



## Annual Program Report

- (Bachelor)

#### Program: Bachelor of Biomedical Equipment Technology

Program Code (as per Saudi Standard Classification of Educational Levels and Specializations): 071901, 071902

Qualification Level: Bachelor (Level 6 - NQF)

Department: Medical Equipment Technology

College: College of Applied Medical Sciences

Institution: Majmaah University

Academic Year: 2023-2024

Main Location: Al Majmaah

Branches offering the Program (if any):

- None.
- •
- •







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#### **A. Program Statistics**

Item	Number
Number of students enrolled in the program	53
Number of students who started the program (in reporting year)	22
Number of students who completed the program	8

#### **B. Program Assessment**

#### **1.** Program Learning Outcomes Assessment and analysis according to PLOs assessment plan \*

#	Program Learning Outcomes	Assessment Methods	Targeted Performance (%)	Assessment Results (%)
		Direct	Direct	Direct
	Knowledge and	d understanding		
K1	knowledge of the impact of biomedical engineering technology solutions in societal and global context		70	79
K2	an ability to select and apply knowledge of mathematics, science, engineering, and technology to biomedical engineering technology problems that require the application of principles and applied procedures or methodologies	Direct From DAS S1 & S2 1445	70	85
	Sk	tills		
S1	an ability to design systems components, or processes for broadly defined engineering technology problems appropriate to medical equipment technology program educational objectives		70	91
S2	an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to biomedical engineering technology activities		70	82
S3	an ability to identify, analyze and solve biomedical engineering technology problems	Direct From DAS S1 & S2 1445	70	85
S4	an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes	1445	70	90
S5	an ability to apply written, oral, and graphical communication in both technical and non- technical environments; and an ability to identify and use appropriate technical literature		70	84
	Values, autonomy	, and responsibil	ity	
V1	an ability to function effectively as a member or leader on a technical team;		70	94







V2	an understanding of the need for and an ability to engage in self-directed continuing professional development;		70	85
V3	an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;	Direct From DAS S1 & S2 1445	70	96
V4	a commitment to quality, timeliness, and continuous improvement.		70	86

### PLO achievement reports – indirect

#	Program Learning Outcomes	Assessment Methods	Targeted Performance (%)	Assessment Results (%)
		indirect	indirect	indirect
	Knowledge	e and understanding		
К1	knowledge of the impact of biomedical engineering technology solutions in societal and global context	SPES Q(1, 2)AES Q(1, 2)EES Q(1, 2)SES Q(1, 2)CES Q(1, 2, 3)	70 (3.5/5)	76(3.8/5)
К2	an ability to select and apply knowledge of mathematics, science, engineering, and technology to biomedical engineering technology problems that require the application of principles and applied procedures or methodologies	SPES Q(2, 5)AES Q(2, 5)EES Q(2, 5)SES Q(2, 5)CES Q(1, 2, 3)	70 (3.5/5)	76(3.8/5)
		Skills		
S1	an ability to design systems components, or processes for broadly defined engineering technology problems appropriate to medical equipment technology program educational objectives	SPES Q(6, 3)AES Q(6, 3)EES Q(6, 3)SES Q(6, 3)CES Q(1, 2, 3)	70 (3.5/5)	76(3.8/5)
S2	an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to biomedical engineering technology activities	SPES Q(24, 3)AES Q(13, 3)EES Q(13, 3)SES Q(13, 3)CES Q(1, 2, 3)	70 (3.5/5)	78(3.9/5)
S3	an ability to identify, analyze and solve biomedical engineering technology problems	SPES Q(19, 3)AES Q(11, 3)EES Q(11, 3)SES Q(11, 3)CES Q(1, 2, 3, 4)	70 (3.5/5)	78(3.9/5)
S4	an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes	SPES Q(7, 3)AES Q(7, 3)EES Q(7, 3)SES Q(7, 3)CES Q(1, 2, 3, 4)	70 (3.5/5)	76(3.8/5)
S5	an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature	SPES Q(8, 3)AES Q(8, 3)EES Q(8, 3)SES Q(8, 3)CES Q(1, 2, 3, 5)	70 (3.5/5)	78(3.9/5)
	Values, auton	omy, and responsibil	ity	



