## **Health Physics and Radiation Science**

**How** do we ensure the safety of scientists and technologists while working with radiation in medical research, health care, and nuclear science?

How do we ensure the safe operation of nuclear power plants?

How do we ensure regulations of industries in the presence of radiation?

**How** can radiation scientists contribute to space exploration where there is radiation?

**How** can we protect the environment and people from any harmful effects of radiation, relative to the background radiation that naturally exists?

How can radiation scientists contribute to national security?

**How** can radiation scientists contribute to fighting the pandemic and pathogens?

You'll learn fundamental radiation science, technological methods and applications, and prepare for a successful and rewarding career in this multidisciplinary field.

Gain real-world experience with a co-op and/or internship placement, and experiential learning in our labs.

Study advanced science for radiation protection of humans and the environment, as well as the safe application of radiation technologies in science, health care and the regulatory requirements.



## What will I study?

- Environmental Effects of Radiation
- Industrial Applications and Radiation Techniques
- Medical Imaging
- Nuclear Physics
- Radiation Biophysics and Dosimetry

- Radiation Detection and Measurement
- Radioisotopes and Radiation Machines
- Therapeutic Applications of Radiation Techniques

## What can i do with my degree?

- Environmental radiation monitoring and safety
- Non-destructive material testing
- Radiation applications in health-care
- Radiation protection
  - nuclear power plants and installations
  - nuclear waste management
  - regulation and compliance
  - resource extraction and mining

- Work in industrial applications of radiation
- Work internationally in both nuclear power and non-power applications of radiation technologies

## Want more information?

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