Radiation Safety: Safely Working with Radioactive Materials

29 August – 2 September 2027
Dubai (UAE)



Radiation Safety: Safely Working with Radioactive Materials

Ref: 323011_221781 **Date:** 29 August – 2 September 2027 **Location:** Dubai (UAE) **Fees:** 4900 GBP

Course Description

This comprehensive 1-week course provides essential knowledge and practical skills for safely working with radioactive materials. Participants will learn fundamental radiation protection principles, regulatory requirements, and best practices for handling, storing, and disposing of radioactive materials. The course covers radiation physics, biological effects, dosimetry, instrumentation, and emergency procedures.

Learning Objectives

- Understand the principles of radiation protection and ALARA concept
- Identify and mitigate radiation hazards in various work environments
- Demonstrate proper use of radiation detection instruments and personal protective equipment
- Comply with relevant regulations and standards for radioactive material handling
- Implement effective radiation safety programs and emergency response procedures

Course Modules

Day 1: Radiation Fundamentals

- Introduction to ionizing radiation and radioactivity
- Types of radiation and their properties
- Radiation units and measurements
- Biological effects of radiation exposure

Day 2: Radiation Protection Principles

- ALARA concept and time, distance, shielding
- Radiation dosimetry and exposure limits
- Personal protective equipment PPE
- Contamination control and decontamination procedures

Day 3: Radiation Detection and Measurement

- Types of radiation detection instruments
- Proper use and calibration of survey meters
- Environmental and personnel monitoring
- Interpreting radiation measurements and survey results



Day 4: Regulatory Compliance and Safety Programs

- Overview of radiation safety regulations
- Licensing and inspection requirements
- Record-keeping and documentation
- Developing and implementing radiation safety programs

Day 5: Practical Applications and Emergency Procedures

- Safe handling, storage, and disposal of radioactive materials
- Transportation of radioactive materials
- Radiation emergency response and preparedness
- Case studies and hands-on exercises

Practical Wins for Participants

- Ability to confidently work with radioactive materials while minimizing personal exposure
- Skills to develop and implement effective radiation safety programs
- Knowledge to ensure regulatory compliance and pass radiation safety inspections
- Expertise to respond appropriately to radiation incidents and emergencies

