

Kingdom of Saudi Arabia
Ministry of Education
Jouf University
Faculty of Science
Physics Department

رؤية
VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

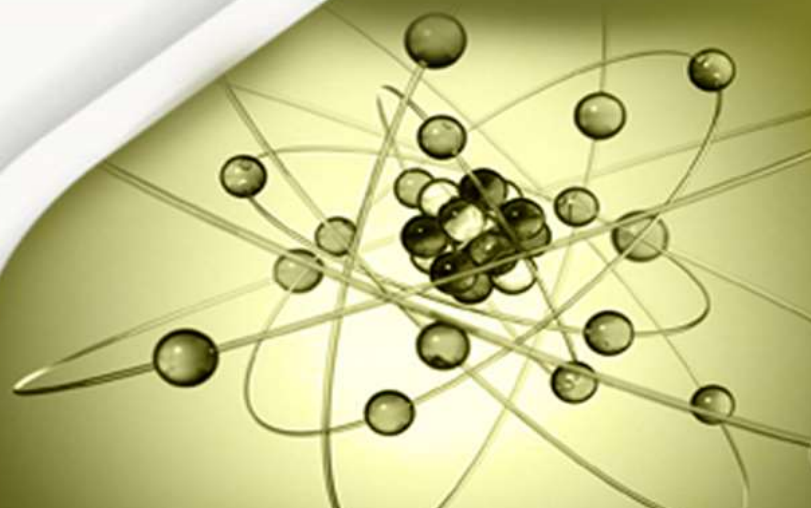


كلية العلوم
College of Science
جامعة الجوف
Jouf University

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المملكة العربية السعودية
وزارة التعليم
جامعة الجوف
كلية العلوم
قسم الفيزياء

Key Performance Indicators Report
Bachelor of Physics
College of Science - Jouf University
2020/2021



Key Performance Indicators Data for Physics Program, College of Science in main campus, Year 2020/2021.

Code	Key Performance Indicators	Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
		Male	Female	Overall			Northern Border University (NBU)	Prince Sattam Bin Abdulaziz PSAU	
KPI-P- 01	<i>Percentage of achieved indicators of the program operational plan objectives.</i>	62.5%			80 %	57 %	61.5 %	87.33%	80%
KPI-P- 02	<i>Students' Evaluation of quality of learning experience in the program</i>	4.33	4.2	4.3	4	3.54	3.56	4.33	4.5
KPI- P- 03	<i>Students' evaluation of the quality of the courses.</i>	4.38	4.28	4.33	4.5	4.2	3.44	4.21	4.5
KPI- P - 04	<i>Completion rate.</i>	10 %	30 %	23 %	80%	7.5%	23 %	22.5 %	80%
KPI- P - 05	<i>First-year students retention rate</i>	74.1	74.1 %	74.1 %	80%	72.5%	100 %	ND	80 %
KPI- P - 06	<i>Students' performance in the professional and/or national examinations.</i>	12%	4%	8%	25%	ND	7 %	unviable	25 %
KPI- P - 07	<i>Graduates' employability and enrolment in postgraduate programs.</i>	50 %	22%	27.3%	50%	15.8%	7.4 %	unviable	50%
		33.3%	0%	16.65 %	10%	5.5%			25%
KPI- P - 08	<i>Average number of students in the class.</i>	12	16	14	25	11	11	20	25
KPI- P - 09	<i>Employers' evaluation of the program graduates proficiency.</i>	4	4	4	4	3.94	NA	unviable	4.2
KPI- P - 10	<i>Students' satisfaction with the offered services.</i>	3.9	4.02	3.88	4	3.53	3.85	4.4	4
KPI- P - 11	<i>Ratio of students to teaching staff.</i>	3:1	14:1	7:1	20:1	8:1	8:1	9:1	20:1

Code	Key Performance Indicators	Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
		Male	Female	Overall I			Northern Border University	Prince Sattam Bin Abdulaziz PSAU	
KPI- P - 12	Percentage of teaching staff distribution.	M:74.2% F:25.8 % Assist. P: 71 % Assoc. P: 25.8 % Prof.: 3.2 %			Assist. P:48 % Assoc. P:40 % Prof.: 12 %	M. 65.63 % F.34.37 % Assist. P:67.56 % Assoc. P: 29.5 % Prof.: 2.94 %	M. 61 % F. 39 % Assist. P:55.5% Assoc. P: 16 % Prof.: 11.1 Lecturer: 5% Demonstrator: 11.1	M. 63.6 % F. 36.4% Assist. P:33.3% Assoc. P: 24.2 % Prof.: 12.1 Lecturer: 12.1% Demonstrator: 18.2%	Assist. P:48 % Assoc. P:40 % Prof.: 12 %
KPI- P - 13	Proportion of teaching staff leaving the program.	4.7 %	18.2 %	11.5 %	6%	14.5%	10 %	6%	6 %
KPI- P - 14	Percentage of publications of faculty members.	100 %	66.6 %	90 %	70%	69.7%	66.6 %	78.3%	100%
KPI- P - 15	Rate of published research per faculty member.	4.19:1	1.3:1	2.9:1	2:1	1.2:1	1.5:1	4.22:1	3:1
KPI- P - 16	Citations rate in refereed journals per faculty member.	44.7:1	27:1	38.8:1	30:1	23.6:1	20:1	GS: 73.4 SC: 55.7	40:1
KPI- P - 17	Satisfaction of beneficiaries with the learning resources.	4.5	3.9	4.04	4.2	4.1	3.8	4	4.2
KPI-AP-1	Number of research groups in the program	2		2	1	2	—	—	1
KPI-AP-2	The number of supported research projects obtained by the program per year	14	4	18	10	7	—	—	20
KPI-AP-3	Percentage of students participating in extracurricular activities	51.5%	53%	52.6 %	45%	43.4%	—	—	60%
KPI-AP-4	Employers' satisfaction with the program's target, vision and mission	4.71		4.71	4	3.8	—	—	4.2
KPI-AP-5	Percentage of student graduation projects related to the surrounding community	33.3 %	50 %	40 %	25 %	22.2 %	—	—	45 %

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Standard 1: Mission and Goals

KPI-P-01: Percentage of achieved indicators of the program operational plan objectives.

NCAAA KPI Reference Number: KPI-I- 01: Percentage of achieved indicators of the program operational plan objectives

Actual Benchmark	Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
			1- NBU	2- PSAU	
62.5	80%	57 %	61.5%	87.33%	80%

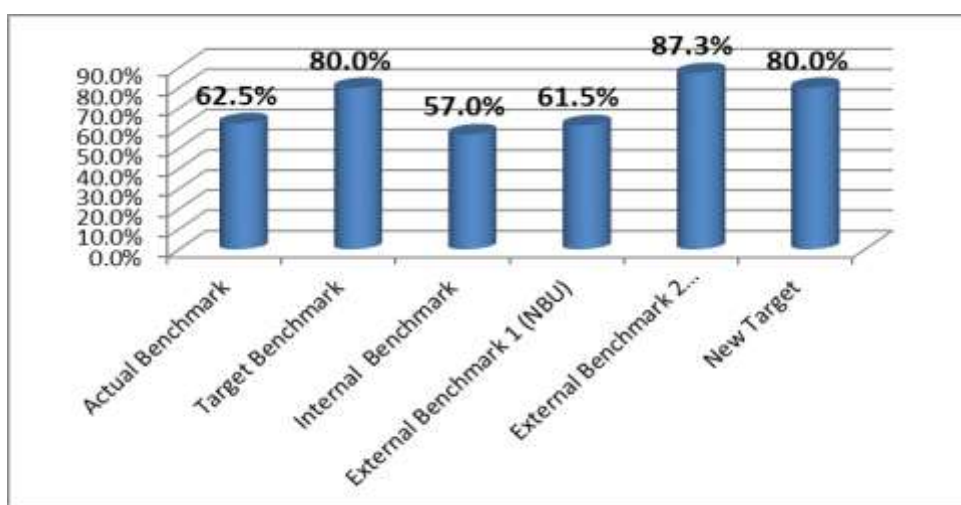


Figure 1: Percentage of achieved indicators of the physics program operational plan objectives

Analysis

The results indicate that the actual performance of the indicator of the program operational plan objectives reached (62.5 %), the target not achieve (80%). The external benchmark for NBU 61.5%, lower than the actual value while the University of PSAU (87.33 %) still higher. Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator is (80%).

Strength

It is clear from the value of the actual performance indicator of the Percentage of achieved indicators of the physics program operational plan objectives in the last year has been increased and exceed the internal Benchmark value.

Recommendations at the level of the program:

- Follow up all aspects of operational plan.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

Percentage of performance indicators of the operational plan objectives of the program that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year.

3. Name of the internal benchmark provider.

The KPI will be provided by the Committee of the operational Plan in the physics program in.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

Percentage of performance indicators of the operational plan objectives of the program that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

Standard 2: Teaching and Learning

KPI-P-02: Students' evaluation of quality of learning experience in the program

NCAAA KPI Reference Number: KPI-P- 02: Students' evaluation of quality of learning experience in the program

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	4	3.54	3.56	4.33	4.5
4.33	4.2	4.3					

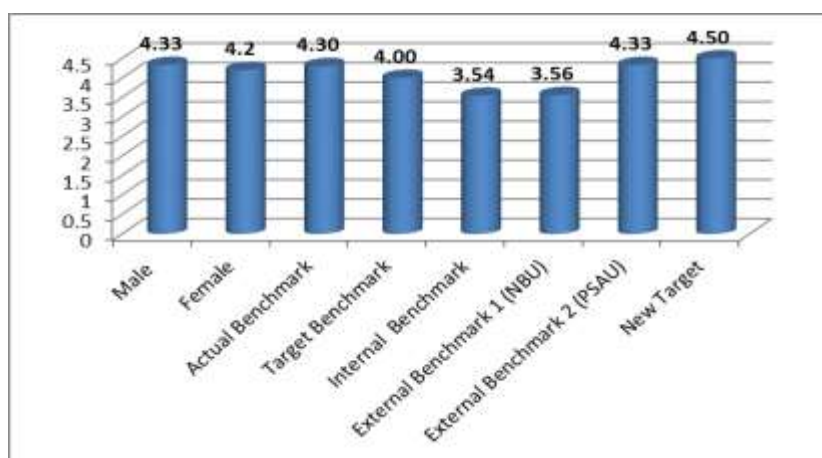


Figure 2: The Students' evaluation of quality of learning experience in the Physics program

Analysis

NCAAA has been developed This KPI to capture final year student's opinion about the quality of learning experiences of the students given by the program. It is clear from the results that the targeted value (4) has been achieved for male and female students. as It is shown from the results that the actual benchmark value (4.3) is considerably higher than the internal benchmark (3.54), the external benchmark by Northern Border and equal to the value of Prince Sattam University (3.56, 4.33) and higher than the target (4). Keeping in view the actual, internal, and external benchmarks, and the ambitions of the program, the new target benchmark is reset at 4.5.

