

NUCLEAR RADIATION AND REACTOR ANALYSIS CERTIFICATE

The Nuclear Radiation and Reactor Analysis certificate provides a foundation in radiation and reactor concepts for engineers across multiple majors and industries. The certificate's prerequisites and courses promote nuclear engineering education across a numerous engineering disciplines.

About this Program

- **College:** Herbert Wertheim College of Engineering (<http://catalog.ufl.edu/UGRD/colleges-schools/UGENG/>)
- **Credits:** 11 | Completed with minimum grades of C

Certificates must contain at least nine credits of coursework that are unique to that program out of all other certificates and minors.

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/>)

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Map (<http://campusmap.ufl.edu/#/index/0184>)

Curriculum

- /UGRD/colleges-schools/UGENG/NRA_BS/
- 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
- Nuclear Radiation and Reactor Analysis Certificate
- Nuclear Thermal Systems Analysis Certificate
- Polymer Science and Engineering Certificate
- Semiconductor Materials Certificate

Prerequisites

Code	Title	Credits
CHM 2045 or CHM 2095	General Chemistry 1 Chemistry for Engineers 1	3
CHM 2046 or CHM 2096	General Chemistry 2 Chemistry for Engineers 2	3
MAC 2311	Analytic Geometry and Calculus 1	4
MAC 2312	Analytic Geometry and Calculus 2	4
MAC 2313	Analytic Geometry and Calculus 3	4
PHY 2048	Physics with Calculus 1	3
PHY 2049	Physics with Calculus 2	3
MAP 4305	Differential Equations for Engineers and Physical Scientists	3

Required Courses

Code	Title	Credits
ENU 4103	Reactor Analysis and Computation 1: Statics	4
ENU 4605	Radiation Interactions and Sources 1	4

ENU 4612	Nuclear Radiation Detection and Instrumentation	3
Total Credits		11
