



# ENGINEERING ONLINE

NC STATE UNIVERSITY

## Master of Materials Science and Engineering

The Master of Materials Science and Engineering (MME) is designed for students with an undergraduate degree in an engineering discipline who wish to pursue a graduate degree in materials science and engineering. The strengths of the NC State program include nanostructured and thin film materials.

### Admission Requirements

The minimum requirements for admissions to the graduate degree program in Materials Engineering are as follows:

- A bachelor's degree from an accredited college or university in an engineering discipline with an overall grade point average of 3.0.
- The Graduate School requires that all international applicants take the TOEFL or IELTS examination unless they have completed one year of study at a university in the U.S., Canada, or Great Britain. The exam must have been taken within two years of receipt of application.
- GRE scores are recommended but not required.
- Three letters of recommendation from persons able to comment on the applicant's qualifications for graduate study.
- Online application form can be found at <http://www2.acs.ncsu.edu/grad/applygrad.htm>

### Degree Requirements

- Completion of 30 graduate hours with an overall GPA of 3.0.
- Coursework must include 18-21 credit hours of materials science and engineering (MSE) courses.
- Remaining 9-12 credit hours can be taken from non-MSE engineering courses in the Engineering Online program.
- After a student has been admitted and enrolls for the first time, he/she is required to maintain continuous enrollment in each fall and spring semesters until completion of the degree program. A student in good academic standing may request a leave of absence for good reasons from the Director of Graduate Programs in MSE. The leave absolutely may not exceed two semesters.
- No thesis or on-campus residency required.

### Course Registration

Students must register for online courses through Engineering Online at <http://EngineeringOnline.ncsu.edu>. Click on the "Registration" link. Students cannot register through the university's Pack Tracks registration system for an online course in engineering.

A person does not have to be admitted to a degree program to enroll in an online credit course. Prior to applying to Graduate School, a qualified individual may enroll in Engineering Online courses as a Post-Baccalaureate Studies (PBS) student. The PBS classification is designed for individuals who wish to undertake academic work beyond the baccalaureate degree but who are not currently admitted to a degree program. If the student is admitted to the MSCHE program, a maximum of twelve PBS credit hours may apply toward the 30 credit hour requirement if the student earns the grade of B or higher in each course and not a B- grade.

## Course Offerings

A list of distance education courses available for each semester can be found on the Engineering Online website at <http://EngineeringOnline.ncsu.edu>. Full-time employed individuals can only enroll in two online courses per semester. It is highly recommended that new students enroll in only one online course during their first semester.

The following courses will be available through the Engineering Online program in various semesters.

MSE 500 Modern Concepts in Materials Science  
MSE 509 Nuclear Materials  
MSE 540 Processing of Metallic Materials  
MSE 556 Composite Materials  
MSE 702 Defects in Solids  
MSE 705 Mechanical Behavior of Engineering Materials  
MSE 708 Thermodynamics of Materials  
MSE 741 Principles of Corrosion  
MSE 760 Materials Science in Processing of Semiconductor Devices  
MSE 770 Defects, Diffusion and Ion Implementation

## Course Logistics

Online courses are the same as on campus courses in terms of content, requirements and academic rigor. On-campus class lectures are captured, digitized and placed on the Internet for distance students to access at any time and from any location without a firewall problem. Students must, however, follow the on-campus class schedule in terms of submitting homework and taking exams. Course assignments, lecture notes, and handouts are made available to distance students on the course website. All in-class exams must be proctored.

## Contact Information

For more information about the MSMSE degree program available online, contact:

- Dr. Ronald Scattergood, Director of Graduate Programs  
Department of Materials Science and Engineering  
Telephone: 919.515.7843  
Email: Ron\_Scattergood@ncsu.edu
- For more information about the registration process and course offerings, contact:

Dr. Linda Krute, Director  
Engineering Online  
Telephone: 919.515.5440  
Email: Linda\_Krute@ncsu.edu