Strength

- The Target benchmark has been achieved for both male and female section and also for the program overall
- Relevant surveys are conducted regularly which allows for consistent evaluation of the overall learning experience from final year students' perspective.

Recommendations at the level of the program:

- For **Male and Female students**, the target has been achieved. Thus, Students performed well with quality of learning experience in the program.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The level of internal reference performance was calculated through the students' average assessment of the quality of learning experience provided by the academic program for the past year on a five-point scale.

3. Name of the internal benchmark provider.

Committee of the operational Plan in the physics program in.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

Average of overall rating of final year students for the quality of learning experience in the program on a five-point scale in an annual survey

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-03 Students' evaluation of the quality of the courses

NCAAA KPI Reference Number: KPI-P- 03: Students' evaluation of the quality of the courses

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	4.5	4.2	3.44	4.21	4.5
4.38	4.28	4.33					

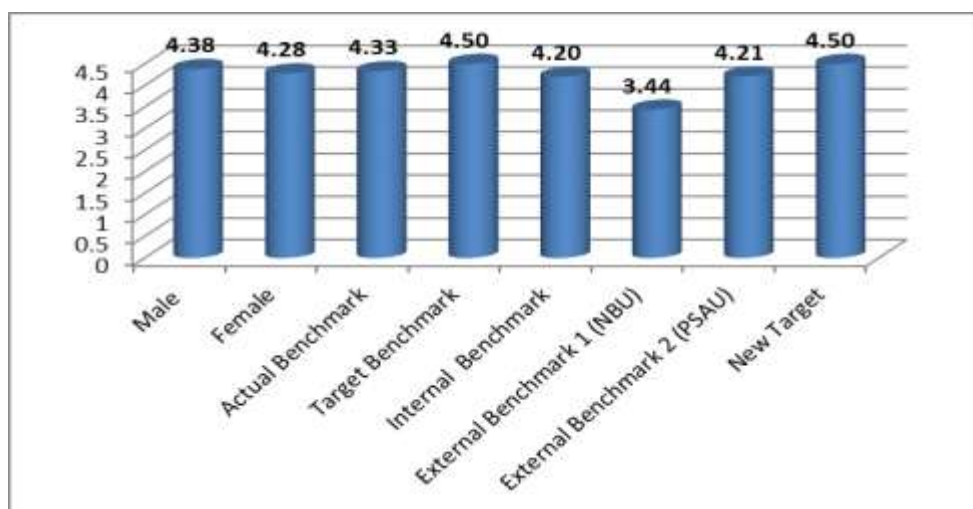


Figure 3: The Students' evaluation of the quality of the courses in the physics program

Analysis

It is clear that the actual performance indicator of the Students' evaluation of the quality of the courses has been increased and reached 4.38 for male, 4.28 for female and 4.33 at the level of the program but the target has been not achieved for both male and female and also at the level of the program, and it is still higher than the external benchmark by NBU and PSAU (3.44, 4.21 respectively). Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator will be (4.5).

Strengths

Surveys are performed every semester involving all the courses included in that semester. The Surveys is conducted electronically through the electronic student portal to reduce data entry errors from paper .

Recommendation For Male and Female students:

Developing teaching strategies used in the program and course specifications to include active learning teaching strategies.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The level of internal reference performance was calculated through the students' average assessment of the evaluation of the quality of the courses provided by the academic program for the past year on a five-point scale.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

The external Benchmark was calculated through the corresponding program in NBU and PSAU in the same way that was calculated in the academic program, which is the assessment of students' evaluation of quality of courses on a five-point scale.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-04: Completion rate

NCAAA KPI Reference Number: KPI-P- 04: Completion rate

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	80%	7.5%	23%	22.5%	80%
10%	30%	23%					

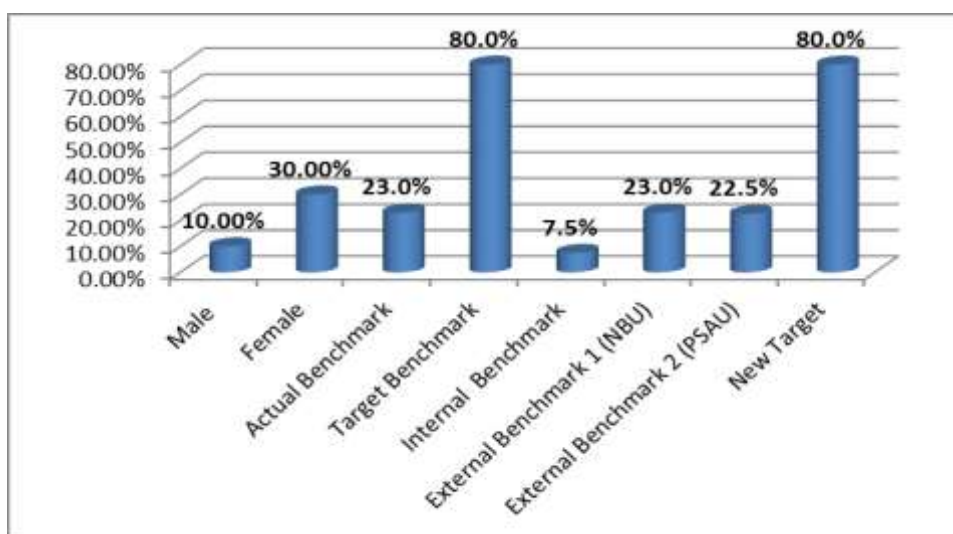


Figure 4: The completion rate in the physics Program.

Analysis

It is noted that the value of actual performance indicator (23%) of the number of students attends this program and finish it in minimum time is higher than the internal benchmark (7.5%) and the external benchmark by NBU and PSAU (23%,22.5 %). the target doesn't achieved for male and female students and at the level of the program. Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator is (80 %).

Strengths

the results show that the number of students attends this program and finish it in minimum time comparable to the past academic year is slightly increase but the values is very low which mean that this indicator need more improvements to increase its values.

Recommendation for male section:

The Completion rate for **male student** is well below the target benchmark

For Male students

- Disallow late registration and late enrollment in classes because this practice is associated with lower grades, lower re-enrollment rates the following term, and lower completion rates. As an alternative, offer “late start” classes for late registrants that begin 2-3 weeks into the term to provide students with shorter, more intensive learning and academic skill-building experiences.
- Implement the mechanism and procedures of the Student retention policy and increased completion rates.
 - ***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark was calculated through the number of students attends this program and finish it in minimum time provided by the academic program by dividing the number of undergraduate students who completed the program within the prescribed period with the total number of students enrolled in the program in each cohort.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

The external benchmark was calculated at the corresponding programs in NBU and PSAU in the same way that was calculated in the academic program through the Proportion of undergraduate students who completed the program in minimum time in each cohort.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-05: First-year student's retention rate

NCAAA KPI Reference Number: KPI-P- 05: First-year students retention rate

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
M	F	Total	80%	72.5%	100 %	ND	80%
74.1 %	74.1 %	74.1 %					

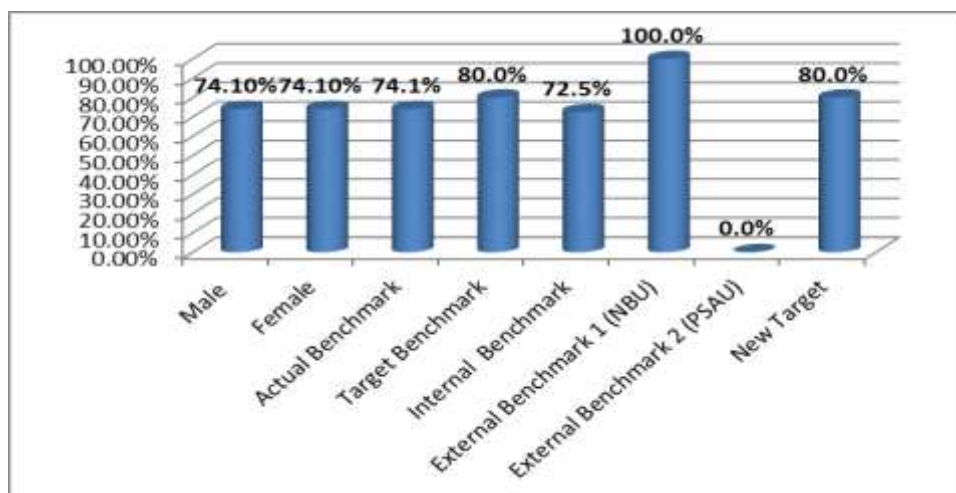


Figure 5: The first-year student's retention rate in the physics program.

Analysis

The results indicate that the actual performance indicator of the percentage number of students who entering the program and successfully complete first year has been increased by a small value and reached 74.1 % in the last year. The target benchmark doesn't achieve for male and female students and for the program. The external benchmark (100%) for NBU was higher than the actual benchmarking (74.1%) but there no value for PSAU. Based on the analysis of the indicator's development, the target performance indicator value will be fixed at the same value (80 %).

Strengths

Actual performance indicator of the percentage number of students who entering the program and successfully complete first year has been increased and exceeds the internal benchmark.

Recommendation:

KPI—P-05 is not achieved for both male and female students

For Male and Female students

- Choosing fitting contents for the course of study in such a way students can adjust to the new environment.
- The key to student retention lies in the areas of regular mentoring. Mentoring from day one makes students feel secure which a critical factor in student success becomes. Then continuous mentoring is primordial through the Implementation the mechanism and procedures of the Student retention policy and increased completion rates

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark was calculated through the number of students who entering the program and successfully complete first year provided by the academic program for the past year by dividing The Number of first-year students who continue in the program for the following year with the total number of first year students in the same year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark of the number of students who entering the program and successfully complete first year provided by the academic program was calculated at the corresponding program NBU and PSAU in the same way that was calculated in the academic program (Percentage of first-year undergraduate students who continue at the program in the next year to the total number of first-year students in the same year).