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V1	an ability to function effectively as a member or leader on a technical team;	SPES Q(9, 4)AES Q(9, 4)EES Q(9, 4)SES Q(9, 4)CES Q(6, 3)	70 (3.5/5)	78(3.9/5)
V2	an understanding of the need for and an ability to engage in self-directed continuing professional development;	SPES Q(22, 4)AES Q(12, 4)EES Q(12, 4)SES Q(12, 4)CES Q(3)	70 (3.5/5)	78(3.9/5)
V3	an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;	SPES Q(25, 26, 4)AES Q(14, 15, 4)EES Q(14, 15, 4)SES Q(14, 15, 4)CES Q(3)	70 (3.5/5)	80.8(4.04/5)
V4	a commitment to quality, timeliness, and continuous improvement.	SPES Q(10, 4)AES Q(10, 4)EES Q(10, 4)SES Q(10, 4)CES Q(3)	70 (3.5/5)	76(3.8/5)

SPES – Student program evaluation survey, AES – Alumni Evaluation Survey, EES – Employee Evaluation Survey, SES – Stakeholder Evaluation Survey, CES – Course Evaluation Survey.

#### PLO achievement reports – combined

#	Program Learning Outcomes	Assessment Methods	Targeted Performance (%)	Assessment Results (%)
		Direct -indirect	Direct - indirect	Direct - indirect
	Knowledge ar	nd understanding		
К1	knowledge of the impact of biomedical engineering technology solutions in societal and global context		70	77.5
К2	an ability to select and apply knowledge of mathematics, science, engineering, and technology to biomedical engineering technology problems that require the application of principles and applied procedures or methodologies	Direct -indirect	70	80.5
	S	skills		
S1	an ability to design systems components, or processes for broadly defined engineering technology problems appropriate to medical equipment technology program educational objectives		70	83.5
S2	an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to biomedical engineering technology activities	Direct -indirect	70	80
S3	an ability to identify, analyze and solve biomedical engineering technology problems		70	81.5
S4	an ability to conduct standard tests and measurements; to conduct, analyze, and		70	83



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	interpret experiments; and to apply experimental results to improve processes			
S5	an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature		70	81
	Values, autonom	y, and responsibili	ity	
V1	an ability to function effectively as a member or leader on a technical team;		70	86
V2	an understanding of the need for and an ability to engage in self-directed continuing professional development;		70	81.5
V3	an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;	Direct -indirect	70	88.4
V4	a commitment to quality, timeliness, and continuous improvement.		70	81

\*Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (**if any**).

#### Strengths:

#### 1. Exceptional Performance Across All PLOs:

- All outcomes exceed the 70% target, with most scoring 80% or higher, indicating strong program effectiveness.
- V3 (Professional/Ethical Responsibilities) and V1 (Team Leadership) are standout outcomes, scoring 88.4% and 86%, respectively.

#### 2. Strength in Values and Ethics:

• The highest scores are in V3 (88.4%) and V1 (86%), reflecting outstanding emphasis on ethics, teamwork, and leadership, likely due to effective curriculum integration and practical training.

#### 3. Strong Technical and Practical Skills:

 S1 (Design Systems – 83.5%) and S4 (Experiments/Processes – 83%) demonstrate robust hands-on and analytical abilities, supported by direct assessment methods (e.g., labs, projects).

#### 4. Balanced Assessment Approach:

 Use of direct methods (e.g., exams, project evaluations) alongside indirect surveys (e.g., SPES, CES) provides a more comprehensive evaluation of student competence.

#### Aspects that need improvement with priorities:

- Areas for Further Enhancement: While overall performance is strong, areas such as K1 (77.5%), though still above the target, might benefit from additional attention to further enhance students' ability to apply modern techniques and technologies. Tailoring interventions to these slightly underperforming areas could elevate the program's overall success.
- 2. **Ongoing Monitoring and Enhancement**: Continuous monitoring and the integration of direct and indirect assessment results are crucial for ongoing curriculum adjustments. This ensures that the program remains relevant and effective, addressing both student and industry needs.





