Master of Science in Software Engineering - Thesis Track

**REQUIREMENTS: Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SE561: Mathematical Foundations of Software Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>SE565: Software Systems Requirements</td>
<td>3.0</td>
</tr>
<tr>
<td>SE570: Software System Design</td>
<td>3.0</td>
</tr>
<tr>
<td>SE575: Software Verification, Validation &amp; Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>SE580: The Process of Engineering Software</td>
<td>3.0</td>
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**REQUIREMENTS: Guided Electives**

Choose ONE SET of guided electives from among:

- SE601: Outsourcing: Specifications and Strategies
- SE602: Technology Assessment
- SE620: Network Software Systems I
- SE621: Network Software Systems II
- SE625: Information Systems Architecture
- SE626: Information Systems Engineering
- SE630: Real-Time Software Analysis and Specification
- SE631: Real-Time Software Design and Implementation
- SE637: Wireless Communications
- SE638: Communications Systems
- SE650: Software Project Management
- SE651: Software Organization Management

**REQUIREMENTS: Electives (a)**

Choose 3 credits from among:

- SE601, SE602, SE603, SE605, SE610, SE611, SE615, SE620,
- SE625, SE626, SE630, SE631, SE637, SE638, SE650, SE651,
- SE652, SE660, SE698, SE699, CS514, CS517, CS533, BM565

**REQUIREMENTS: Two Semester Thesis**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>SE691A: Thesis Research</td>
<td>3.0</td>
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<tr>
<td>SE692B: Thesis Research</td>
<td>3.0</td>
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</table>

(a) May substitute with an additional set of electives; consult with advisor.

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

*Up to 9 credits may be waived if equivalent courses have been completed as part of the students B.S. in Software Engineering Program

**NOTE:**
- This track is open only to students with an undergraduate degree in Software Engineering.