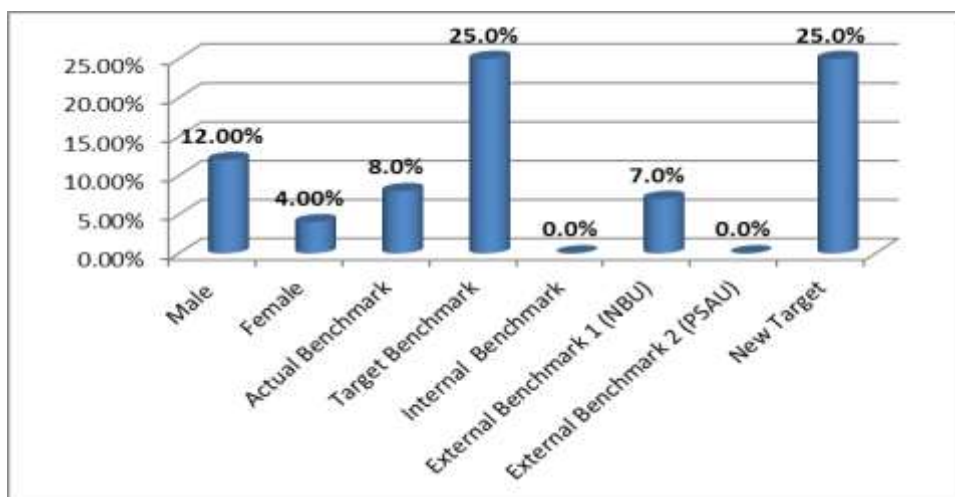
3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-06: Students' performance in the professional and/or national examinations

NCAAA KPI Reference Number: KPI-P- 06: Students' performance in the professional and/or national examinations.

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	25%	ND	7%	Unavailable	25%
12 %	4 %	8 %					



Figuring 6: The Students' performance in the professional and/or national examinations for the physics program.

Analysis

The results indicate that the actual performance indicator (8 %) of the percentage of graduates who pass professional and or / national exams are approximately equal to the external benchmark of NBU (7%) whenever there is no value for PSAU, and the target (25%) was not achieved for male and female students. Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator is (25 %).

The reason for not achieving the target performance level is the failure of students to receive training and qualification before entering the national or professional exams, also entering the exams after a long period of graduation, as well as the failure of graduates to acquire sufficient and important skills and knowledge in passing the national exams.

Strength:

Although the target benchmark has not been achieved the actual value exceeded the external benchmark value of NBU

Recommendation:

KPI—P-06 is not achieved for both male and female students

For Male and Female students

***Academic planning and monitoring:**

1. Analysis of adequacy and quality of exams and class tests conducted in each subject vis-à-vis performance of students should be done by the internal audit/program coordinator and corrective action in case of discrepancies should be taken.
2. Analysis of consolidated monthly reports on the performance of students in various class tests should be done so as to monitor their academic progress and to deal with non-performing students.
3. Systematic assessment of the fidelity or integrity with which instruction and interventions are implemented
3. Students' feedback on faculty performance and course experience at the end of each semester should be collected, analyzed and acted upon.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The level of internal reference performance was calculated through the percentage of students or graduates who pass professional and/or national exams by dividing the number of graduate's students who pass professional and/or national exams with the total number of graduates who perform professional or national exams in the same year

3. Name of the internal benchmark provider.

Committee of the Alumni in the Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

The level of external reference performance of the Students' Percentage who pass professional and or national exams provided by the academic program for the past year was calculated at the corresponding program in NBU and PSAU in the same way that was calculated in the academic program, by dividing the number of students or graduates who pass professional and/or national exams with the total number of graduates who perform professional or national exams in the same year.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-07: Graduates' employability and enrolment in postgraduate programs

NCAAA KPI Reference Number: KPI-P- 06: Graduates' employability and enrolment in postgraduate programs							
Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	50%	15.8%	7.4%	Unavailable	50%
50 %	22.2 %	27.3%	10%	5.5%			25%
33.33%	0 %	16.65 %					

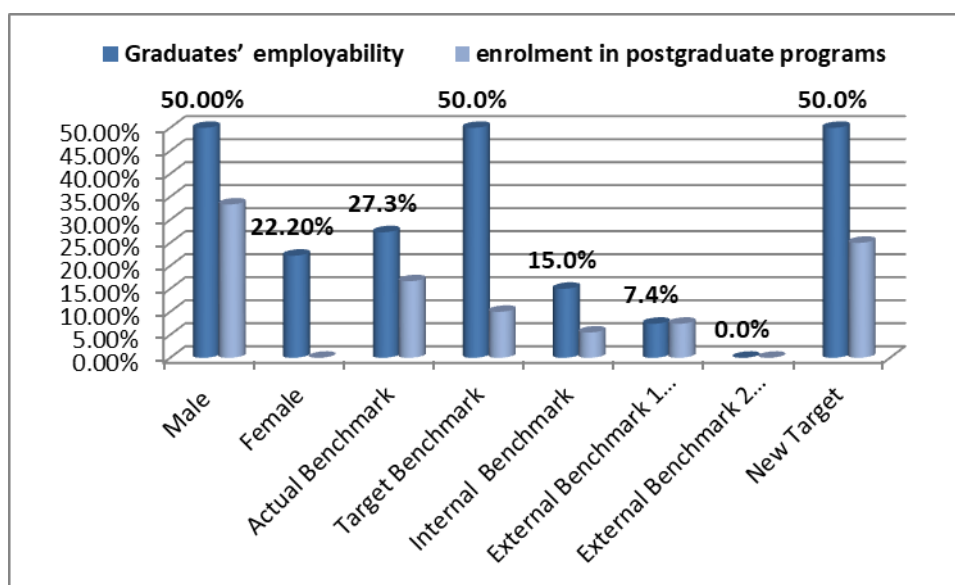


Figure 7: The employability of graduates and the enrolment in postgraduate programs of the physics program.

Analysis (The employability of graduates of the physics program):

The results indicate that the value of the actual performance indicator (27.3 %) of the percentage of the employability of graduates of the physics program is considered higher than the internal benchmark value (15%) and external benchmark of NBT (7.4%) but there is no value for PSAU, also it is lower than the target value (50%). It is clear that the target was not achieved for female (22.2%) and for the program (27.3%) but achieved for students since it is reached to (50%). Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator is (50 %).

Strengths:

Although the target benchmark of the percentage of the employability of graduates has not been achieved the actual level exceeded the external benchmark of NBU

Recommendations:

KPI—P-07 is achieved for both male and not achieved for female students

For Female students

It is recommended to

Give more attention to internships and graduate projects (work experience). These courses give graduates practical skills and greater knowledge of the labor market requirement.

Encouraging female students to come to the central laboratory in the main building, and the participation of male students in experimental work, and encouraging them to collective effort

For Male and Female students

1. Develop curricula, in particular as regards teaching and learning methods.
1. Make labor market analysis and update the alignment with labor market requirements.

Analysis(enrolment in postgraduate programs):

The results indicate that the actual performance indicator (16.7%) of the percentage of the Enrollment of graduates of the program to postgraduate studies of the physics program has been increased in the last year and the target (10%) was achieved. Also, the Actual benchmark is higher than the external benchmark of NBU (7.4%) but there is no benchmark value of PSAU. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The value of the new target indicator is 25 %.

Strengths:

- The target benchmark (10%) of the percentage for Enrollment of graduates to postgraduate studies has been achieved and exceeded external benchmark of NBU

Recommendations:

- Amending the regulations and conditions for admission to postgraduate studies to increase the rate of enrollment
- Reducing the cost of enrolling in postgraduate programs

****Explain:***

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

Internal benchmark was calculated through the percentage of graduates who were employment or enrolled in postgraduate programs within a year of their graduation to the total number of program graduates in the same year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

**Explain:

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator was calculated for the corresponding program in NBU and PSAU in the same way that was calculated in the academic program by the Percentage of graduates from the program who within a year of graduation were:

- A. employed
- B. enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-08: Average number of students in the class

NCAAA KPI Reference Number: KPI-P- 08: Average number of students in the class							
Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	25	11	11	20	25
12	16	14					

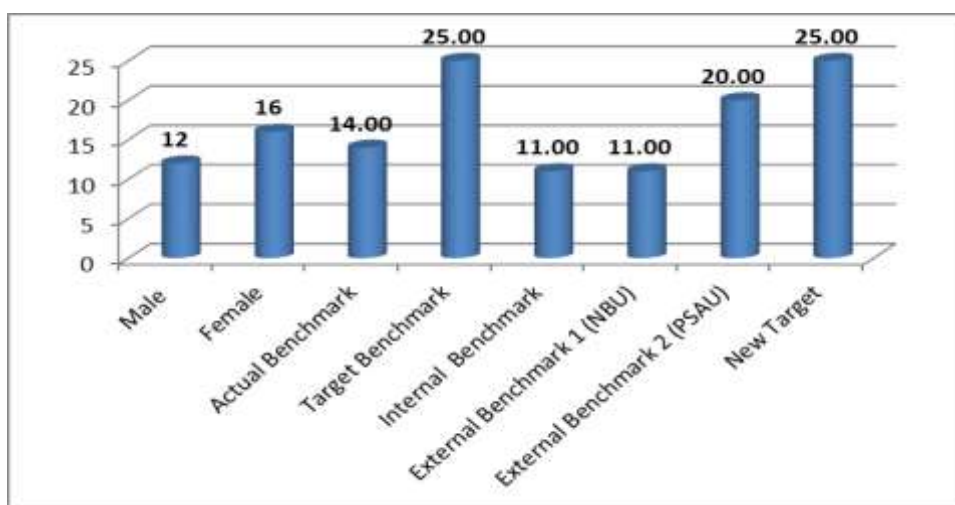


Figure 8: The average number of students in the class in the physics program.

Analysis:

The results indicate that the actual performance indicator of the average number of students in the class in the physics program has been increased and reached 14 in the last year but the target was achieved for male, female and program. It is also noticed that the Actual benchmark still higher than the external benchmark (11) in NBU but less than value of PSAU (20). Based on the analysis of the indicator's development, the target performance indicator value will be fixed. The value of the new target indicator is (25).

Strengths:

The target benchmark of the average number of students in the class in the physics program in the last year has been achieved and exceeded the value the internal Benchmark values. Optimal ratio of students in the class is currently exists.

