

People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Sétif 1 University – Ferhat Abbas



Faculty: Sciences

Bachelor's Degree in Applied Physics

Presentation and Objectives of the Speciality:

This bachelor's degree program is designed to ensure a comprehensive understanding of fundamental concepts and principles in the physics of biomedical equipment. It encompasses various activities within the healthcare domain, including the operation and monitoring of biomedical instruments for conventional and nuclear medical imaging. Additionally, the program covers aspects such as quality control of biomedical equipment, radiation protection, and safety protocols associated with the use of equipment utilizing ionizing radiation. The program also includes overseeing equipment installation, conducting acceptance and reference tests, and providing education to operators and users of biomedical equipment on safety and radiation protection regulations.

Access conditions:

Recognition of Academic Excellence:

Consideration may be given to students who have demonstrated exceptional academic performance, such as being recognized as the best student in their graduating class during the two previous academic years.

Career prospects/professions:

- Hospital-University Centers
- Cancer Treatment Centers
- Medical Imaging Centers
- Biomedical Analysis Laboratories
- Quality Control Organizations in the Healthcare Sector
- Nuclear Imaging Centers
- Biomedical Equipment Maintenance Companies

Organisation des Études et Durée Officielle du Programme:

Aperçu du programme :

Semester 05 : Radiology and Planar Scintigraphy Tomography Laser and Optical Imaging Ultrasonic Imaging Radiation Protection and Radiobiology Sensors and Image Processing Instrumentation in Functional Exploration Automatic Control of Biomedical Systems Anatomy and Physiopathology Human Resources and Logistics Management English

Semester 06 :

Project / Internship

Curriculum Highlights:

- Basic training for the medical physicist.
- Training technical personnel on biomedical equipment used in healthcare facilities.
- Providing operational and organizational elements necessary for the proper mastery of medical device operation.
- Contributing to the continuous improvement of quality and safety in the healthcare sector.

Admission Information:

- Skills and knowledge acquisition are assessed every six months through continuous assessment and a final exam.
- The student's assessment depends on the training program and may include lectures, practical work, tutorials, and internships.

Training Canvas:

- Radiology and Planar Scintigraphy
- Tomography
- Ultrasonic Imaging
- Radiation Protection and Radiobiology

Advanced training modules:

- Sensors and Image Processing
- Instrumentation in Functional Exploration
- Instrumentation in Functional Exploration

Language of instruction:

French and English

Training framework:

The tables provided in the previous section "Program Overview"

Coordinator of the Program: Dr. Halima Saadia KIDAR

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