**Recommendation for Broader Stakeholder Engagement**: To further improve the program outcomes, increasing engagement with industry stakeholders could provide valuable insights into emerging technologies and market trends, which could be integrated into the curriculum to keep it up-to-date and aligned with real-world requirements.

#### **2. Students Evaluation of Courses**

Course Code	Course Title	Number of Students Who Evaluated the Course	Percentage of Participants	Evaluation Results	Developmental Recommendations
MET 232	Anatomy for Bioengineering	23	100	3.9	None
MET 233	<b>Basic Mathematics</b>	26	100	3.8596	None
MET 234	Biophysics	22	100	3.8406	None
MET 235	Biomechanics	23	100	3.94	None
MET 237	Physiology for Bioengineering	23	100	3.9206	None
MET 241	Applied Mathematics 1	7	100	4.1604	None
MET 242	Physics for Medical Equipments	15	100	3.9	None
MET 243	Electrical Circuits	12	100	3.8812	None
MET 244	Electrical Skills	7	100	3.9996	None
MET 245	Computer & Systems	7	100	4.1604	None
MET 246	<b>Bio-Materials</b>	14	100	3.92	None
MET 351	Applied Mathematics 2	5	100	3.8	None
MET 352	Basic Analogue Electronics	9	100	3.92	None
MET 353	Medical Electrical Measurements	9	100	3.88	None
MET 354	Basic Digital Electronics	9	100	3.86	None
MET 355	Biomedical Mechanical Equipment	12	100	3.881	None
MET 356	Computer Programming	9	100	3.6808	None
MET 361	Medical Analog Signal Processing	18	100	3.8998	None
MET 362	Advanced Medical Analogue Electronics	8	100	3.9002	None
MET 363	Advanced Medical Digital Electronics	8	100	3.82	None
MET 364	Electromechanical and Pneumatic Equipments	8	100	4.042	None



Course Code	Course Title	Number of Students Who Evaluated the Course	Percentage of Participants	Evaluation Results	Developmental Recommendations
MET 365	Advanced Electromechanical Equipments	8	100	4.0032	None
MET 471	Medical Digital Signal Processing	12	100	4.0796	None
MET 472	Medical Electronic Equipment	12	100	4.08	None
MET 473	Medical Imaging Systems	13	100	3.82	None
MET 474	Medical Equipment Management & Maintenance	10	100	3.68	None
MET 481	Computer Applications for Biomedical Systems	18	100	3.8	None
MET 482	Advanced Medical Imaging Systems	10	100	4.04	None
MET 483	Optical & Laboratory Medical Equipments	10	100	4	None
MET 484	Advanced Medical Electronic Equipments	8	100	3.8032	None
MET 486	Medical Equipment Design	18		3.7204	None
MET 591	Project	2	100	4.082	None
MET 592	Medical Digital Image Processing	8	100	3.8024	None
MET 593	Control of Biomedical Systems	8	100	3.682	None
MET 594	Safety in Hospitals	8	100	3.8424	None
MET 595	Molecular Sensors & Nano Equipment	18	100	3.8608	None
MET 597	Artificial intelligence	18	100	3.8808	None

### 3. Students Evaluation of Program Quality

Evaluation Date: 7 June 2024	Number of Participants: 10
Students Feedback	Program Response
Strengths:         Consistently High Scores Across Key Questions         o       Most courses received an average         greater than 3, demonstrating         strong student satisfaction with	It's a good sign



course quality, teaching, and available resources. 2.	
Areas for Improvement:	
Continued Monitoring and Enhancement	It's a good sign
• Since all course averages are <b>above 3</b> , no critical issues need immediate attention.	

#### 4. Scientific research and innovation during the reporting year

Activities Implemented	Number
Published scientific research	90
Current research projects	10
conferences organized by the program	1
Seminars held by the program	2
Conferences attendees	3
Seminars attendees	15

#### Discussion and analysis of scientific research and innovation activities

The program has maintained a balanced publication rate of classified scientific papers (90 research papers) during the reporting year, compared to the previous academic year. The citation rate has also steadily increased for the current year. Additionally, the program contributed to organizing one research-related conference and facilitating research and publication for students. However, more focus should be placed on increasing the number of innovations.

