Educational outcomes of the study

Main learning outcomes

By studying, adequate knowledge is acquired in:

- the sciences on which the work of a radiological assistant is based on, mainly in topographic anatomy and pathology, ionizing radiation, clinical oncology and nuclear medicine,
- · professional ethics, psychology, communication and relevant legislation;
- the basic groups of diseases and conditions of disability, about the causes of their occurrence, about the possibilities of diagnosis and treatment,
- · clinical practice in a medical facility in the workplaces of radiology, nuclear medicine, radiotherapy, computed tomography, nuclear magnetic resonance imaging and interventional radiology.

Theoretical knowledge

Graduate in radiological technology

- knows the essential concepts, facts, principles and theories related to imaging techniques in the diagnostic use of ionizing and non-ionizing radiation in medicine as well as to irradiation techniques in all modalities of radiotherapy, as well as in relation to the different types of ionizing radiation used in medicine and their effects on living systems, taking into account deterministic and stochastic risks,
- · implements the acquired knowledge in radiation protection of the patient, optimizing the radiation dose in imaging and therapeutic radiological procedures in medicine,
- has knowledge of medical technology, radiological technology, which he/she will use in relation to radiological imaging and radiotherapy procedures and techniques, with regard to maximum safety of the patient and medical staff,
- · uses the knowledge of the structure of a healthy human organism as well as pathologies, topographical conditions and physiological processes taking place in the organism in his/her practical activities,
- has knowledge of biomedical and humanities (preclinical and clinical) subjects, applies them by meeting the needs of the patient, in radiological imaging and radiotherapy procedures

Practical skills and procedures

- The graduate of radiological technology independently performs radiological imaging examinations based on a doctor's indication, fulfils the role of an applicating specialist, while bearing full responsibility for the implementation of these procedures.
- On the basis of a doctor's prescription, he independently performs radiation techniques in radiotherapy, he is responsible for the accuracy and safety of the implementation of these techniques.
- It practically applies all the rules, restrictions and recommendations for health protection against ionizing radiation in relation to patients and medical staff.
- · Within the scope of his professional qualifications, he/she uses radiological technology and ensures the comfort of the patient.
- The graduate can provide nursing care to patients in radiological imaging and radiotherapy procedures, including qualified pre-medical first aid.
- The graduate is ready to join the top specialized workplace.

Additional knowledge, abilities and skills

Graduate in radiological technology

- · knows the structure of health care in the Slovak Republic and neighbouring countries and his/her position in the health care organisational structure,
- is able to apply the acquired knowledge of health management, health law, psychology and ethics in a professional approach to patients and co-workers,
- applies the results of scientific research in radiology in his/her practice and is able to work as a member of a research team,
- is theoretically and practically prepared to acquire the qualifications necessary for professional supervision of compliance with radiation protection,
- · knows and communicates in at least one foreign language, is able to study foreign literature,
- knows how to work with a computer.