

NUCLEAR ENGINEERING MATERIALS, CERTIFICATE

REQUIREMENTS

Code	Title	Credits
Required courses (4 credits - must be taken for a letter grade)		
N E/M S & E 423	Nuclear Engineering Materials ¹	3
N E 424	Nuclear Materials Laboratory	1
Elective courses (minimum 12 credits - must be taken for a letter grade)		
CIV ENGR 445	Steel Structures I	3
CIV ENGR 447	Concrete Structures I	3
E M A 303	Mechanics of Materials	3
M S & E 330	Thermodynamics of Materials	4
M S & E 352	Materials Science-Transformation of Solids	3
M S & E/N E 433	Principles of Corrosion	3
M S & E 460	Introduction to Computational Materials Science and Engineering	3
M S & E/M E 462	Welding Metallurgy	3
M S & E 463	Materials for Elevated Temperature Service	3
M S & E 570	Properties of Solid Surfaces	3
N E 541	Radiation Damage in Metals	3
N E 545	Materials Degradation in Advanced Nuclear Reactor Environments	3

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Because M S & E 350 Introduction to Materials Science or M S & E 351 Materials Science-Structure and Property Relations in Solids are prerequisites for N E/M S & E 423 Nuclear Engineering Materials, students are expected to take one of the two of these courses as prerequisites for the certificate.

CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.