

What is Nuclear Engineering?

Nuclear engineering is not just about power plants. Nuclear engineers design, build and operate complex systems involving radiation and/or radioactive materials.

Employment opportunities in the field include: national laboratories; universities; federal agencies (NASA, Department of Energy, Nuclear Regulatory Commission, etc.); nuclear utilities; reactor and nuclear fuel vendors; and private consulting.

As a nuclear engineer, you may:

- Develop new ways to recycle spent fuel from nuclear reactors
- Develop new ways to use radioisotopes for medical diagnostics and therapy
- Enhance oil and gas exploration with radioisotopes
- Improve medical imaging
- Improve food safety, using radiation pasteurization
- Develop steady-state and pulsed-power plasma systems
- Design and build power systems for space exploration and propulsion
- Develop arms control and non-proliferation strategies
- Design, build, and operate nuclear power plants