DAE-Biomedical Technology (3-Years)

Biomedical engineering is an industry that integrates methods with biological and medical sciences and engineering values to develop innovative solutions for medical devices and health care. It works at the junction of medicine, biology, and engineering, using their information of engineering rules, such as computer, electrical, and mechanical engineering, to resolve medical issues.

There are some skills for success in biomedical engineering:

- Inspiration to help appear with new solutions to develop or improve new medical instruments.
- Critical and problem-solving skills.
- Imagination and innovation.
- Perception of medical implements and devices.
- Association with medical scanning techniques and clinical practice.

Scope of Biomedical Engineering in Pakistan

The scope of biomedical engineering in Pakistan is rapidly growing. Due to new hospitals, analytical laboratories, and advanced technology, there is an excellent need for biomedical engineers. It is a good field in Pakistan. Pakistan's advanced and effective tools and machines are developed for better surgery, diagnosis, and devices for the safety of mankind. Its trend is rising daily, not only in Pakistan but worldwide. It is a good choice for career success.

With the world's increasing healthcare demands and many resources, biomedical engineers can play an essential role in minimizing costs and better healthcare outcomes. In addition to technical knowledge and skills, biomedical engineering also creates teamwork skills, problem-solving, communication, and the ability to make precious resources for any organization. The field of biomedical engineering continues to evolve and grow. It is an engaging time to pursue a career in this field. Biomedical engineering suggests a combination of creativity, social impacts, and technical challenges for those passionate about human health. Biomedical engineering is habitually developing, with creativity evolving regularly, new technologies, career advancement, and continuous learning.

. DAE-Biomedical Engineering Course Curriculum

S.No	Subjects Name	Code No
	First Semester	
1.	Islamiat and Pakstudies	Gen-III
2.	English	ENG-112
3.	Applied Maths	MATH-123
4.	Applied Physics	Phy-122
5.	Applied Chemistry	Chem-112
6.	Computer Applications	Comp-122
7.	Electrical Essential and Network	EIT-114
8.	Electronic Components Application and Assembly	BMI-112
9.	Fundamental of Bio Medical Equipment and Interfaces	BM-112
10.	General Engineering	BMI-123
11.	Islamiat And Pakstudies	Gen-211
12.	Applied Mathematics	MATH-233
13.	Business Communication	Mgm-211
14.	Industrial Economics	Mgm-221
15.	Measuring Instruments	ELT-233
16.	Solid State Electronics	BMI-214
17.	Digital Electronics	BMI-222
18.	Electrical Machines And Industrial Electronics	BMI-233
19.	Operational Amplifier And Applications	BM-242
20.	Patient Safety And Ultrasound Radiation Physics	BM-212
21.	X-Ray And Film Processing Equipment	BM-223
22.	Islamiat And Pak studies	Gen-311
23.	Industrial Management And Human	MGM-311
24.	Opto Electronics, Fiber Optics And Lessors	BMI-312
25.	Fundamental Of Microprocessor And Interfacing Techniques	BMI-324
26.	Medical Terminology, Human Anatomy and Physiology	BM-311
27.	Sterilization, Autoclaves and Medical Gases Vacuum	BM-322
28.	ECG And Ultrasound Equipment	BM-334
29.	Bio-Chemistry And Clinical Lab Equipment	BM-342
30.	Therapeutic Biomedical Equipment	BM-354

31.	Biomedical Maintenance Management And Computer Application In Biomedical Equipment's	BM-361