Recommendation:

At the level of the program

- Maintain the same ratio for the coming year, taking into account any expected increase in the number of student admissions.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal indicator was calculated by the dividing number of students per class (in each teaching session/activity: lecture, small group, tutorial, laboratory or clinical session) to the total number of classes during the year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

The external indicator was calculated at the corresponding programs at Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities' in the same way (Average number of students per class (in each teaching session/activity: lecture, small group, tutorial, laboratory or clinical session).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P-09: Employers' evaluation of the program graduates proficiency

NCAAA KPI Reference Number: KPI-P- 09: Employers' evaluation of the program graduates proficiency

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	4	3.91	NA	Not available	4.2
4	4	4					

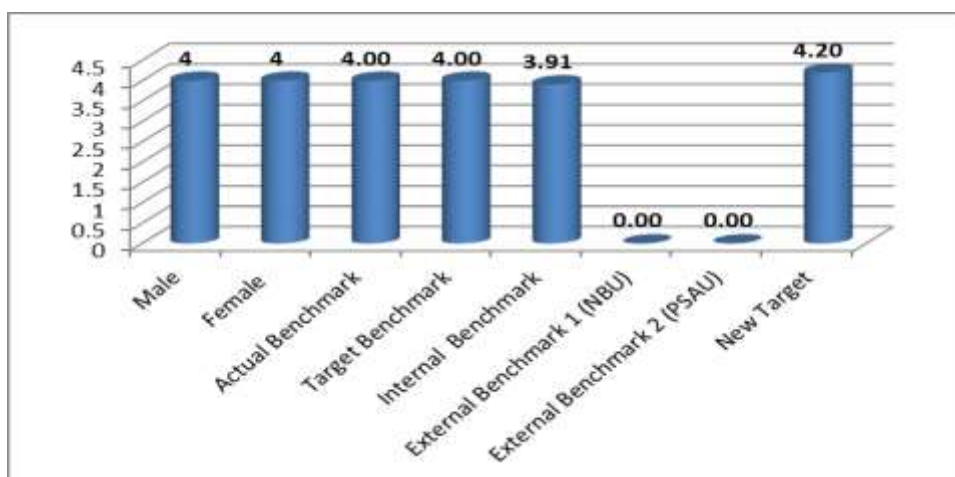


Figure 9: The employers' evaluation of the physics program graduates proficiency.

Analysis:

The results indicate that the actual performance indicator of the employers' evaluation of the physics program graduates proficiency (4) is higher than the values of the internal benchmark (3.91); however the two values are approximately equal. The target (4) was achieved for both male and female students. As there no values of the external benchmark in NBU and PSAU. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The value of the new target indicator is (4.2).

Strengths:

The target of the Employers' evaluation of the program graduates proficiency indicator is approximately achieved since their values are very close; also the actual value exceeded the internal benchmark.

Recommendation at the level of the program:

- Increase the number of employers in the evaluation so that the survey will be more real able.

- Preparing a survey for employers to measure their satisfaction with the qualifications of graduates of the physics program.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal indicator performance was calculated through the employers' evaluation of the physics program graduates proficiency provided by the academic program for the past year on a five-point scale.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

The level of external reference performance was calculated through the corresponding program in NBU and PSAU in the same way that was calculated in the academic program, Average of overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

Standard 4: Students

KPI-P-10: Students' satisfaction with the offered services

NCAAA KPI Reference Number: KPI-P- 010: Students' satisfaction with the offered services

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	4	3.53	3.85	4.4	4
3.9	4.02	3.88					

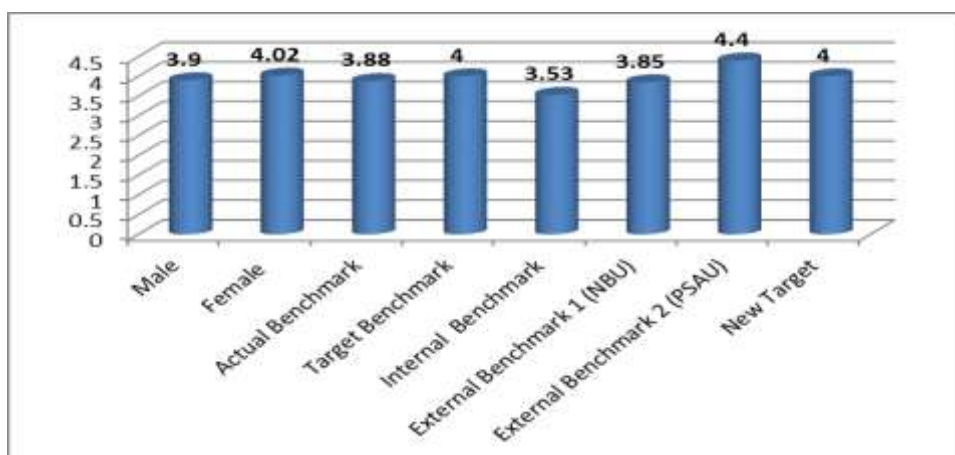


Figure 10: The Students' satisfaction with the offered services in the physics program

Analysis:

From the results it noticed that the actual performance of the student satisfaction indicator with the services provided value is (3.88) in the last year it is higher than internal benchmark (3.53) and the external benchmark of NBU (3.85) university but lower than PSAU (4.4) university. The target performance (4) has been not achieved for male and the program and achieved for female students. Based on the analysis of the indicator's development, the target performance indicator value will increased. The value of the new target indicator is (4.2).

Strengths:

It is clear from the value of the actual performance indicator of the Students' satisfaction with the offered services in the last year has been achieved and exceeded the value of both the target performance indicator, and the internal Benchmark values.

Recommendations for male:

The result of the indicator is archived for [female section](#) and not achieved for the [male section](#)

[Recommendation for Male section](#)

Submitting a request to the college administration to inform students about the medical services provided to students in the main building

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal indicator performance was calculated through the students' average assessment of the various services provided by the academic program for the past year on a five-point scale.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program in NBU and PSAU in the same way that was calculated in the academic program, which is Average of students' satisfaction rate with the various services offered by the program (restaurants, transportation, sports facilities, academic advising, ...) on a five-point scale in an annual survey.

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

Standard 5: Teaching Staff

KPI-P- 11 Ratio of students to teaching staff.

NCAAA KPI Reference Number: KPI-P- 11: Ratio of students to teaching staff.

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	20:1	8:1	8:1	9:1	20:1
3:1	14:1	7:1					

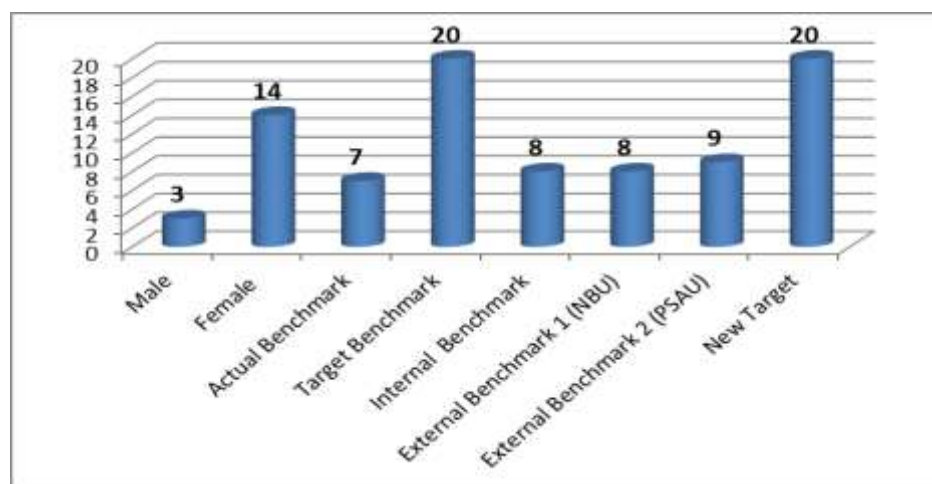


Figure 11: The ratio of students to teaching staff in the physics program.

Analysis:

Ratio of students to teaching staff indicator is from negative polarity indicators. The results indicate that the actual performance of the ratio of students to teaching staff indicator reached to (7:1) for the program, for female (14:1) and male (3:1) in the last year. The actual value of the Ratio of students to teaching staff indicator (7:1) is higher than external benchmark in both NBU & PSAU (8:1 & 9:1) and also the target value (20:1) has been achieved. Based on the analysis of the indicator's development, the target performance indicator value will be fixed.

Strengths:

The target value (20:1) of the Ratio of students to teaching staff indicator has been achieved and exceeded external benchmark in both NBU & PSAU (8:1 & 9:1)

Recommendations:

KPI-P-11 is achieved for both male and female section

- Maintain the same ratio for the coming year, taking into account any expected increase in the number of student admissions.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark was calculated through the Ratio of students to teaching staff in the program by dividing the total number of students of the program with total number of full-time faculty members in the physics program

.3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program in NBU & PSAU in the same way that was calculated in the academic program (Ratio of the total number of students to the total number of full-time and full time equivalent teaching staff in the program).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P- 12: Percentage of teaching staff distribution.

NCAA KPI Reference Number: KPI-P- 12: Percentage of teaching staff distribution.					
Actual Benchmark	Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
			NBU	PSAU	
M:74.2%	M:60%	M. 65.63%	M. 61 %	M. 63.6%	M:60%
F:25.8 %	F:40 %	F. 34.37 %	F.39 %	F. 36.4%	F:40 %
Prof. 3.2%	Prof.: 12 %	Prof.: 2.9 %	Prof.: 11.1 %	Prof.: 12.1%	Assist. P:46.9 %
Assoc. P. 25.8%	Assoc. P:40 %	Assoc. P: 29.5 %	Assoc. P: 16 %	Assoc. P: 24.2%	Assoc. P:40 %
Assist P. 71%	Assist. P:48 %	Assist. P:67.56 %	Assist. P:55.5 %	Assist. P:33.3%	Prof.: 12.2 %

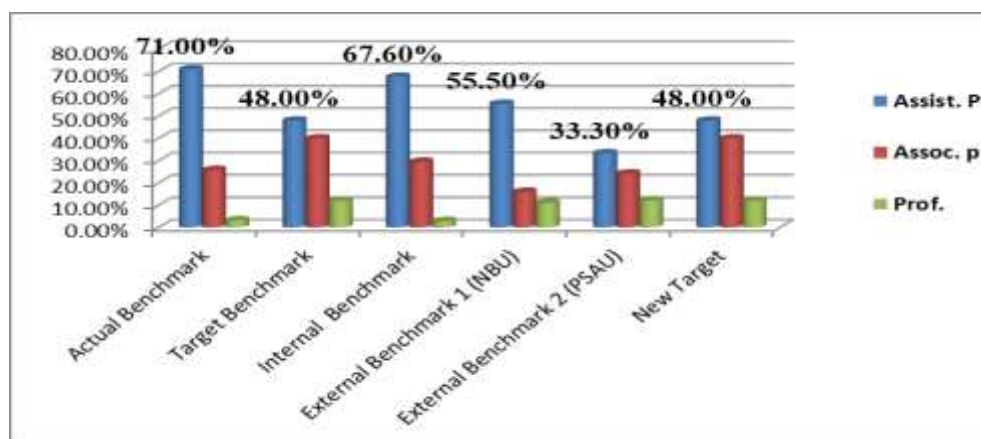


Figure (12): Percentage of teaching staff distribution.

