

# Master of Science in Software Engineering

## INTRODUCTION

The Master of Science in Software Engineering (MSSE) program is the first of its kind in Ohio. It is a joint, interdisciplinary program between the College of Engineering's Department of Electrical and Computer Engineering and the College of Business Administration's Department of Computer and Information Science. The program introduces students to current and best practices in the engineering of software systems.

## PROGRAM DESCRIPTION

The program is intended for both practicing professionals, as well as full-time students in the areas of software engineering, computer engineering, electrical engineering, computer science, or information management. A distinguishing feature is its emphasis on the quality, architecture, economics, and management aspects of software engineering. Students take a project from start to completion, learning the requirements of specific deliverables and the development life cycle. Critical management issues, such as risk assessment, project planning, and market analysis, are also covered. The program exposes students to new technological developments in an advancing field and how to apply their knowledge in the workplace. Graduates meet the demands of industry and address the needs of information technology professionals in

general, and software engineers in particular. The Electrical and Computer Engineering Department and the Computer and Information Science Department have several state-of-the-art instructional laboratories.



## RESEARCH

All full-time faculty hold doctoral degrees and have extensive experience in the field. They are engaged in research in several areas suitable for student theses and dissertations. These include software design, component-based software development, middleware systems, embedded software, wireless computing, software quality assurance, data mining, mobile computing, fault-tolerant computing, computer and network security, distributed computing, algorithm design and analysis, object-oriented development, and multimedia computing. Results of research in these areas are published regularly in referred journals, such as transactions of IEEE, and are presented at scholarly conferences and symposia.

## DEGREE REQUIREMENTS

The MSSE program is planned around a core of required topics and a number of technical electives. All students must complete the 16 credit hour core courses. Students may elect a thesis option or a non-thesis option. Thesis option students are required to take 28 credit hours of course work and 6 hours of thesis, for a total of 34 credit hours. Non-thesis option students are required to take 32 credit hours of course work and 4 credit hours of Software Engineering Project (EEC 626), for a total of 36 credit hours.

### For admission information contact:

Cleveland State University  
Graduate Admissions Office  
2121 Euclid Ave.

Cleveland, OH 44115

(216) 687-5599

[www.csuohio.edu/gradcollege/](http://www.csuohio.edu/gradcollege/)

### For program information, contact:

Department of Electrical and  
Computer Engineering  
Stilwell Hall 332

(216) 687-2589

Website:

<http://graduatestudies.csuohio.edu/catalog/?View=entry&EntryID=260>