#### **5. Community Partnership**

	Activities Implemented	Brief Description*
1.	General Public Health Awareness:	A public health awareness initiative on Wednesday and Thursday, October 4-5, 2023, in University's Pioneers school (Al-Rowad Schools) in the male section (primary and secondary sections) on Wednesday, October 4, and in the female section (primary and secondary sections, on Thursday, October 5, 2023). The initiative included a number of activities, including providing brief lectures on stage about the importance of proper nutrition, healthy habits, personal care, dental safety, the importance of exposure to beneficial sunlight, avoiding exposure to harmful radiation emanating from electronic devices, and school bag specifications, in addition to providing a number of different diagnostic services such as measuring the rate of skeletal growth. Assessing the breathing process, introducing students to the correct times for exposure to sunlight, the proper way to wash hands, resistance to infection and food contamination, and other healthy habits.
2.	Saudi – International Day of Volunteering Work	An international day to celebrate the obvious strong steps of volunteering work in the kingdom was held for the first time in College



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	of Applied Medical Sciences(CAMS), under the patronage of His Excellency the President of the University, for one week from 17 – 21 December, 2023 in a collaboration with Center of Cooperation and Community Partnership and Health Volunteering Platform. The event included presenting vision, mission and objectives of the volunteer work according to vision of the kingdom 2030, impact of volunteer services on the personality of the volunteer, tasks, duties and regulations of these services nationally and internationally. Besides, important information about the authorized platforms responsible for accrediting the volunteer hours, the aspects and fields of volunteer services
3. Health Care of Diabetics (in MHC):	The initiative was held in the primary medical care center in Majmaah on Sunday, 28.02.2024. This event targeted patients who have been monitoring their health status, where many services were provided by students and under the supervision of faculty members and administrative assistance. Volunteers from the department of Medical Equipment provided full details for patients about the periodical maintenance of home (domestic) glucometers as an important tool for monitoring glucose level by patient or his relative medical devices. Also, they presented informative speech about the software that can be used to track the health status of diabetic parents or kids in case they are away from them.
4. International Day of Renal Diseases	<ul> <li>A public awareness event including volunteers from different departments was held on 17th March 2024 in building 5, targeting students, faculties and admins. The aim of the event was to raise the level of awareness of the community about renal diseases in different aspects.</li> <li>Providing a lecture on the latest devices and techniques used in diagnosis and treatment and presenting a model (prepared by the students), to explain the dialysis device (Medical Equipment Technology)</li> </ul>
5. International Week of Vaccination:	<ul> <li>An event entitled "International Week of Vaccination" was conducted in two places, on Tuesday, 16th April in College of Applied Medical Sciences and Medicine (building number 5) and on Wednesday, 17th April, 2024, in the administrative building (number 3), targeting the admins working there, staff members and students whom visiting the deanships, which are considered another category of the community. The event included many activities done by students such as:</li> <li>5- Presenting a brief lecture on the beginning of the discovery and use of vaccinations to prevent endemic diseases and epidemics, the history of the development of the vaccine industry, and the role of the Ministry of Health in controlling Covid-19 pandemic through vaccinations.</li> <li>5- Providing a video about the most important diseases that can be prevented through vaccinations during different age stages and preventive vaccinations for the mother during pregnancy.</li> <li>5- A special section to introduce the differences between the different types of vaccines and the extent of their applied use, whether routine or preventive, during the Hajj season.</li> </ul>





- 5- A section dedicated to correcting misconceptions about vaccination (as an interactive presentation and competition).
- 5- The importance of exercising to support the effect of vaccines on disease resistance and immune activation, especially for the elderly. In addition to assessing of beneficiaries' opinions about the event and the volunteering teams.

\*including timing of implementation, number of participants, and outcomes.

#### Comment on community partnership activities\*\*

The scheduled plan was achieved by 100 %, from 05 planned initiatives by 05 initiatives were done and number of attendees have increased.

\*\*including overall evaluation of the program's performance in these activities (if any).