Analysis:

The results indicate that the actual performance indicator of percentage distribution of teaching staff by gender and the percentage distribution of teaching staff in terms of scientific rank has been decreased in recent years, also the target performance and external benchmark values has been not achieved. Based on the analysis of the indicator's development, the target performance indicator value will be fixed at the same values.

From the table of the percentage of teaching staff distribution for both males and females, it is clear that, there is a gap still exist between the distributions of teaching staff in terms of scientific rank, it clearly appears in the female branch. And there is a decrease in the percentage of the female faculty members in the program, this is due to:

- The termination of contracts for reasons related to the period allowed for them to contract with their original universities or for personal reasons related to a faculty member.
- the lack of contracting with new faculty members, this is due to the conditions of the Corona virus, which affected the whole world

Strengths:

The program has sufficient numbers of teaching staff of assistant professor scientific rank in both male and female sections but there is a gap still exists between the distributions of teaching staff in terms of gender.

Recommendations:

At the level of the program

- Contracting with new faculty members of female
- Contracting with faculty members of higher academic ranks (professors and associative professors) to fill the shortage.

**Explain:*

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark is calculated through dividing number of professor, associate professor and assistant professor in the program by the total number of teaching staff in the program during the academic year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

***Explain:*

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program in NBU & PSAU in the same way that was calculated in the academic program (Percentage of teaching staff distribution based on: a. Gender b. Branches c. Academic Ranking).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P- 13: Proportion of teaching staff leaving the program

NCAAA KPI Reference Number: KPI-P- 13: Proportion of teaching staff leaving the program.

Actual Benchmark			Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	6%	14.5%	10%	6%	6%
4.7 %	18.2 %	11.5 %					

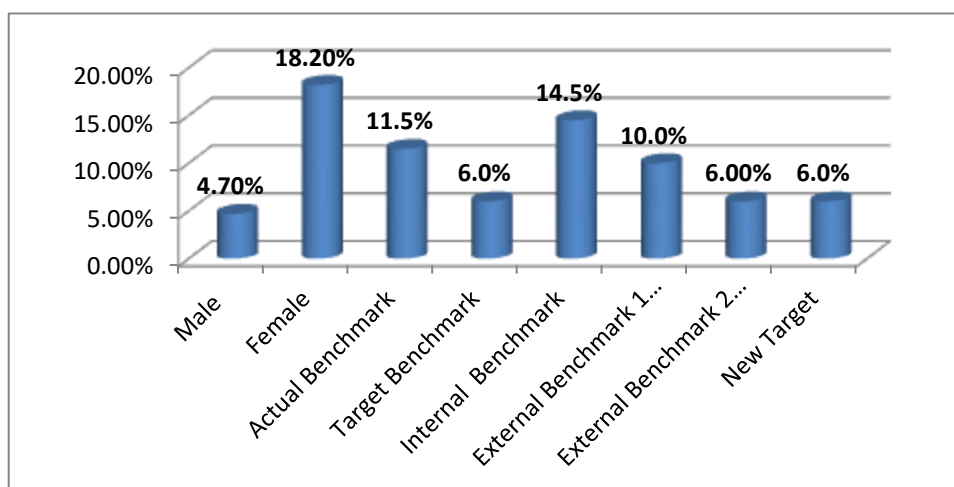


Figure 13: The proportion of teaching staff leaving the physics program.

Analysis:

The results indicate that the actual performance indicator of Percentage of faculty member's dropout from the program has been decreased in recent year; however the target performance was not achieved. The actual performance for male section (4.7%) lowers than female section (18.2%) but the target was not achieved for female section and achieve for male. The number of teaching staff which leaving the program (11.5%) is still higher than that of the external benchmark in both NBU & PSAU (10% & 6%). Based on the analysis of the indicator's development, the target performance indicator value will be fixed at the same values (6 %). The value of the new target indicator is (6 %).

Strength:

From the results, it is clear that the faculty member's drop out of the program due to reasons related to the period allowed for them to contract with their original universities, or because of some technical observations on the performance of the faculty member, or because of personal reasons for the faculty member.

Recommendation:

For female section

- Improve the support for new and existing faculty members through the establishment of better tenure, and a rewarding system.
- Increasing the stability of the faculty members of the program

****Explain:***

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of faculty leaving the program was calculated by dividing the number of teaching staff leaving the program to the total number of teaching staff in the program.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

*****Explain:***

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program in NBU & PSAU in the same way that was calculated in the academic program (Proportion of teaching staff leaving the program annually for reasons other than age retirement to the total number of teaching staff).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P- 14: Percentage of publications of faculty members

NCAAA KPI Reference Number: KPI-P- 14: Percentage of publications of faculty members.

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	PSAU	
100 %	66.6%	90 %	70%	69.7%	66.6%	78.3%	100%

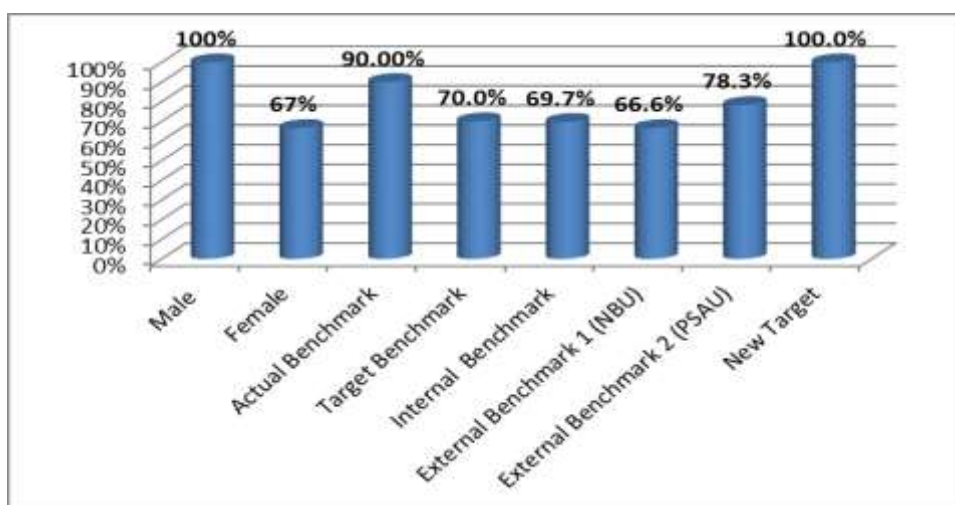


Figure 14: The percentage of publications of faculty members in the physics program.

Analysis:

The results indicate that the actual performance of the scientific publication percentage indicator of the faculty members in the program is increasing from year to year. The actual value of male section reached 100% which is higher than female section (66.6%). male and program achieve the target but female section doesn't achieve the target benchmark. It is noticed that the value of the actual performance indicator (90%) is considerably higher than the target (70%), internal benchmark (69.7%) and external benchmark for both NBU & PSAU (66.8%& 78.3%).

Strength:

It is clear from the value of the actual performance indicator of the percentage of scientific publication for faculty members has been achieved and exceeded the value of both the target performance indicator value, and the value of the internal Benchmark in the last year, which confirms the scientific research activities as an apparent strength point in the program.

Recommendation:

KPI-P-14 is achieved for male and not achieve for female section

Continue to motivate researchers to publish scientific papers

Explain:

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of Percentage of scientific publication for faculty members was calculated by dividing the number of full-time faculty members who published at least one research during the year to the total number of teaching staff in the program.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program at NBU & PSAU in the same way that was calculated in the academic program (Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P- 15: Rate of published research per faculty member

NCAAA KPI Reference Number: KPI-P- 15: Rate of published research per faculty member

Actual Benchmark			Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	2:1	1.2:1	1.5:1	4.22:1	3:1
4.19:1	1.3:1	2.9:1					

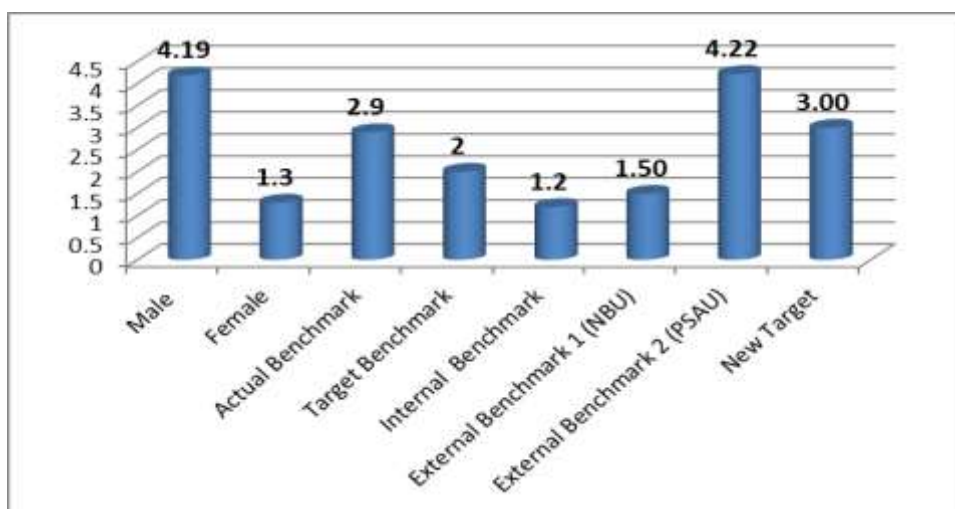


Figure 15: The rate of published research per faculty member in the physics program.

Analysis:

The results indicate that the actual performance indicator (4.22) of the rate of published research per faculty member has been increased in recent years, and the target performance (2) was achieved. It is clear that the actual value of male section 4.19:1 is higher than the value of female section (1.3:1) and it achieve the targeted value. It is noticed that the actual benchmark is considerably higher than, the target value, internal benchmark and the external benchmark for NBU and approximately equal to PSAU. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The new value is 5:1.

Strengths:

It is clear from the value of the actual performance indicator of The rate of published research per faculty member in the physics program in the last year has achieved and exceeded the value of both the target performance indicator value, and the value of the internal Benchmark, which confirms the scientific research activities as an apparent strength point in the program.

