

NANOSCALE SCIENCE AND TECHNOLOGY MINOR

Maryland NanoCenter

Kim Engineering Building

<http://nanocenter.umd.edu/education/nano-minor/>

Program Director: Ray Phaneuf, Ph.D.

Continued growth in the field of nanometer scale science and technology (NS&T) has led in the past several years to many technological advances in devices and materials structured at the nanometer scale. The Interdisciplinary Minor Program of Study in Nanoscience and Technology is intended to prepare participating students for a career in this rapidly developing field. This program draws upon the considerable expertise in nanoscience at the University of Maryland, in departments distributed among two schools: The Clark School of Engineering, and the College of Computer, Mathematics and Natural Sciences. Students take courses in Fabrication/Synthesis and Characterization, which emphasize the experimental side of NS&T, as well as Fundamental Science and Specialization Electives, which teach the underlying principles and directions, and include underlying theory and the motivations for NS&T.

Visit the website <http://mse.umd.edu/undergraduate/degrees/minor-nano/> for more information.

REQUIREMENTS

- The minor requirement will consist of a total of five courses (at least 15 credits).
- At least two of the courses (6 credits) must be from the list of NanoFabrication/Nanosynthesis and/or NanoCharacterization electives.
- At least two of the courses (6 credits) must be from the list of Fundamental Science and/or Nanoscience Electives. At least one of these must be listed as a NanoApplication / Specialization elective.
- Up to two courses (6 credits) may be double counted, i.e. used both toward satisfying the requirements of the major and the NS&T minor.
- Three of the courses (9 credits) must be from outside the individual major. Cross listed courses (e.g. ENMA460/PHYS431) which are offered by the major department do not qualify as being outside the major.
- At least three of the courses (9 credits) must be at the 400 level or above.
- No more than two courses (6 credits) from any one department will be credited toward the NS&T minor.
- A grade of "C-" or above is required in all courses to be credited toward the NS&T minor.
- Students wishing to participate in the NS&T minor must declare participation formally. Declaration of participation in the NS&T minor must follow a meeting with the individual department representative to the NS&T committee who will help the student develop a program of courses suitable for the minor and a schedule for taking those courses. Students from outside participating departments will consult with one of the MSE representatives to develop a program of courses and declare participation.