

# NANOMATERIALS MINOR

This minor exposes non-Materials Science and Engineering students to the fundamentals and applications of nanoscale materials. This includes synthesis and characterization techniques, nano-device fabrication methods, testing and applications, and underlying Materials Science and Engineering, physics and chemistry principles. Content in this fast developing area is frequently based on recent progress and reports documentation in the nanoscience and nanotechnology disciplines, and is extensively interdisciplinary.

## Requirements

The minor requires the completion of 15 credits including as follows:

- Application for the Nanomaterials Minor two semesters before graduation
- An approved Plan of Study one semester before graduation
- Group I - Required Courses

| Course      | Title   | Credits |
|-------------|---|---------|
| MSE 2001    | Introduction to Structure, Properties, and Processing of Materials I  | 3       |
| or MSE 2101 | Materials Science and Engineering I                                   |         |
| MSE 2002    | Introduction to Structure, Properties, and Processing of Materials II | 3       |
| or MSE 2102 | Materials Science and Engineering II                                  |         |

- Group II - Nine credits selected from the following courses:

| Course    | Title   | Credits |
|-----------|---|---------|
| MSE 4001  | Electrical and Magnetic Properties of Materials   | 3       |
| MSE 4240  | Nanomaterials Synthesis and Design  | 3       |
| MSE 4241  |   | 3       |
| ENGR 3195 | Special Topics in Engineering (if related to nanomaterials, subject to approval by Minor advisor)                       | 1-6     |
| MSE 4095  | Special Topics in Materials Science and Engineering (if related to nanomaterials, subject to approval by Minor advisor) | 1-3     |

**Note:** Group II courses cannot be simultaneously used towards multiple minors, e.g. the Materials Science and Engineering Minor and the Nanomaterials Minor.

This minor is offered by the Materials Science and Engineering Department. For more information, contact the MSE Office 860-486-4620 or mseinfo@engr.uconn.edu.