#### 6. Other Evaluation (if any)

(e.g., independent reviewer, program advisory committee, and stakeholders (e.g., faculty members, alumni, and employers)

Evaluation method: Surveys among employers, faculty and students and alumni	Date: During Year		Number of Participants: Students :7 Stakeholders:30 Alumni:35 Employee :12
Summary of Evaluator Revi	ew		Program Response
		□ Con We are	aprehensive Learning Impact: e pleased to see that students

### • Students:

- Strengths:
- Comprehensive Learning Impact: Students strongly believe that their coursework contributes to serving society and enhances their specialized knowledge, skills, and values (Q1, Q2, Q3).
- Technical and Problem-Solving Abilities: High satisfaction with the ability to apply engineering principles, conduct experiments, and solve biomedical engineering-related problems (Q5, Q6, Q7, Q19).
- Educational Support & Learning Environment: Strong approval of educational services, technical support, and specialized learning facilities, including laboratories and accessibility resources (Q11, Q17, Q18).

□ **Comprehensive Learning Impact:** We are pleased to see that students strongly feel their coursework contributes to both societal service and the enhancement of their specialized knowledge, skills, and values. This is a testament to the program's alignment with real-world needs and its focus on impactful education. Moving forward, we will continue to integrate applied learning opportunities and encourage student involvement in communitybased projects.

**Technical and Problem-Solving** Abilities: The high satisfaction regarding students' ability to apply engineering principles, conduct experiments, and solve biomedical engineering-related problems is encouraging. The program will keep focusing on strengthening practical problem-solving opportunities through lab work, case studies, and problembased learning.

□ Educational Support & Learning Environment: We are glad that students approve of the educational



#### Stakeholders: Strengths:

#### Stakeholder Satisfaction with Graduates' Self-Learning Ability

• Stakeholders recognize that graduates have strong self-learning skills and stay updated with industry developments (Q12, Avg: **4.13**).

### Positive Stakeholder Perception of Social Responsibility

• Stakeholders appreciate graduates' involvement in volunteer work and social responsibility activities, reflecting positively on the program (Q15, Avg: **4.19**).

#### Stakeholder Confidence in Graduates' Ethical Awareness

• Stakeholders acknowledge graduates' awareness of professional ethics and commitment to job responsibilities, which enhances trust in the program (Q14, Avg: **4.06**).

#### Alumni: Strengths:

- Effective Communication Skills: With an average score of 3.97, students demonstrated strong abilities in both oral and written communication on technical topics, indicating good preparation in communication skills.
- Commitment to Ethics and Social Responsibility: The high score of 4.11 in volunteer activities and social responsibility initiatives suggests that graduates actively engage in professional and community responsibilities.
- **Proficiency in Technical Tools and Equipment:** With an average score of **4.08**, students reported strong capabilities in using





services, technical support, and specialized learning facilities. We will continue to enhance these resources and ensure that students have access to the latest technologies and learning tools to support their academic growth.

Self-Learning Ability: We are pleased stakeholders recognize that the graduates' strong self-learning skills and their ability to stay updated with industry developments. The program is committed to fostering a culture of continuous learning and selfimprovement. We will explore additional avenues, such as industry workshops and ongoing certifications, to further develop these skills.

**Social Responsibility:** Stakeholders' positive feedback on graduates' involvement in volunteer work and social responsibility activities is highly valued. We plan to further integrate service-learning projects and volunteer initiatives into the curriculum, ensuring that students continue to contribute meaningfully to society.

**Ethical Awareness:** The recognition of graduates' awareness of professional ethics and job responsibilities is encouraging. The program will continue to emphasize ethical practices across the curriculum, ensuring that students develop a strong foundation of integrity and responsibility.

Effective Communication Skills: The strong communication abilities of our graduates, both oral and written, are a significant achievement. We will continue to prioritize communication skills in the curriculum, ensuring students are well-prepared to present technical information clearly to both technical and non-technical audiences. **Commitment to Ethics and Social Responsibility:** The high score in volunteer activities and social responsibility initiatives reflects the program's success in instilling a sense of ethical duty in our graduates. We will continue to offer opportunities for





industry-specific tools and equipment, which students to engage in real-world reflects the program's effectiveness in hands-on training.

