



NEAR EAST UNIVERSITY

**DEPARTMENT OF Bioengineering**

***Occupational Profiles of Graduates***

**2021-2022**

## **1. Occupational Profiles of Graduates**

Graduates of the Department of Bioengineering have an opportunity to be employed as maintenance engineers, equipment manufacturers, medical equipment suppliers, medical equipment managers and specialists in this field, in a variety of private and public establishments such as hospitals and medical industries, food, oil industries etc.

The Department of Bioengineering has good relations with the governmental and private organizations and companies in North Cyprus and Turkey, thereby ensuring up to date study program in regard to scientific expertise and regional industrial needs. Curriculum of the department is kept up to date by offering new core/ elective courses upon the regional requirements, the demand of employers, international organizations and job market representatives.

### **The Work Areas of Bioengineers:**

The main employment areas of bioengineer students are as follows:

- In health institutions – such as state hospitals, private hospitals, and health clinics.
- In government offices – such as Ministry of Health and health departments of municipalities.
- In manufacturing firms – such as firms employing design engineers for manufacturing medical products, quality control engineers, and so on.
- In representative firms – such as support engineers and consultants in firms that sell medical equipment.
- In educational establishments – such as lecturers in universities and in colleges offering training on health issues.

The main employment areas of bioengineers can be summarized as follows:

- In the firms manufacturing medical equipment and tools.
- In firms that manufacture artificial organs.
- In units developing equipment and sensors for analyzing the blood.
- In the units in charge of setup and maintenance of electronic equipment for the monitoring of patients in intensive care units, and in operations.
- In the firms that design, develop and manufacture ultrasound, x-ray, magnetic resonance and similar medical imaging systems.
- In the firms that design specialized medical systems.
- In the establishments that carry out research for the modeling of the circulatory system, absorption, and breathing and similar physiologic systems.
- In the firms that design, develop, and manufacture all type of medical equipment used in hospitals.

- In the units in charge of setup and maintenance of all types of medical equipment used in hospitals.
- In the departments and firms that are interested in the development of existing medical electronic equipment, and for designing new medical equipment.
- In the foundations which offer medical training.

The modules in the degree structure are also closely linked to the research conducted in the department and provide a path to post graduate studies. Moreover, a large majority of Bachelor's projects are completed in cooperation with industry in various projects either at the university or in companies, and thus provide a link to the professional field and a path to future employment in specialist tasks in these research areas.

Practical relevance of the program is achieved by:

- Lectures given by professionals from various fields;
- Laboratory lessons;
- Renewing course contents periodically based on the job market needs;
- Implementing new courses based on the job market needs;
- Guest lecturers delivered by engineering practitioners;
- Providing project based learning in courses with term projects;
- Providing graduation projects that involve practical applications both in manufacturing and service sectors;
- Organizing international and domestic academic seminars and workshops;
- A summer practice (internship) in order to integrate knowledge and theory to practice in the fields of Bioengineering.

A summer practice is included in the Bachelor's degree. A summer practice is lasted 40 working days.