



Radiation Safety

Length of Program

Two semesters and one summer term

Technical Certificate

Intended Learning Outcomes

- Know and apply radiation safety fundamentals and work safely to protect self and others
- Employable as a well-trained, safe, and professional radiation safety technician
- Advocate for the nuclear power industry
- Communicate effectively through listening, speaking, and writing
- Promote and participate in lifelong learning
- Demonstrate leadership as a community member

This 38-credit Technical Certificate program teaches entry-level skills required for employment in the nuclear industry. Qualified radiation safety technicians work at commercial nuclear power plants under the direction of the Nuclear Regulatory Commission (NRC), Department of Energy (DOE) National Laboratories, dosimetry laboratories, medical facilities, accelerators, and independent and university research facilities that work with radioactive material.

Students entering this program must have high aptitudes in mathematics and communications. In addition to specialized classroom/laboratory instruction, students will be required to complete supervised work experience training. Graduates of the Radiation Safety Program will possess the skills, knowledge, and field-based training necessary to gain employment as entry-level technicians in this high-wage, high-demand occupation.

Students continuing to the next semester/term requires at least a “C-” in each course. Program instructional components will be provided in the areas of radiation protection, radiation detection and instrumentation, safety and hygiene, communications in radiological safety, practical radiation survey techniques, nuclear plant systems, and radiological chemistry. Entry into RDS-111-Supervised Work Experience is dependent on successful completion of all Radiation Safety courses. During the summer term, students will attend practical hands-on supervised work experience at the INL and/or other facilities which employ radiation safety technicians.

Program Costs

In addition to the semester registration fees, students can expect to spend approximately \$950 on textbooks, respirator fit test physical, instructional materials, and associated fees for Department of Energy required building access only badging and online testing required for supervised work experience. Information regarding costs and dates for the exams will be posted in the online catalog and available from the program instructor(s).

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Technical Certificate

38 Credits

Semester 1

ENG 101	English Composition	3
MAT 108	Intermediate Algebra	3
RDS 101	Basic Radiation Protection Principles	5
RDS 102	Intermediate Radiation Protection Principles	5
RDS 103	Intermediate Radiation Protection Principles Lab	1

Semester 2

ESH 102	40-Hour OSHA HAZWOPER Training	1
REL 104	Communications in Radiological Safety	2
REL 107	Nuclear Components and Plant Systems	1
RDS 104	Advanced Radiation Protection Principles	5
RDS 104L	Advanced Radiation Protection Principles Lab	1
RDS 106	Basic Radiological Chemistry	1
RDS 109	Nuclear Regulatory Practices	1
PSY 101	Introduction to Psychology	3 OR
SOC 101	Introduction to Sociology	3

Summer Term

RDS 111	Supervised Work Experience	6
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