The Ohio State University  
College of Engineering

Nuclear Engineering Minor (NUCLREN-MN)

Nuclear Engineering Program  
Department of Mechanical and Aerospace Engineering  
Scott Lab, 201 W. 19th Ave., Columbus, OH 43210  
http://nuclear.osu.edu  
Advising information: Dr. Raymond Cao; cao.152@osu.edu

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 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 one core course and three 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

**Additional courses (at least 9 credit hours are required)**  
NUCLREN 4506 Undergraduate Nuclear Engineering Lab.  
NUCLREN 4536 Nuclear Reactor Systems  
NUCLREN 5606 Radiation Protection and Shielding  
NUCLREN 5610 Reactor Safety  
NUCLREN 5735 Nuclear Power Plant Operations  
NUCLREN 5742 Nuclear Radiations and Their Measurements  
NUCLREN 5776 Nuclear Fuel Cycle and Radioactive Waste Management

**Nuclear Engineering minor program guidelines**

**Credit Hours Required** A minimum of 12 credit hrs. 1000 level courses shall not be counted in the minor. At least 6 cr hrs need to be at the 3000 level or above.

**Transfer and EM Credit Hours Allowed** A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination toward the minor.

**Overlap with the GE** A student is permitted to overlap up to 6 cr hrs between the GE and the minor.

**Overlap with the Major and Additional Minor(s)**
- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minors.

**Grades Required**
- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 cr hrs of course work graded Satisfactory/Unsatisfactory may count towards the minor.

**X193 Credits** No more than 3 cr hrs

**Minor Approval** The minor course work must be approved by the faculty advisor of the academic unit offering the minor.

**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 advisor.

**Changing the minor** Once the minor program is filed in the college office, any changes must be approved by the faculty advisor of the academic unit offering the minor.

College of Arts and Sciences  
Curriculum and Assessment Services  
306 Dulles Hall, 230 Annie & John Glenn Ave.  
http://artsandsciences.osu.edu

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