M.S. IN SOFTWARE ENGINEERING, NON-THESIS TRACK

Code	Title	Credits
Requirements (22.5 credits)		
Foundation Courses [1]		
CS-501B	Program Development	3
CS-503	Data Structures and Algorithms	3
SE-505	Principles of Software Engineering	1.5
SE-511	Object-Oriented Analysis	1.5
SE-512	Object-Oriented Design	1.5
Core Courses		
SE-565	Software System Requirements	3
SE-571	Software Design and Systems Architecture	1.5
SE-572	Enterprise and Global Architecture	1.5
SE-575	Software Verification, Validation and Maintenance	3
SE-580	The Process of Engineering Software	3
Electives (12 credits)		
Select four of the following:		12
SE-601	Outsourcing: Specifications and Strategies	
SE-602	Technology Assessment	
SE-603	MOST Implementation	
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	
	Software Engineering 600-Level Independent Study	
CS-514	Networks	
CS-517	Database Design and Management	
Practicum (6 credits)		
SE-695A	Software Engineering Practicum	3
SE-695B	Software Engineering Practicum	3
Total Credits		40.5

[1] *Up to 10.5 credits of Foundation Courses may be waived upon evaluation of prior academic preparation in Computer Science and Software Engineering*

Admission Requirements

1. Possession of a baccalaureate degree in software engineering, computer science, computer engineering, or another engineering-related discipline with a 2.75 overall GPA and a 3.0 GPA in the undergraduate major. Candidates whose major is not computer science or a related field may be admitted on a case-by-case basis.

2. Demonstrate completed course work in computer programming, data structures and algorithms, operating systems, discrete mathematics, and software engineering. Applicants who have not completed course work in these areas will be required to complete preparatory/foundation courses as necessary. (Only foundation coursework will be applied towards the MS degree.) Students must earn a grade of "B-" or better in each of these courses.

3. Thesis track students must hold a bachelor's degree in software engineering from a college or university accredited by its regional accrediting agency.

MONMOUTH UNIVERSITY CURRICULUM CHART