

Radiation protection basis

Reference: 060



OBJECTIVES

- Define radioactive transformation modes, ionizing radiations and their interactions with matter.
- Define biological effects of ionizing radiations and radiation protection quantities.
- Use detection and measuring devices.
- Present the protection systems against external and internal exposure.
- Give an overview of the international regulation in radiation protection.
- Identify radiological risk within a nuclear facility.

PUBLIC

Engineers or researchers working in nuclear industry companies or research centres and wishing to acquire basic knowledge on radiation protection.

CONTENT

- Nuclear physics basis: radioactivity, ionizing radiations and their interactions with matter.
- Biological effects of ionizing radiations.
- Radiation protection quantities: equivalent dose, effective dose.
- Detection and measuring.
- External and internal exposure.
- International regulation in radiation protection, ALARA principle.
- Application of radiation protection in nuclear industry.

METHOD

Conferences, practical works and visits of nuclear installations.

This course includes visits of facilities with regulated zones. Please comply with the conditions stated in the terms of sale.

Maximum number of trainees: 12.