



SOFTWARE ENGINEERING

MASTER OF SCIENCE

ONLINE EDUCATION AND FACE-TO-FACE

Software engineering is an emerging, interdisciplinary field that combines the disciplines of computer science and engineering. The Master of Science in Software Engineering (M.S.S.E.) program prepares students to specify, implement, and manage large software system projects using best practices. The program will focus on meeting the career development needs of professionals practicing in fields related to software systems. The M.S.S.E. program of study requires the completion of 30 semester hours (SH) of courses: 24 SH of required courses and 6 SH of electives.

| Required (Core) Courses (24 SH) | Electives (Select 6 SH from this list.) |
|---|--|
| SENG 6200 Software Project Management SENG 6230 Introduction to Software Engineering SENG 6240 Software Architecture and Design SENG 6250 Software Systems Modeling and Analysis SENG 6260 Software Metrics and Quality Management SENG 6270 Software Verification and Validation SENG 6280 Process Management and Lifecycle Modeling SENG 6290 Software Engineering Project | CSCI 6130 Networking and Telecommunications CSCI 6710 Developing e-Commerce Systems CSCI 6905 Mobile Communications DTEC 6823 Information Security Management DTEC 6878 Legal and Ethical Issues in Information Technology |

ADMISSION REQUIREMENTS

Applicants must meet the admission requirements of the ECU Graduate School. Acceptance to the Master of Science in software engineering is based on satisfactory undergraduate grades, scores on either the Miller Analogy Test or the Graduate Record Examinations, and letters of reference. Applicants whose native language is not English must additionally submit a satisfactory score on the Test of English as a Foreign Language. Completion of an undergraduate degree in computer science, software engineering, computer engineering, electrical engineering, information systems, or a related discipline is recommended for admission. Students from other disciplines and applicants with limited technical expertise are evaluated on a case-by-case basis by the program admissions committee. This committee comprises the program coordinator and a faculty member from both participating departments. In some cases, remedial undergraduate courses or additional graduate courses will be required as a precondition for admission. Students in the program are required to have fully functional computer hardware and full Internet connectivity.

ADMISSION PROCEDURE

The M.S.S.E. program will begin the spring semester of 2008. For information about how to apply for admission to this program visit the ECU Graduate School website (<http://www.ecu.edu/gradschool/>). To obtain more information about the M.S.S.E. program contact Dr. Tabrizi or Dr. Placer. Contact information is given below.

According to a 2003 report prepared for the University of North Carolina Office of the President, employment growth in software engineering should increase over 70% between 2000 and 2010. Analyzing the need for various engineering professions in North Carolina the report identified software engineering as the fastest growing field in North Carolina. Offering a Master of Science in Software Engineering through distance education provides opportunities for working professionals to continue their education in a technical area with high employment potential. Courses are offered using a variety of Internet-based tools.

For more information contact:

Dr. John Placer
Chair of Computer Science
C-122 Science and Technology Complex
East Carolina University, Greenville, NC 27858
252-328-9680
placerj@ecu.edu

Dr. M. Tabrizi
Professor of Computer Science
C-110 Science and Technology Complex
East Carolina University, Greenville, NC 27858
252-328-9691
tabrizim@ecu.edu