can take no more than 9 credits towards their degree prior to completing all leveling courses. All leveling must be completed with a grade of "B" or better. Students can take no more than 9 hours towards their degree prior to completing all preparatory courses.

**CS Preparatory Coursework**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 1435 Problem Solving I</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 1436 Problem Solving II</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 5321/2437 Data Structures</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 5331 Foundations of Computer System Software/3346</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**MATH Preparatory Coursework**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2305 Discrete Math</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 2413 Calculus I</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Additional Junior level or higher mathematics course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Linear Algebra, Numerical Analysis or Applied Probability &amp; Statistics)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**CORE COURSES (9 Credit Hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 6334 Design and Analysis of Algorithms</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6351 Advanced Computer Architecture</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6352 Advance Operating Systems</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**REQUIRED COURSE- Must be taken in last semester:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 6370 Advanced Software Engineering</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVES (Min 24 credit hours):**

At least 6 credit hours from each concentration track below required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from A. below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from A. below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from B. below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from B. below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from C. Below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE (Choose from C. Below)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC APPROVED GRADUATE ELECTIVE</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total 36**

**A: Software and Programming**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 6340 Human Computer Interaction</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6353 Compiler Design and Construction</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6356 Theory of Computation</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6360 Parallel Computing</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6361 Parallel Algorithms</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6362 Mobile Software Development</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6365 Current Trends in Programming</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**B: Data Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 6324 Digital Image Processing</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6327 Introduction to Computer Graphics</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6328 Advanced Computer Graphics</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6337 Data Mining</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6350 Advance Topics in DBMS</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**C: Cyber Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 6355 Data Communications and Networking</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6357 Wireless Sensor Networks</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6374 Computer Forensics</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6375 Information Assurance</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6376 Network Security</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6377 Applied Cryptography</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COSC 6379 Advanced Information Assurance</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours (min. 36):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hrs</th>
<th>Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA (Min 3.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer hours (Max 12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residency hours (Min 24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIS hours (Max 6)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program Coordinator approval: ____________________________

Last revised date: 2/08/2018