West Long Branch, NJ 07764 - 1898

| Master of Science in Software Engineering - Thesis Track |   |                                 |
|--|---|---------------------------------|
| CORE COURSES:  | 15 Credits  | Credits                         |
|  | SE561: Mathematical Foundations of Software Engineering SE565: Software Systems Requirements SE570: Software System Design SE575: Software Verification, Validation & Maintenance SE580: The Process of Engineering Software    | 3.0<br>3.0<br>3.0<br>3.0<br>3.0 |
| ELECTIVES: 12 C  | redits  | Credits                         |
| Choose   | Two pairs of guided electives from among  | 12.0                            |
| and  | SE601: Outsourcing: Specifications and Strategies<br>SE602: Technology Assessment   |                                 |
| and  | SE620: Network Software Systems I<br>SE621: Network Software Systems II   |                                 |
| and  | SE625: Information Systems Architecture<br>SE626: Information Systems Engineering   |                                 |
| and  | SE630: Real-Time Software Analysis and Specification SE631: Real-Time Software Design and Implementation  |                                 |
| and  | SE637: Wireless Communications<br>SE638: Communications Systems   |                                 |
| and  | SE650: Software Project Management<br>SE651: Software Organization Management   |                                 |
| ELECTIVES: 6 Credits                                     |   | Credits                         |
| Choose   | Two guided electives (6 credits) from among:<br>SE601, SE602, SE603, SE605, SE610, SE611, SE615, SE620,<br>SE625, SE626, SE630, SE631, SE637, SE638, SE650, SE651,<br>SE652, SE660, SE698, SE699, CS514, CS517,<br>CS533, BM565 | 6.0                             |
| THESIS: 6 Credits  |   | Credits                         |
| and  | Two Semester Thesis:<br>SE690A: Thesis Research<br>SE690B: Thesis Research  | 3.0<br>3.0                      |

## NOTE:

TOTAL CREDITS FOR MASTER OF SCIENCE IN SOFTWARE ENGINEERING -THESIS TRACK = 39.0

This track is open only to students with an undergraduate degree in Software Engineering.

<sup>\*\*</sup> Up to 9 credits of core courses can be waived if equivalent courses have been completed as part of the students Bachelor of Science in Software Engineering Program.