

Master of Science in Software Engineering	
REQUIREMENTS: 42 Credits	Credits
<p><b>FOUNDATION COURSES: (a)</b></p> <p>CS-501B: Program Development 3.0</p> <p>CS-503: Data Structures and Algorithms 3.0</p> <p>SE-504: Principles of Software Engineering 3.0</p> <p>SE-510: Object-Oriented Analysis and Design 3.0</p> <p><b>CORE COURSES:</b></p> <p>SE-565: Software Systems Requirements 3.0</p> <p>SE-570: Software Systems Design 3.0</p> <p>SE-575: Software Verification, Validation and Maintenance 3.0</p> <p>SE-580: The Process of Engineering Software 3.0</p> <p><b>ELECTIVE COURSES:</b></p> <p>Take 12 Elective Credits from the Following Courses: 12.0</p> <p>SE-601: Outsourcing: Specifications and Strategies</p> <p>SE-602: Technology Assessment</p> <p>SE-603: MOST Implementation</p> <p>SE-605: Software Implementation and Reuse</p> <p>SE-610: Software Systems Security</p> <p>SE-611: Secure Web Services Design</p> <p>SE-615: Usability Engineering/Human-Computer Interaction</p> <p>SE-616: Extensible Markup Language (XML)</p> <p>SE-620: Networked Software Systems I</p> <p>SE-621: Networked Software Systems II</p> <p>SE-625: Information Systems Architecture</p> <p>SE-626: Information Systems Engineering</p> <p>SE-630: Real Time Software Analysis and Specification</p> <p>SE-631: Real-Time Software Design and Implementation</p> <p>SE-650: Software Project Management</p> <p>SE-651: Software Organization Management</p> <p>SE-652: Software Quality Management</p> <p>SE-660: Computer System Architecture</p> <p>SE-699: Individual Research Project in Software Eng.</p> <p>CS-514: Networks</p> <p>CS-517: Database Design and Management</p> <p>Choose Practicum or Thesis: 6.0</p> <p>SE-695A: Software Engineering Practicum</p> <p>SE-695B: Software Engineering Practicum</p> <p><b>*OR*</b></p> <p>SE-691: Software Engineering Thesis Research</p> <p>SE-692: Software Engineering Thesis Research</p>	

**TOTAL CREDITS FOR MASTER OF SCIENCE IN SOFTWARE ENGINEERING = 42.0**

**(a) Up to 12 credits of Foundation Courses may be waived upon evaluation of prior academic preparation in Computer Science and Software Engineering**