The nuclear industry expanded rapidly in the 1960s and early 1970s and during that time hired thousands of engineers and scientists. Those people are now approaching retirement age, and the nuclear industry needs to replace them. Electric utilities, national laboratories and government regulatory agencies need both nuclear engineers and scientists and engineers in other fields who also have some knowledge of nuclear technology. Because so many senior people are retiring, there will be many opportunities for rapid advancement in the nuclear industry over the next several years. Ohio State now offers an undergraduate minor in Nuclear Engineering to provide students with the knowledge and skills they will need for many entry-level positions in the nuclear industry.

The undergraduate minor in Nuclear Engineering requires two core courses and two additional courses selected from a list of options.

*Some courses in this minor may have pre-requisites. Please consult the course bulletin before enrolling in courses.

Required course
- NUCLREN 4505 Nuclear Science and Engineering
- NUCLREN 4536 Nuclear Reactor Systems

Additional courses (at least 6 credit hours are required)
- NUCLREN 4506 Undergraduate Nuclear Engineering Lab.
- NUCLREN 4701 Intro to Reactor Physics
- NUCLREN 5606 Radiation Protection and Shielding
- NUCLREN 5610 Reactor Safety
- NUCLREN 5716 Probabilistic Risk Assessment
- NUCLREN 5735 Nuclear Power Plant Operations
- NUCLREN 5742 Nuclear Radiations and Their Measurements
- NUCLREN 5776 Radioactive Waste Mgt./Nuclear Fuel Cycles
- NUCLREN 6537 Nuclear Reactor Thermal Hydraulics
- NUCLREN 6708 Reactor Theory
- NUCLREN 6725 Reactor Dynamics*
- NUCLREN 6726 Reactor Dynamics Laboratory*

*With permission of instructor. If NUCLREN 6725 and NUCLREN 6726 are selected and approved, the student needs to take a total of five courses to satisfy the minimum requirement of 12 cr. hr.

Arts and Sciences minor program guidelines

Required for graduation: No

Credit hours required: A minimum of 12 credit hrs (some minors require more). 1000 level courses shall not be counted toward the 12 credit hr minimum.

Transfer credit hours allowed: No more than one half of the credit hours required on the minor.

Overlap with the GEC: Permitted, unless specifically disallowed by an individual minor program.

Overlap with the major: Not allowed and
- The minor must be in a different subject than the major.
- The same courses cannot count on the minor and on the major.

Overlap between minors: Each minor completed must contain 12 unique hours.

Grades required
- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative point-hour ratio required for the minor.
- Course work graded Pass/Non-Pass cannot count on the minor.

Minor Approval: The minor program description sheet indicates if the minor course work must be approved by:
- The academic unit offering the minor, or
- A college/school counselor.

Filing the minor program form: The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor: Once the minor program is filed in the college office, any changes must be approved by:
- The academic unit offering the minor, or
- A college/school counselor (depending on the minor).