Recommendation for female section :

KPI-P-15 is achieved for male and not achieved for female section

- Increase the rate of scientific publishing by encouraging joint research with the male section or from the college of Science.

Increasing the university's support for research projects and providing more specialized research laboratories equipment.

****Explain:***

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of the rate for published research per faculty member in the physics program indicator was calculated by dividing the total number of refereed and/or published research during the year to the total number of full-time teaching staff or equivalent faculty members during the year in the program.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program at NBU & PSAU in the same way that was calculated in the academic program (The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the)).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-P- 16: Citations rate in refereed journals per faculty member

NCAAA KPI Reference Number: KPI-P- 16: Citations rate in refereed journals per faculty member

Actual Benchmark			Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	30:1	23.6:1	20:1	55.7:1	40:1
44.7:1	27:1	38.8:1					

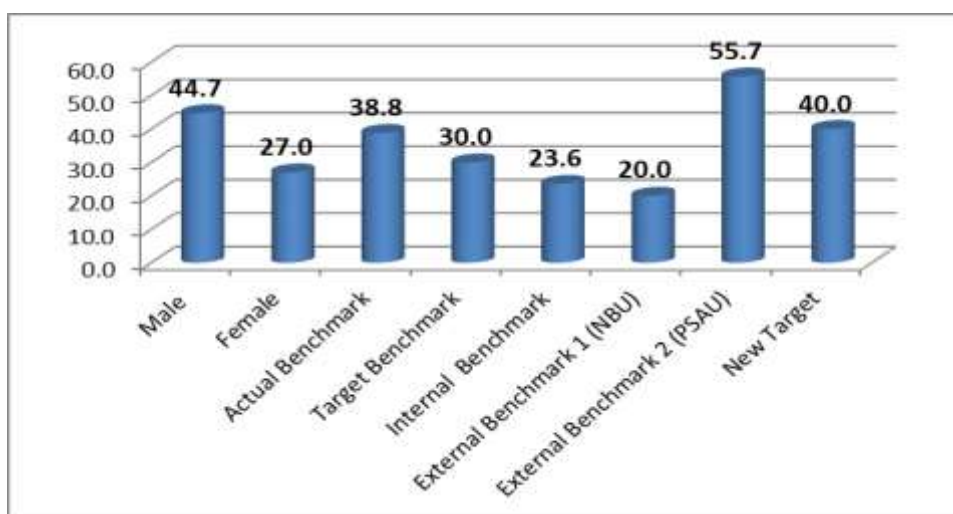


Figure 16: The Citations rate in refereed journals per faculty member in the physics program.

Analysis:

The Results of number of citations in refereed journals show good progress in the academic year 2021/2020 for the female and male branches compared to the academic year 2020/2019 however the number of citations in refereed journals for female branch is still less than male branch. The results indicate that the actual performance indicator of the Citations rate in refereed journals per faculty member has been increased in recent year and exceeds both value of the target performance (30) and the value of internal and external bench mark for NBU but less than the value for PSAU, and the target performance was achieved. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The new value is 40:1.

Strengths:

It is clear from the value of the actual performance indicator of the Citations rate in refereed journals per faculty member in the physics program in the last year has achieved and

exceeded the value of both the target performance indicator value, and the value of the internal Benchmark, which confirms the scientific research activities as an apparent strength point in the program.

Recommendation for female section:

KPI-P-16 is achieved for male and not achieved for female section

Making scientific partnerships with similar programs in international or local universities

****Explain:***

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of The Citations rate in refereed journals per faculty member in the physics program indicator was calculated by dividing the total number of citations in refereed journals from scientific research published by faculty members to the total number of scientific research published for faculty members.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark was calculated through the corresponding program at NBU & PSAU in the same way that was calculated in the academic program (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

Standard 6: Learning Resources, Facilities, and Equipment

KPI-P- 17: Satisfaction of beneficiaries with the learning resources.

NCAAA KPI Reference Number: KPI-P- 17: Satisfaction of beneficiaries with the learning resources.

Actual Benchmark			Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
					NBU	PSAU	
<i>M</i>	<i>F</i>	<i>Total</i>	4.2	4.1	3.8	4	4.2
4.5	3.9	4.04					

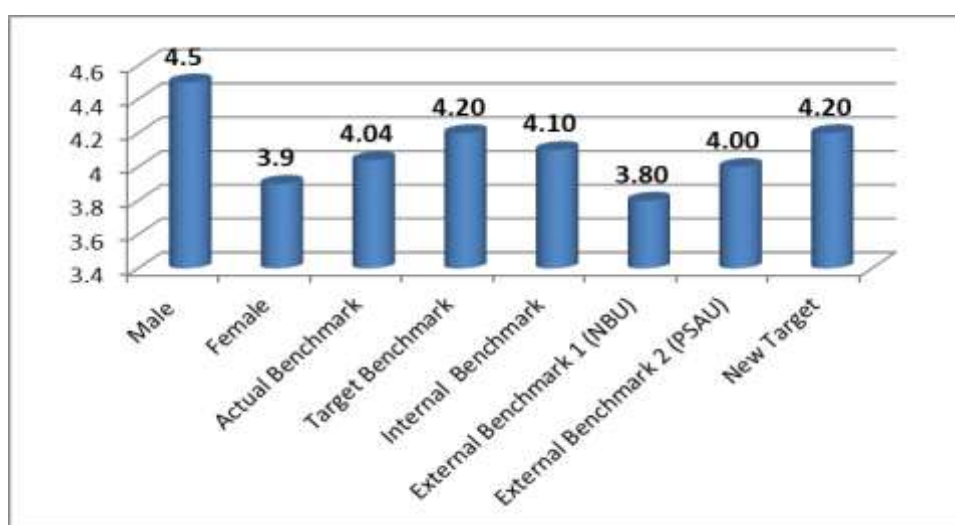


Figure 17: The satisfaction of beneficiaries with the learning resources in the physics program

Analysis:

The results indicate that the value of the actual performance indicator (4.04) of the satisfaction of beneficiaries with the learning resources in the physics program are approximately constant in the last two years and the target was not achieved for female section and achieved for male sections. The value of the actual benchmark (4.04) is higher than the values of External benchmark of both NBU (3.8) and PSAU (4). Also target performance value (4.2) of the indicator was not achieved for the program, by studying the status and development of the indicator, it is decided that the new target performance value will be fixed at 4.2.

Strengths:

Since the actual performance indicator of the satisfaction of beneficiaries with the learning resources in the physics program in the last year has been decreased and the target performance has not been achieved so it needs more improvements.

Recommendations:

KPI-P-17 is not achieved for female section

For Female section

- Demonstrate to students how to use the digital library

Supporting students to make scientific research using the library facilities

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of the Average of beneficiaries' satisfaction rate with the adequacy and diversity of learning resources (references, journals, databases... etc.) in the physics program for the past year was calculated through the application of a questionnaire to evaluate beneficiaries' satisfaction with learning resources on a five-point scale in an annual survey.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator was calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program (Average of beneficiaries' satisfaction rate with the adequacy and diversity of learning resources (references, journals, databases... etc.) on a five-point scale in an annual survey).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities

Additional Performance Indicators (API)

KPI-AP-01: Number of research groups in the program

KPI-AP0-1: Number of research groups in the program

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	TU	
2		2	1	2	—	—	1

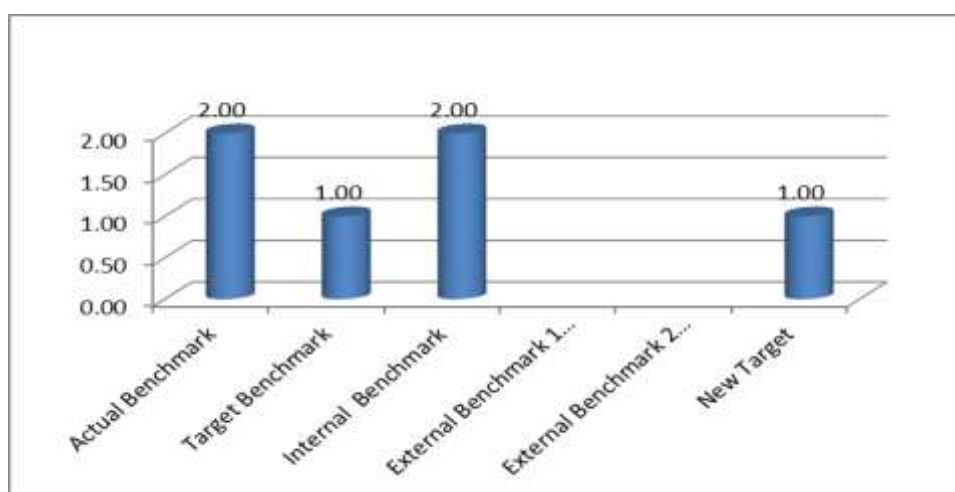


Figure (1): The number of research group's projects received by faculty members in the program annually

Analysis:

The results indicate that the actual performance indicator of the number of research group's projects received by faculty members in the program is constant at 2 for the program and the target has been achieved. Based on the analysis of the indicator's development, the target performance indicator value will be kept at the same value. The value of the new target indicator is (1).

Strengths:

It is clear from the value of the actual performance indicator of the number of research group's projects received by faculty members in the program in the last year has achieved and exceeded the value of the target performance indicator.

Recommendations at the level o the program:

Increasing the university's support for research projects and providing more specialized research laboratories equipment.

