Graduate Resident Tuition: $224.65
University Support Fee: $93.80
General Activity Fee: $47.30
Discipline Fee: $80.00
includes: Science/Technology/Engineering/Atmospheric & Environmental Science, Chemistry, Geology/Nanoscience/Paleontology, Physics
Discipline Fee: $40.00
includes: Biology/Microbiology/Anatomy, Mathematics/Statistics
Other Sciences Discipline Fee (Geography): $20.00
Computer Science Discipline Fee: $45.00
Fine Arts Discipline Fee: $15.00

### Major Requirements (Thesis Option = 30 Credits)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Cr Hrs</th>
<th>Tuition &amp; Fees</th>
<th>Discipline Fee</th>
<th>Other Charges</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 515 (Introductions to Robotics)</td>
<td>4</td>
<td>$1,463.00</td>
<td>$180.00</td>
<td>-</td>
<td>$1,643.00</td>
</tr>
<tr>
<td>CSC 790 (Seminar)</td>
<td>2</td>
<td>$731.50</td>
<td>$90.00</td>
<td>-</td>
<td>$821.50</td>
</tr>
<tr>
<td>CSC 798 (Thesis research)</td>
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<td>$2,194.50</td>
<td>$270.00</td>
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<td>$2,464.50</td>
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</tbody>
</table>

Computer Science Specialization (complete at least 12 credits)
- CSC 510 - Parallel Computing
- CSC 512 - Cryptography
- CSC 514 - Computer Vision
- CSC 533 - Computer Graphics
- CSC 542 - Image Processing
- CSC 545 - Theory of Computation
- CSC 547 - Artificial Intelligence
- CSC 568 - Graphical User Interface Programming

OR
- Electrical Engineering/Computer Engineering Specialization (complete at least 12 credits)
- CENG 514 - Computer Vision
- CENG 544 - Computer Networks
- CENG 547 - Embedded Systems
- CENG 548 - Real-Time Operating Systems
- EE 552 – Robotic Control Systems
- EE 618 - Sensors and Signal Processing
- EE 651 - Digital Controls
- EE 624 - Advanced Digital Signal Processing
- EE 643 - Advanced Digital Systems

OR
- Mechanical Engineering Specialization (complete at least 12 credits)
- ME 683 - Advanced Mechanical System Control
- ME 673 - Applied Engineering Analysis I
- ME 773 - Applied Engineering Analysis II
- ME 781 - Industrial Robotics

OR
- Mathematics Specialization (complete at least 12 credits)
- Math 543 - Data Analysis
- Math 547 - Design of Experiments
- Math 551 - Mathematical Modeling
- Math 552 - Advanced Studies in Math

Total Electives Selected by the Student & Advisor: 6
Total Specialization Credits Required: 12
Total Major Requirements Thesis Option: 30

<table>
<thead>
<tr>
<th>Tuition &amp; Fees</th>
<th>Discipline Fee</th>
<th>Other Charges</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,972.50</td>
<td>$1,980.00</td>
<td>-</td>
<td>$12,952.50</td>
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</tbody>
</table>

Average Cost Per Credit Hour Thesis Option: $431.75

### Major Requirements (Non-Thesis Option = 33 Credits)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Cr Hrs</th>
<th>Tuition &amp; Fees</th>
<th>Discipline Fee</th>
<th>Other Charges</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 515 (Introductions to Robotics)</td>
<td>4</td>
<td>$1,463.00</td>
<td>$180.00</td>
<td>-</td>
<td>$1,643.00</td>
</tr>
<tr>
<td>CSC 788 (Graduate Project)</td>
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<td>$1,232.25</td>
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<tr>
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<td>$731.50</td>
<td>$90.00</td>
<td>-</td>
<td>$821.50</td>
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<tr>
<td>EE 553 (Robotic Controls)</td>
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<td>$1,337.25</td>
</tr>
</tbody>
</table>

Total Major Requirements Non-Thesis Option: 33

Average Cost Per Credit Hour Non-Thesis Option: $431.75
Computer Science Specialization (complete at least 21 credits)
- CSC 510 - Parallel Computing
- CSC 512 - Cryptography
- CSC 514 - Computer Vision
- CSC 533 - Computer Graphics
- CSC 542 - Image Processing
- CSC 545 - Theory of Computation
- CSC 547 - Artificial Intelligence
- CSC 568 - Graphical User Interface Programming

OR
Electrical Engineering/Computer Engineering Specialization (complete at least 21 credits)
- CENG 514 - Computer Vision
- CENG 544 - Computer Networks
- CENG 547 - Embedded Systems
- CENG 548 - Real-Time Operating Systems
- EE 552 – Robotic Control Systems
- EE 618 - Sensors and Signal Processing
- EE 651 - Digital Controls
- EE 624 - Advanced Digital Signal Processing
- EE 643 - Advanced Digital Systems

OR
Mechanical Engineering Specialization (complete at least 21 credits)
- ME 683 - Advanced Mechanical System Control
- ME 673 - Applied Engineering Analysis I
- ME 773 - Applied Engineering Analysis II
- ME 781 - Industrial Robotics

OR
Mathematics Specialization (complete at least 21 credits)
- Math 543 - Data Analysis
- Math 547 - Design of Experiments
- Math 551 - Mathematical Modeling
- Math 552 - Advanced Studies in Math

Total Specialization Credits Required 21 $7,680.75 $1,680.00 $9,360.75
Total Major Requirements Non Thesis Option 33 $12,069.75 $2,325.00 $14,394.75

Average Cost Per Credit Hour Non Thesis Option $436.20

three (3) credits of professional elective selected by the student and advisor.
Any CSR approved elective automatically counts as a professional elective
Up to three (3) credits of CP 697 can be counted towards the professional elective for a
non-thesis program of study. To qualify for CP credit the student must meet the
department CO-OP guidelines

At least 15 credits of course work must be in graduate level CSC courses (the project course of CSC 788 cannot be used to count towards the total of 15).