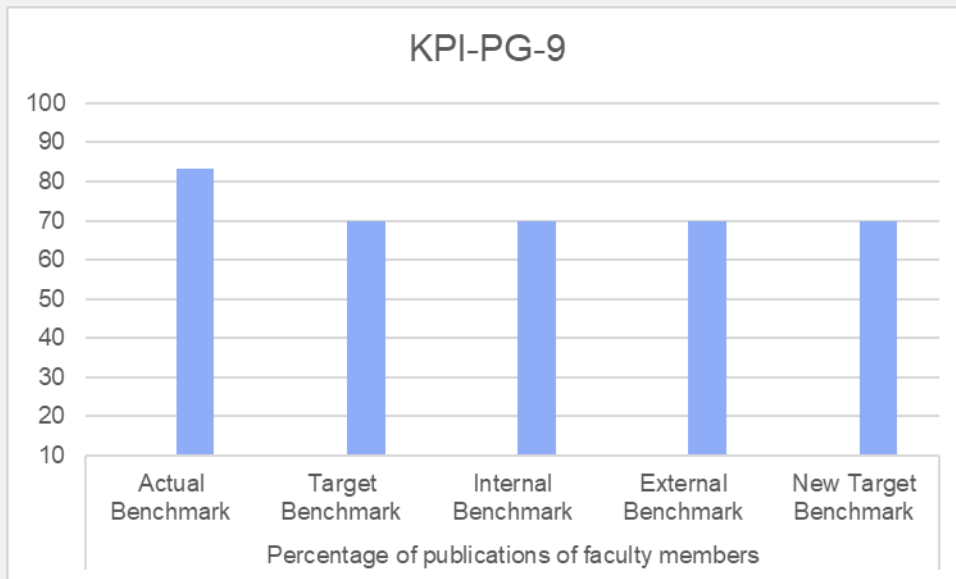
- *It is recommended to decrease the ratio to 10 students per faculty member*



KPI-PG-09 Percentage of publications of faculty members				
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
83.30%	70%	70.00%	70.00%	70%

Analysis (list strengths and recommendations):

The actual value is more than the target benchmark, the external benchmark and the internal benchmark. By observing the KPI-9 trend showed there is an increasing participation of faculty members in terms of research publication per year. The percentage of publications were calculated at the end of the academic year. The university is also providing grants to improve and motivate the faculty members to publish more papers in ISI Journals.



Strength

- *All faculty members publish at least 2 papers per year*

Recommendations:

- *The program should find a better procedure to encourage the participation in conferences*
- *Papers published should focus more on recent trends in industrial engineering with participation from students also.*

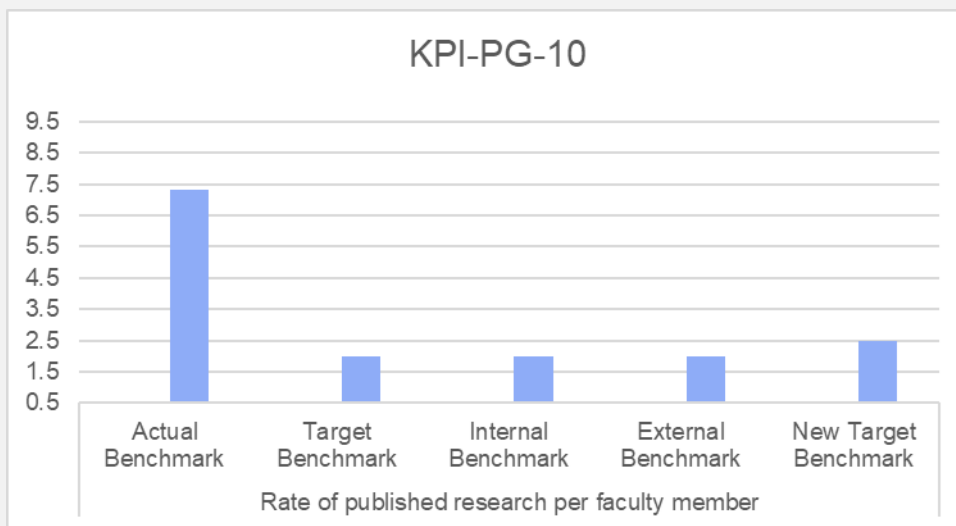


KPI-PG-10 Rate of published research per faculty member

	Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
ISI Journal papers	7.33	2	2	2	2.5

Analysis (list strengths and recommendations):

The actual value is higher than the target, and the internal and external benchmark. By observing the KPI-10 trend showed that there is an increase in the average number of ISI publications per faculty member. The publication rates were calculated at the end of the academic year. This is due to the good support provided by the deanship of scientific research. In fact, all faculty members are involved in different types of funded projects in which international cooperation's has been created.