• ***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark was calculated by counting the number research groups projects received by faculty members in the program annually for the past year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator will be calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program (by counting the number research groups projects received by faculty members in the program annually for the past year).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities

KPI-AP-02: The number of supported research projects obtained by the program per year

KPI-AP-02: The number of supported research projects obtained by the program per year							
Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	PSAU	
14	4	18	10	7	—	—	20

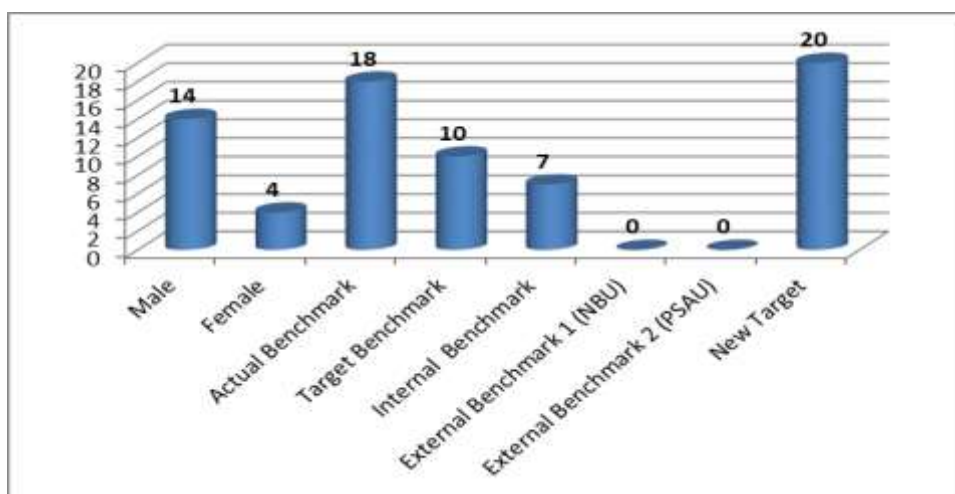


Figure (2): Number of research projects supported annually in the program

Analysis:

The results indicate that the actual performance indicator of the number of research projects received by faculty members in the program has been increased and reached 14 for male section and 4 for female section, and the target (10) has been achieved for male section and at the level of the program but the target didn't achieved for female since the number of projects at female section is very small and need more improvements. Based on the analysis of the indicator's development, the target performance indicator value will be reset. The value of the new target indicator is (20).

Strengths:

It is clear from the value of the actual performance indicator of the number of research projects received by faculty members in the program in the last year has achieved and exceeded the value of both the target performance indicator, and the internal Benchmark values, which confirms the scientific research activities as an apparent strength point in the

program. Despite the distinction of scientific research in the program, there is a lack of some equipment required for the preparation and characterization of samples.

Recommendations for female section:

KPI-AP-02 is achieved for male and not achieved for female section

For Female section

- Encouraging members of the female section to present joint research projects with the male section.
- Allowing the submission of research projects more than once throughout the year so that a larger number of faculty members can apply for them throughout the year.

****Explain:***

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark was calculated by counting the number research projects received by faculty members in the program annually for the past year.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

*****Explain:***

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator will be calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program (by counting the number research projects received by faculty members in the program annually for the past year).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities

KPI-AP-03: The percentage of students participating in the extra-curricular activities

KPI-AP-03: API-P-03: The percentage of students participating in the extra-curricular activities							
Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	PSAU	
51.5%	53%	52.6%	45%	43.4%	—	—	60%

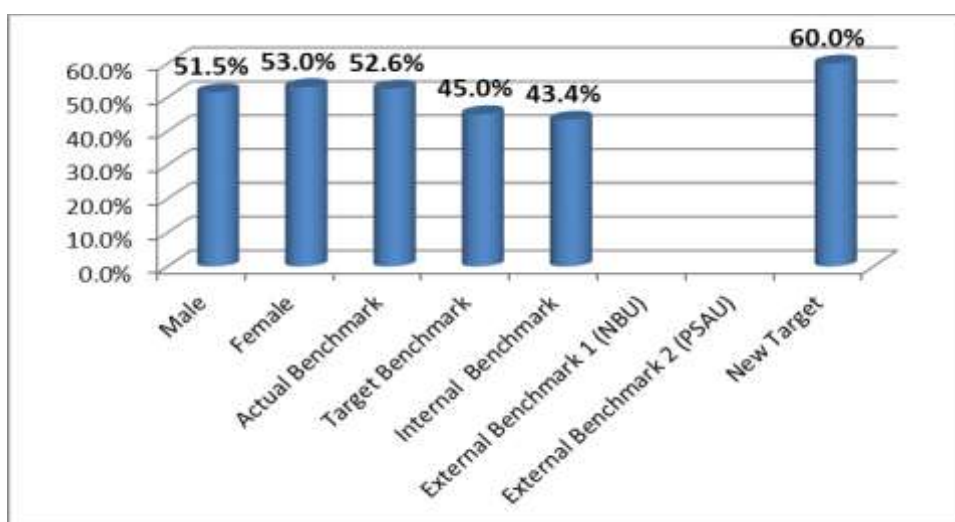


Figure 3: The percentage of students participating in the extra-curricular activities

Analysis:

The results indicate that the actual performance indicator of the percentage number of students participating in the extra-curricular activities in the program has been increased and reached 51.5% for male, 53% for female and 52.6 % for all students in the program; and the target was achieved for male, female and at the level of the program. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The value of the new target indicator is (50%).

Strengths:

It is clear from the value of the actual performance indicator of the percentage number of students participating in the extra-curricular activities in the last year has been achieved and exceeded the value of both the target performance indicator, and the internal Benchmark values, but this value is small and needs improvement to increase it.

Recommendations:

KPI-AP-03 is achieved for both mal female sections

Determine the extra-curricular activities by including them in the program and course specifications.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of the percentage of students participating in the extra-curricular activities was calculated in the program annually for the past year by dividing average number of students participating in all extra-curricular activities to the total number of students in the program

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator of the percentage of students participating in the extra-curricular activities was calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program annually for the past year (by dividing average number of students participating in all extra-curricular activities to the total number of students in the program).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities

KPI-AP-04: Employers' satisfaction with the program's target, vision and mission

KPI-AP-04: Employers' satisfaction with the program's target, vision and mission							
Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	PSAU	
3.86			3.84	3.8	—	—	4

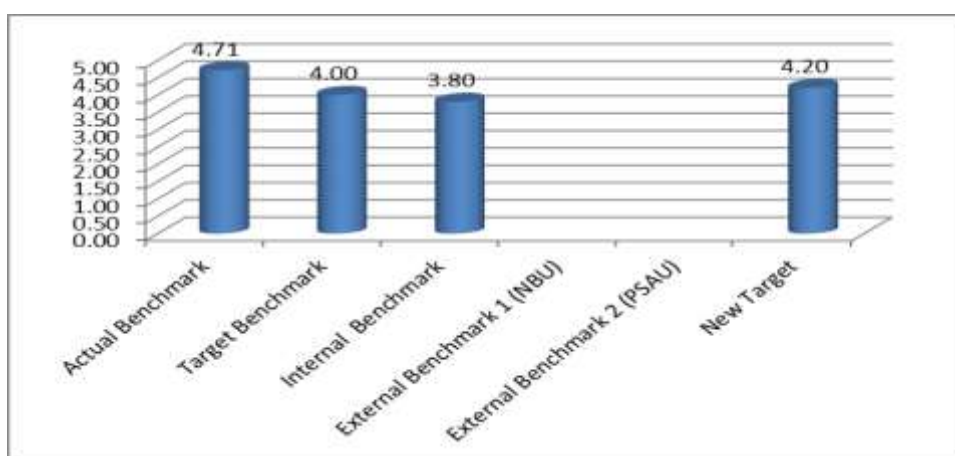


Figure 4: Employers' satisfaction with the program's target, vision and mission

Analysis:

The results indicate that the actual performance indicator of Employers' satisfaction with the program's target, vision and mission in the program has been approximately increased and reached 3.86 in the last year, and the target was achieved. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The value of the new target indicator is (4).

Strengths:

It is clear from the value of the actual performance indicator of the Employers' satisfaction with the program's target, vision and mission in the last year has been approximately increased and the target performance indicator has been achieved.

Recommendation: at the level of the program

- Creating a questionnaire to survey the opinions of students, faculty members and the labor market authorities about vision and mission.

- Conducting consultative processes to establish the program's mission and revisit it regularly, with the participation of students, employers, and professional. Persons.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of the Employers' satisfaction with the program's target, vision and mission was calculated through the application of a questionnaire to evaluate Employers' satisfaction with the program's target, vision and mission on a scale from five points in an annual survey.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator of the Employers' satisfaction with the program's target, vision and mission will be calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program (through the application of a questionnaire to evaluate Employers' satisfaction with the program's target, vision and mission on a scale from five points in an annual survey).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

KPI-AP-05: Percentage of student graduation projects related to the surrounding community

Actual Benchmark			Target Benchmark	Internal Benchmark	External Benchmark		New Target Benchmark
M	F	Total			NBU	TU	
33.3%	50%	40%	25%	22.2%	—	—	45%

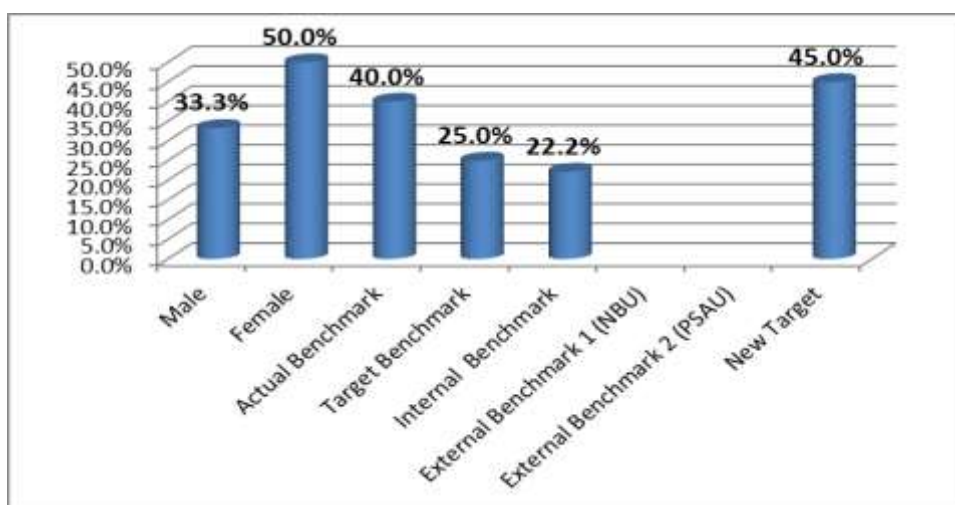


Figure 4: Percentage of student graduation projects related to the surrounding community

Analysis:

The results indicate that the actual performance indicator of the Percentage of student graduation projects related to the surrounding community in the program has been increased and reached 33.3% for male, 50% for female and 40 % for the program in the last year, and the target has been achieved for male and female sections. Based on the analysis of the indicator's development, the target performance indicator value will be increased. The value of the new target indicator is (45).

Strengths:

the actual performance indicator of the percentage of students graduation projects related to the surrounding community in the last year has been achieved and exceeded the value of both the target performance indicator, and the internal Benchmark values or both male and female students.

Recommendations:

KPI-AP-05 is achieved for both male and female section

- Activate the plan of the community service.

Encouraging participation in community service for faculty members and students from male and female section in the next year.

