

Nuclear Engineering (14NEM)

Description

The minor in Nuclear Engineering is intended to allow engineering students to develop an understanding of the fundamental concepts and practices of nuclear engineering. It is designed to provide students with the essentials necessary for employment in nuclear- related fields. Students considering advanced study should also benefit from the minor in nuclear engineering.

Requirements

- Complete a minimum of 16 credit hours of NE designated courses.
- All courses must be completed with a grade of 'C-' or higher.

Required Courses

- NE 201 Introduction to Nuclear Engineering (2cr)
- NE 202 Radiation Sources, Interaction and Detection (4cr)
- NE 301 Fundamentals of Nuclear Engineering (4cr)

Elective Courses

- NE 400 Nuclear Reactor Energy Conversion 2 (4cr)
- NE 401 Reactor Analysis and Design (4cr)
- NE 402 Reactor Engineering (4cr)
- NE 404/504 Radiation Safety and Shielding (3cr)
- NE 409/509 Nuclear Materials (4cr)
- NE 412/512 Nuclear Fuel Cycles (3cr)
- NE 528 Introduction to Plasma Physics and Fusion Energy (3cr)

1 At the Director's discretion, he can substitute a course for one of the electives listed.

2 Mechanical Engineering majors may present MAE 310 as the NE 400 prerequisite for NE 402. The other prerequisite NE 401 is still needed.

Admissions and Certification of Minor

Students are to contact Dr. J. Michael Doster, Director of Undergraduate Programs (2107 Burlington Engineering Laboratories, 919.515.3658, doster@ncsu.edu) to discuss their plan of study. Dr. Doster will also certify completion of the student's minor program. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program. Paperwork for certification should be completed no later than during the registration period for the student's final semester at NC State.

Contact Person

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SIS Code: 14NEM