Strength

- *All faculty members are publishing high number of ISI journals.*
- *All faculty members are involved in different types of funded projects in which international cooperation has been created.*

Recommendations:

- *The program should find a better procedure to encourage the participation in conferences*
- *Papers published should focus more on recent trends in industrial engineering.*
- *International cooperation should be officially signed at the department/college levels not only through research projects as external Co-Principal Investigator or consultant.*

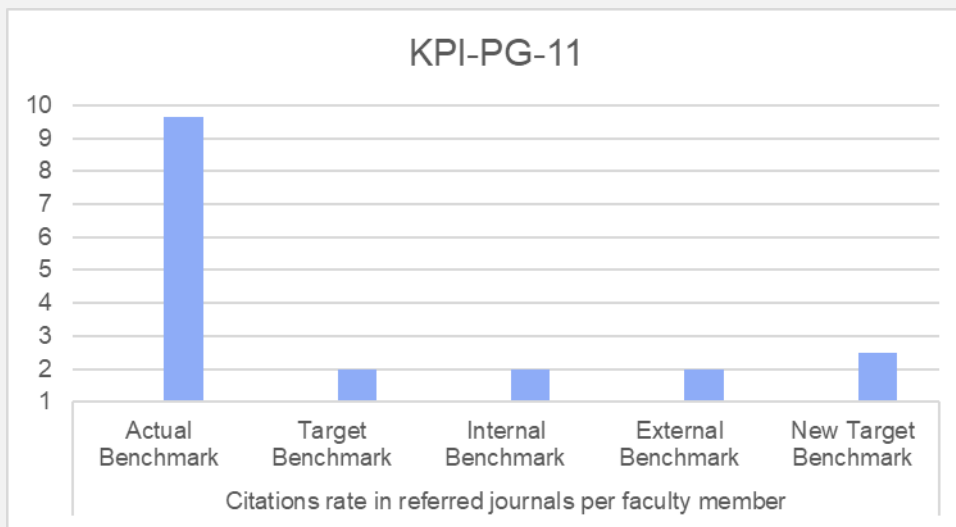


KPI-PG-11 Citations rate in referred journals per faculty member

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark*	New Target Benchmark
9.63	2	2	2	2.5

Analysis (list strengths and recommendations):

The actual value is higher than the target and the internal and external benchmark. By observing the KPI-11 trend, there is an increase in the citation rate publications for each faculty member. The citation rates were calculated at the end of the academic year. Therefore, it may increase after end of the year. In fact, all faculty members are involved in different types of funded projects and produce with their research team's high number of papers and thus number of citations increases automatically.



Strength

- *All faculty members are publishing high number of ISI journals.*
- *All faculty members are involved in different types of funded projects in which international cooperation has been created.*

Recommendations:

- *Papers published should focus more on recent trends in industrial engineering.*
- *International cooperation should be officially signed at the department/college levels not only through research projects as external Co-Principal Investigator or consultant.*
- *Faculty members should focus on review papers to increase citations and publish more in Q1, Q2 journals.*



