

Master of Science in Software Engineering	
FOUNDATION COURSES: 12 Credits (a)	Credits
CS-501B: Program Development	3.0
CS-503: Data Structures and Algorithms	3.0
SE-504: Principles of Software Engineering	3.0
SE-510: Object-Oriented Analysis and Design	3.0
CORE COURSES: 30 Credits	Credits
SE-565: Software Systems Requirements	3.0
SE-570: Software Systems Design	3.0
SE-575: Software Verification, Validation and Maintenance	3.0
SE-580: The Process of Engineering Software	3.0
<b>ELECTIVE COURSES:</b>	
Take 12 Elective Credits from the Following Courses:	12.0
SE-601: Outsourcing: Specifications and Strategies	
SE-602: Technology Assessment	
SE-603: MOST Implementation	
SE-605: Software Implementation and Reuse	
SE-610: Software Systems Security	
SE-611: Secure Web Services Design	
SE-615: Usability Engineering/Human-Computer Interaction	
SE-616: Extensible Markup Language (XML)	
SE-620: Networked Software Systems I	
SE-621: Networked Software Systems II	
SE-625: Information Systems Architecture	
SE-626: Information Systems Engineering	
SE-630: Real Time Software Analysis and Specification	
SE-631: Real-Time Software Design and Implementation	
SE-650: Software Project Management	
SE-651: Software Organization Management	
SE-652: Software Quality Management	
SE-660: Computer System Architecture	
SE-699: Individual Research Project in Software Eng.	
CS-514: Networks	
CS-517: Database Design and Management	
<b>Practicum or Thesis:</b>	6.0
SE-695A: Software Engineering Practicum	
SE-695B: Software Engineering Practicum	
<b>*OR*</b>	
SE-691: Software Engineering Thesis Research	
SE-692: Software Engineering Thesis Research	

**Minimum 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