



ENGINEERING ONLINE

NC STATE UNIVERSITY

Master of Materials Science and Engineering

Program Overview

The Master of Materials Science and Engineering (MMSE) distance education program is designed for students with an undergraduate degree in an engineering discipline who wish to pursue a graduate degree in materials science and engineering. It is a 30 credit hour degree program that does not require a thesis, final oral exam or on-campus residency. GRE scores are recommended but not required. 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 Science and 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.
- You can find out more about the admission requirements at <http://www.mse.ncsu.edu/grads/apply>.

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.
- The 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 semester 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.
- You can find out more about the degree requirements at <http://www.mse.ncsu.edu/grads/requirements>.

Course Registration

It is preferable to seek admission to the MMSE program as soon as possible to assure integration into the advising process. However, 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 Non-Degree Studies (NDS) student. The NDS classification is designed for individuals who wish to undertake academic work but

who are not currently admitted to a degree program. If the student is admitted to the MMSE program, a maximum of twelve hours taken as a NDS student or from another institution may apply toward the 30 credit hour requirement. Students register for online courses through Engineering Online. Those who wish to take only a few courses and not pursue a degree do not need to apply for formal program admission to NC State University. However, students who wish to earn the MMSE degree must formally apply for admission to the Graduate School at <http://www.ncsu.edu/grad>. When completing the online application, please be sure to select the "Distance Track" version of the degree.

To register for an Engineering Online course, complete the registration form on the Engineering Online website at <http://engineeringonline.ncsu.edu> by clicking on "Registration". Students cannot register through the University MyPack Portal system for Engineering Online courses.

Course Offerings

A list of distance education courses available for each semester can be found on the Engineering Online website. Full-time employed individuals may only enroll in two online courses per semester. It is highly recommended that new students enroll in only one 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

For a list of distance education courses approved for the fall, spring or summer semester, visit the Engineering Online web site at <http://engineeringonline.ncsu.edu>.

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. 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 MMSE program available online, contact:

Dr. Ronald Scattergood, Director of Graduate Programs
Department of Materials Science and Engineering
Telephone: 919.515.7843
Email: scatterg@ncsu.edu
Department website <http://www.mse.ncsu.edu>

- For more information about the registration process, course offerings and course logistics, contact:

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