#### **Employee :** Strengths:

- 1. Strong Technical and Problem-Solving Skills - High averages in questions related to critical thinking, problem-solving (Q11: 4.46), and selflearning (Q12: 4.62) indicate that students are well-prepared for professional challenges.
- 2. Effective Communication and Teamwork -Questions on communication skills (Q8: 4.31) and teamwork (Q9: 4.38) received strong scores, demonstrating that students can effectively collaborate and present their ideas.
- 3. Commitment to Ethics and Community Engagement – High scores in professional ethics (Q14: 4.54) and volunteerism/community responsibility (Q15: 4.85) suggest that students exhibit strong ethical standards and social responsibility.

community activities, ensuring they remain responsible and engaged citizens.

**Proficiency in Technical Tools and** Equipment: We are pleased that students feel well-prepared in their ability to use industry-specific tools and equipment. The program will continue to strengthen its hands-on training and ensure students have access to cutting-edge technology to enhance their practical skills.

**Technical and Problem-Solving** Skills: The high scores in critical thinking, problem-solving, and selflearning are promising indicators of our students' preparedness for professional challenges. We will continue to emphasize these skills through hands-on projects, internships, and collaborative research.

**Communication and Teamwork:** Strong scores in communication and teamwork are a testament to the program's emphasis on collaborative skills. We will enhance these aspects by incorporating more team-based assignments, group discussions, and inter-disciplinary projects.

#### **Ethics and Community**

Engagement: The high scores in ethics and volunteerism further highlight the program's success in promoting responsible citizenship. We will ensure that these elements remain central to the program by incorporating ethical dilemmas and community service projects in our coursework.

\*Attach independent reviewer's report and stakeholders' survey reports (if any).





Including the key performance indicators required by the NCAAA.

		KPI Results				
КРІ	Description	Actual	Target Benchmark	Internal Benchmark (Average of 3 years)	External Benchm ark (PSAU)	New Target
KPI-P-01	Students' Evaluation of quality of learning experience in the program	3.9/5	4.5/5	4.44/5	3.91/5	4.44/5
KPI-P-02	Average of students' overall rating for the quality of courses on a five-point scale in an annual survey	3.89/5	4.5/5	4.28/5	4.05/5	4.74/5
KPI-P-03	The proportion of undergraduate students who completed the program in minimum time in each cohort.	90%	90%	89.3%	64.9%	90.7%
KPI-P-04	P-04 Percentage of first-year undergraduate students who continue at the program the next year to the total number of first-year students in the same year.		100%	100%	89.4%	100%
KPI-P-05	Students' performance in the professional and/or national examinations		NA	NA	NA	NA
KPI-P-06	a. Percentage of graduates from the program who within a year of graduation were employed within 12 months	92%	91%	90.4%	92.3%	93.6%
KPI-P-06	b. Percentage of graduates from the program who within a year of graduation were enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year.	2%	2%	1.67%	0%	2.33%
KPI-P-07	Average of the overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey.	3.8/5	4/5	4.33/5	3.85/5	4.33/5
KPI-P-08	Ratio of the total number of students to the total number of full-time and full-time equivalent teaching staff in the program (Faculty – 13 Students – 53)	4.07:1	4:1	4:1	21:1	4:1
KPI-P-09	Percentage of full-time faculty members who published at least one research paper during the year to total faculty members in the program	90%	90%	90%	62.5%	90%
KPI-P-10	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 year).	4.0	4.2	4.022	6.9	4.02
KPI-P-11	The average number of citations in refereed journals from published research per faculty member in the program (total number of citations in refereed journals from published	72:1	70:1	66.67:1		77.33:1





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	Description	KPI Results				
KPI		Actual	Target Benchmark	Internal Benchmark (Average of 3 years)	External Benchm ark (PSAU)	New Target
	research for full-time or equivalent faculty members to the total research published).					
MU-P-01	Average rating of beneficiaries' satisfaction with the community services provided by the program on a five-level scale in an annual survey	4.65/5	4.6/5	4.51/5		4.79/5
MU-P2	The percentage of students who received a warning or more in the program to the total number of students in the program.	0%	0%	0%		0%
MU-P3	The percentage of students who were denied entry to the final examination of the course for exceeding the legally permitted percentage of the total number of students in the program.	0%	0%	0%		0%
MU-P-05	The percentage of full-time faculty members who provided professional development activities inside or outside the university during the year to the total teaching staff in the program	60%	60%	60%		60%

