

MEDICAL ENGINEERING

In the Romanian nomenclature of University studies, *Medical Engineering* bachelor degree program is a subdivision of the license domain *Applied Engineering Sciences* which is a branch of *Engineering Sciences* fundamental domain.

The purpose of *Medical Engineering* specialization is to prepare interdisciplinary specialists that can integrate on medical devices development industry. For this reason, a medical engineer will get both specific engineering and medical skills.

The skills development during the education period will equally focus on cognitive, practical and communication abilities, being structured as follows:

- general knowledge of specific engineering profession;
- modeling of biological systems and model implementation in medical investigation;
- conception, design, construction, operation and development of modern medical equipments;
- expertise, technical advice and service for the operation and development of medical equipments;
- conception, design, development and use of medical informatics applications;
- acquisition and processing of biomedical signals and images;
- conception, design, manufacture and testing of dental and orthopedic implants, prosthetic and orthotic elements;
- selection and use of biomaterials to manufacture the medical devices;
- quality assurance and maintenance of medical devices;
- implementation of modern medical equipments and management of medical entities.