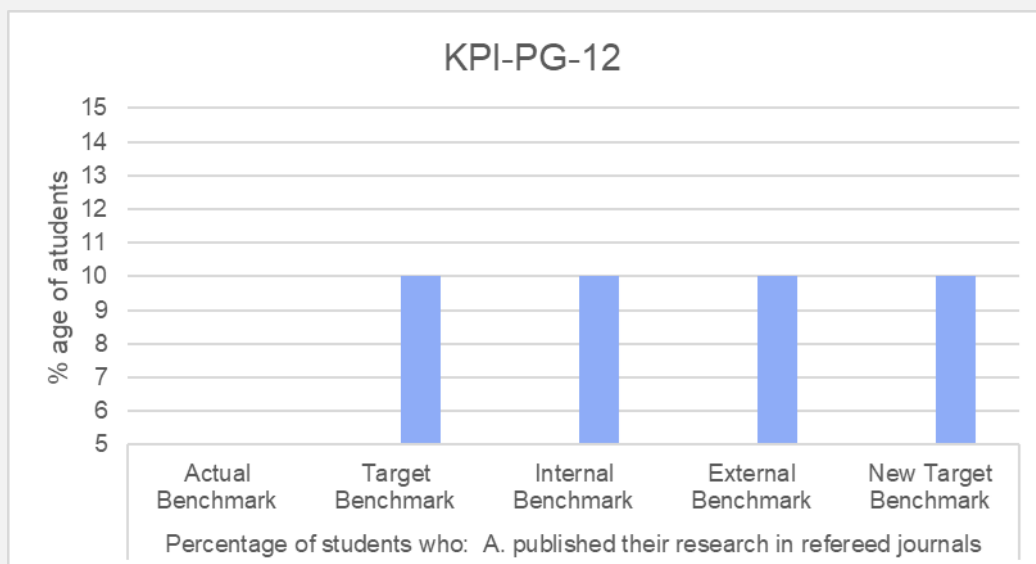


KPI-PG-12 Percentage of students' publication

	Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
a. published their research in referred journals.	0.00%	10.00%	10.00%	10.00%	10.00%
b. presented papers at conferences.	0.00%	10.00%	10.00%	10.00%	10.00%

Analysis (list strengths and recommendations):

The actual value is lower than the target and the internal and external benchmark. By observing the KPI-12 trend, the participants from the students were unsatisfactory and target has not been achieved. The faculty members are continuously motivation the students to publish research in reputed journals or in the conferences.



Strength

- *All faculty members are publishing high number of ISI journals.*
- *All faculty members are required to motivate students as they are involved in different types of funded projects in which international cooperation has been created.*

Recommendations:

- *Papers published should focus more on recent trends in industrial engineering.*
- *International cooperation should be officially signed at the department/college levels not only through research projects as external Co-Principal Investigator or consultant.*
- *Faculty members should focus on review papers to increase citations and publish more in Q1, Q2 journals.*



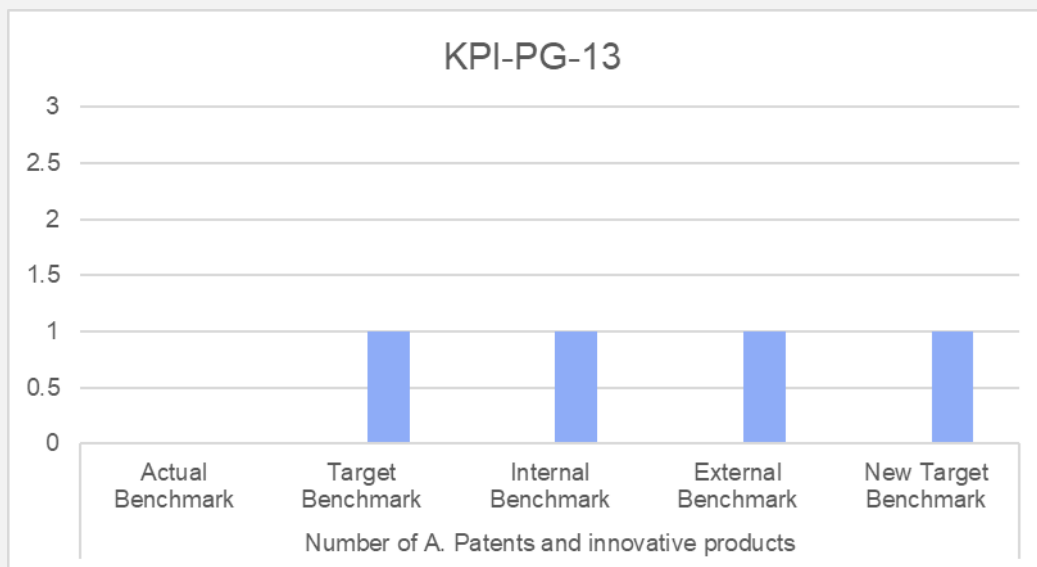


KPI-PG-13 Number of patents, innovative products, and awards of excellence

	Actual Benchmark	Target Benchmark	Internal Benchmark *	External Benchmark **	New Target Benchmark
a. Patents and innovative products	0	1	1	-	
b. National and international excellence	0	1	1	1	1

Analysis (list strengths and recommendations):

The actual value is lower than the target and the internal and external benchmark. By observing the KPI-13 trend, the participants from the students were unsatisfactory and target has not been achieved. The faculty members are continuously motivation the students to publish and write a patent and participate in national or international activities.



Strength

- *All faculty members are publishing high number of ISI journals, therefore they need to motivate students for writing and publishing a patent.*

Recommendations:

- *Papers published should focus more on recent trends in industrial engineering and tried to file the patents for each project or research activities.*



Specification Approval

COUNCIL /COMMITTEE	Academic Development and Quality Committee and Department Council Meeting
REFERENCE NO.	QADC-MScEM-1-461
DATE	Sept 3, 2024