#### **Comments on the Program KPIs and Benchmarks results:**

#### Strengths:

- 1. KPI-P-03: The proportion of students completing the program at minimum time is 90%, close to the target (90.7%), indicating strong academic support.
- 2. KPI-P-04: A 100% retention rate for first-year students reflects effective student engagement and support mechanisms.
- 3. KPI-P-06: A high employment rate of 90.4% within 12 months of graduation (with an internal benchmark of 92.3%) suggests strong career readiness.
- 4. KPI-P-09: 90% of full-time faculty members published at least one research paper, meeting the target.
- 5. KPI-P-11: The citation rate (72:1) is high, indicating research impact and recognition.
- 6. MU-P-01: Beneficiary satisfaction with community services is strong (4.65/5).
- 7. MU-P2 & MU-P3: No students received warnings or were denied exams, demonstrating academic discipline.
- 8. MU-P-05: 60% of faculty engaged in professional development activities, meeting the benchmark and ensuring continuous improvement.

#### Weaknesses:

- 1. KPI-P-01: The actual value (3.9/5) is below the targeted 4.5/5, indicating room for improvement in teaching quality.
- 2. KPI-P-02: Course quality ratings (3.89/5) did not meet the 4.5/5 target.
- 3. KPI-P-07: Employers rated graduates' proficiency at 3.8/5, falling short of the 4/5 target, which may indicate a skills gap.



**دیب هیئة تقویم التعلیم والتدریب** 4. KPI-P-10: The average research output pe<sup>Fd</sup>factilfty<sup>&</sup> (4:0)<sup>in</sup>s<sup>E</sup>bellöt<sup>win</sup>thermaission of 4.2 indicating a need for improved research support.

#### D. Challenges and difficulties encountered by the program (if any)

Teaching	The program has faced a few challenges as the NCAAA forms has been changed to new format
Assessment	None
Guidance and counseling	None
Learning Resources	None
faculty	None
Research Activities	None
Others	The program has started conducting progress exams and student performance was 97%. The program offered FutureX platform for eLearning and 50% of the students took the courses.

### E. Program development Plan

No.	Priorities for Improvement	Actions	Action Responsibility
		1. Collect feedback on curriculum improvements.	Assessment and Evaluation Committee
1 Curriculum Improvement		2. Implement modern teaching methodologies (e.g., problem-based learning, flipped classrooms).	Curriculum Development Committee
	3. Increase faculty professional development in instructional design.	Educational Affairs and Examinations Committee	
	4. Regularly update course content to align with industry trends and student needs.	Educational Affairs and Examinations Committee	
		5. Improve classroom infrastructure and integrate digital learning tools.	Educational Affairs and Examinations Committee
		<ul><li>6. Approve the new curriculum from</li><li>:</li><li>1- Department council</li><li>2- College Council</li><li>3- University Council</li></ul>	Curriculum committee and Head of the department
2	Industry Collaboration & Employability	1. Strengthen collaboration with industry partners for curriculum alignment.	Alumni Committee
		2. Introduce soft skills and employability workshops for students.	Practical and Cooperative Training Committee
		3. Increase internship and cooperative education opportunities.	Practical and Cooperative Training Committee





		4. Develop a graduate mentorship program with industry leaders.	Alumni Committee
	1. Provide faculty with research incentives (e.g., grants, workload reduction for research-active staff).	1. Provide faculty with research incentives (e.g., grants, workload reduction for research-active staff).	Graduate Studies and Research Committee
3	2. Establish research collaboration with international universities.	2. Establish research collaboration with international universities.	Graduate Studies and Research Committee
	3. Organize faculty training workshops on high-impact publishing strategies.	3. Organize faculty training workshops on high-impact publishing strategies.	Graduate Studies and Research Committee
	4. Develop a research mentorship program for junior faculty.	4. Develop a research mentorship program for junior faculty.	Graduate Studies and Research Committee

• Attach any unachieved improvement plans from previous report.

• The annual program report needs to be discussed in department council

#### F. Approval of Annual Program Report

COUNCIL / COMMITTEE	MET COUNCIL
REFERENCE NO.	06
DATE:	24 SEPTEMBER 2024