***Explain:**

1. Why this internal benchmark provider was chosen?

Because it is a self-comparison for the physics program in Jouf University.

2. How was the benchmark calculated?

The internal benchmark of The Percentage of student graduation projects related to the surrounding community was calculated by dividing Number of community-related graduation projects to the total number of graduation projects in the program.

3. Name of the internal benchmark provider.

Physics program in Jouf University.

****Explain:**

1. Why this external provider was chosen?

- Northern Border University (NBU) and Prince Sattam Bin Abdulaziz (PSAU) were chosen because they are accredited by the NCAAA, in addition, NBU and Jouf University also has a mutual KPI sharing agreement.
- The Physics program at NBU and PSAU are similar to the program offered by Jouf University and serve a similar demographic (students, Faculty members, employees...).

2. How was the benchmark calculated?

External benchmark indicator of The Percentage of student graduation projects related to the surrounding community will be calculated through the corresponding program at NBU & PSAU in the same way that was calculated in physics program (by dividing Number of community-related graduation projects to the total number of graduation projects in the program).

3. Name of the external provider.

Physics Program in Northern Border (NBU) and Prince Sattam Bin Abdulaziz (PSAU) Universities.

Kingdom of Saudi Arabia
Ministry of Education
Jouf University
Faculty of Science
Physics Department



المملكة العربية السعودية
وزارة التعليم
جامعة الجوف
كلية العلوم
قسم الفيزياء

The Enhancement and development of Key Performance Indicators for Physics Program,

Year 2020/2021 H

Name of KPI	Recommendations	Responsible Person	Start Date	Completion Date
KPI-P-01 Percentage of achieved indicators of the program operational plan objectives.	<u>At the level of the program</u> Follow up all aspects of operational plan.	Operational plan and KPIs Committee	From September 2021	June 2022
KPI-P- 02 Students' Evaluation of quality of learning experience in the program	<u>For Male and Female students,</u> The target has been achieved for male and female Thus, Students performed well with quality of learning experience in the program.	None	None	None
KPI-P-03 Students' evaluation of the quality of the courses conferences	<u>For Male and Female students</u> The target has been achieved for male and female Thus, Students performed well with quality of learning experience in the program.	None	None	None

<p>KPI-P-04 Completion rate</p>	<p><u>For Male students</u> Disallow late registration and late enrollment in classes because this practice is associated with lower grades, lower re-enrollment rates the following term, and lower completion rates. As an alternative, offer “late start” classes for late registrants that begin 2-3 weeks into the term to provide students with shorter, more intensive learning and academic skill-building experiences.</p> <p><u>For Male and Female students</u> Implement the mechanism and procedures of the Student retention policy and increased completion rates.</p>	<p>students affairs and alumni committee</p>	<p>From September 2021</p>	<p>June 2022</p>
<p>KPI-P-05 First-year student's retention rate</p>	<p>KPI-P-05 is not achieved for both male and female students</p> <p><u>For Male and Female students</u></p> <ul style="list-style-type: none"> • Choosing fitting contents for the course of study in such a way students can adjust to the new environment. • The key to student retention lies in the areas of regular mentoring. Mentoring from day one makes students feel secure which a critical factor in 	<p>students affairs and alumni committee & Academic advising committee</p>	<p>From September 2021</p>	<p>June 2022</p>

	student success becomes. Then continuous mentoring is primordial through the Implementation the mechanism and procedures of the Student retention policy and increased completion rates			
KPI-P-06 Students' performance in the professional and/or national examinations	<p>KPI-P-06 is not achieved for both male and female students</p> <p><u>For Male and Female students</u></p> <p>*Academic planning and monitoring:</p> <ol style="list-style-type: none"> 1. Analysis of adequacy and quality of exams and class tests conducted in each subject vis-à-vis performance of students should be done by the internal audit/program coordinator and corrective action in case of discrepancies should be taken. 2. Analysis of consolidated monthly reports on the performance of students in various class tests should be done so as to monitor their academic progress and to deal with non-performing students. 3. Systematic assessment of the fidelity or integrity with which instruction and interventions are implemented 4. Students' feedback on faculty performance and course experience at the end of each semester should be collected, analyzed and acted upon. 	quality assurance and accreditation committee	From September 2021	June 2022

<p>KPI-P-07 Graduates' employability and enrolment in postgraduate programs</p>	<p>KPI-P-07 is achieved for male and not achieved for female students <u>For Female students</u> It is recommended to Give more attention to internships and graduate projects (work experience). These courses give graduates practical skills and greater knowledge of the labor market requirement. Encouraging female students to come to the central laboratory in the main building, and the participation of male students in experimental work, and encouraging them to collective effort <u>For Male and Female students</u> 1. Develop curricula, in particular as regards teaching and learning methods. 2. Make labor market analysis and update the alignment with labor market requirements.</p>	<p>quality assurance and accreditation committee</p>	<p>From September 2021</p>	<p>June 2022</p>
<p>KPI-P-08 Average number of students in the class</p>	<p><u>For Male and Female students</u> Maintain the same ratio for the coming years, taking into account any expected increase in the number of student admissions in the coming years.</p>			
<p>KPI-P-09 Employers' evaluation of the program graduates</p>	<p>The result of the indicator is equal for the two sections and is close to achieving the target <u>For Male and Female students</u></p>	<p>quality assurance and accreditation</p>	<p>From September</p>	<p>June 2022</p>

proficiency.	1. Increase the number of employers in the evaluation so that the survey will be more real able. 2. Preparing a survey for employers to measure their satisfaction with the qualifications of graduates of the physics program.	committee	2021	
KPI-P-10 Students' satisfaction with the offered services	The result of the indicator is archived for female section and not achieved for the male section <u>For Male section</u> Submitting a request to the college administration to inform students about the medical services provided to students in the main building	Academic advising committee	From September 2021	June 2022
KPI-P-11 Ratio of students to teaching staff	KPI-P-11 is achieved for both male and female section Maintain the same ratio for the coming year, taking into account any expected increase in the number of student admissions.	Academic advising committee & students affairs and alumni committee	From September 2021	June 2022
KPI-P-12 Percentage of teaching staff distribution	<u>For Male and Female students</u> Contracting with faculty members of higher academic ranks (professors and associative professor's especially from female section) to fill	Human Resources	From September	June 2022

	the shortage.		2021	
KPI-P-13 Proportion of teaching staff leaving the program	<u><i>for both male and female section</i></u> <ul style="list-style-type: none"> Improve the support for new and existing faculty members through the establishment of better tenure, and a rewarding system. Increasing the stability of the faculty members of the program 	the department council	From September 2021	June 2022
KPI-P-14 Percentage of publications of faculty members	KPI-P-14 is achieved for both male and female section <ul style="list-style-type: none"> Continue to motivate researchers to publish scientific papers 	Scientific Research committee	From September 2021	June 2022
KPI-P-15 Rate of published research per faculty member	KPI-P-15 is achieved for male and not for female section <u><i>For Female section</i></u> <ul style="list-style-type: none"> Increase the rate of scientific publishing by encouraging joint research with the male section or from the college of Science. Increasing the university's support for research projects and providing more specialized research laboratories equipment. 	Scientific Research committee	From September 2021	June 2022

KPI-P-16 Citations rate in refereed journals per faculty member	KPI-P-16 is achieved for male and not achieved for female section <u>For Female section</u> Making scientific partnerships with similar programs in international or local universities	Scientific Research committee	From September 2021	June 2022
KPI-P-17 Satisfaction of beneficiaries with the learning resources	KPI-P-17 is not achieved for male and female section <u>For Male and Female section</u> <ul style="list-style-type: none"> • Demonstrate to students how to use the digital library • Supporting students to make scientific research using the library facilities 	Course instructor/course coordinator	From September 2021	June 2022
KPI-AP-01 Number of research groups in the program	KPI-AP-01 is achieved for mal and not achieved for female section <u>For Female section</u> Increasing the university's support for research projects and providing more specialized research laboratories equipment.	Scientific Research committee	From September 2021	June 2022
KPI-AP-02 The number of supported research projects	KPI-AP-02 is achieved for mal and not achieved for female section <u>For Female section</u>	Scientific Research committee	From September	June 2022

obtained by the program per year	Encouraging members of the female section to present joint research projects with the male section. Allowing the submission of research projects more than once throughout the year so that a larger number of faculty members can apply for them throughout the year.		2021	
KPI-AP-03 Percentage of students participating in extracurricular activities	KPI-AP-03 is achieved for both mal female section Determine the extra-curricular activities by including them in the program and course specifications.	Study plan and quality committee/Q uality committee	From September 2021	June 2022
KPI-AP-04 Employers' satisfaction with the program's target, vision and mission	KPI-AP-04 is equal for the two sections, but is not achieving the target <u>For both Male and Female section</u> 1. Creating a questionnaire to survey the opinions of students, faculty members and the labor market authorities about vision and mission. 2. Conducting consultative processes to establish the program's mission and revisit it regularly, with the participation of students, employers, and professional persons.	quality assurance and accreditation committee & community service	From September 2021	June 2022

<p><i>KPI-AP-05</i> Percentage of student graduation projects related to the surrounding community</p>	KPI-AP-05 is achieved for both mal female section <ul style="list-style-type: none"> • Activate the plan of the community service. • Encouraging participation in community service for faculty members and students from male and female section in the next year. 	community service committee	From September 2021	June 2022

Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give		Evidence hyper link
				Reasons	Proposed action	
Raising in the department council to discuss teaching strategies used in the courses specifications and the program and their suitability for learning outcomes and assessment methods	From September 2020 June 2021	quality Committee	yes			
Organizing introductory lectures to inform the students of the program about the learning outcomes of the program	From September 2020 June 2021	quality Committee	yes			
Discuss The reasons for the difficulty of completing will be mentioned in the department council	From September 2020 June 2021	course teachers	yes			

Communicate with students during office hours to find out the difficulties they face, whether study problems such as language or social problems	From September 2020 June 2021	Academic Guidance Committee & course teachers	Yes			
Organizing and holding workshops and training courses to train students on professional exams	From September 2020	Alumni Affairs Committee	Yes			
<ul style="list-style-type: none"> • Work to set up partnerships with the business sector. • work on Opening a variety of postgraduate programs to suit the graduates' desires and the labor market 	From September 2020	Alumni Affairs Committee	Yes	Need time	Need more communication with the community	

Council / Committee	Physics Department Council
Reference No.	DEPARTMENT MINUTES NO. (2/1443)
Date	(24-8-2021) corresponding to (16/1/1443)