NUCLEAR AND RADIOLOGICAL ENGINEERING MINOR

This minor is for students interested in careers related to nuclear and radiological engineering, usually as a complement to a major in another engineering discipline or physical science. In addition to the areas of power generation and national security, nuclear engineering knowledge and skills are critical in nuclear medicine, radiation imaging, petroleum applications, and non-destructive testing.

About this Program

- **College**: Herbert Wertheim College of Engineering (http://catalog.ufl.edu/UGRD/colleges-schools/UGENG/)
- **Credits**: 15 | Completed with minimum grades of C

Department Information

The Department of Materials Science and Engineering strives to serve the scientific and engineering community of the state and nation by providing quality education in the field, conducting basic and applied research to enhance science in the field, and supplying short courses, technology transfer, industrial consulting, and distance learning to promote engineering in the field.

Website (https://mse.ufl.edu/)

CONTACT

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GAINESVILLE FL 32611-6400
Map (http://campusmap.ufl.edu/#/index/0184)

Curriculum

- Advanced Engineering Ceramics Certificate
- Biomaterials Certificate
- Combination Degrees
- Materials Science and Engineering
- Materials Science and Engineering Minor
- Metallurgical Engineering Certificate
- Nuclear and Radiological Engineering Minor
- Nuclear Engineering
- Polymer Science and Engineering Certificate
- Semiconductor Materials Certificate

Upon completion of the minor, students will have a broad background in nuclear engineering, including mathematics/computation, radiation sources, the interaction of radiation with matter, reactor analysis (neutronics), and radiation detection/instrumentation. Students will be capable of performing engineering analysis and design in areas relevant to nuclear engineering, or to pursue graduate student in nuclear engineering or a closely related field.

Prerequisite

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<tr>
<th>Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>MAP 2302</td>
<td>Elementary Differential Equations</td>
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Required Courses

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<tr>
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<tr>
<td>ENU 4001</td>
<td>Nuclear Engineering Analysis 1</td>
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<tr>
<td>ENU 4103</td>
<td>Reactor Analysis and Computation 1: Statics</td>
<td>4</td>
</tr>
<tr>
<td>ENU 4605</td>
<td>Radiation Interactions and Sources 1</td>
<td>4</td>
</tr>
<tr>
<td>ENU 4612</td>
<td>Nuclear Radiation Detection and Instrumentation</td>
<td>3</td>
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Total Credits: 15