One of the following two-semester sequences must be included:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 198 and 401</td>
<td>9</td>
</tr>
<tr>
<td>CHM 210 and 230</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 213 and 214</td>
<td>10</td>
</tr>
<tr>
<td>PHYS 223 and 224</td>
<td>10</td>
</tr>
</tbody>
</table>

Students are required to complete 15 hours of Tech Electives

Required Tech Elective: 3 hours
- CIS 520 Operating Systems I (spring course only)
- CIS 625 Parallel Programming (fall course only)

Capstone Experience: 9hrs
Students get the choice between two different pathways for capstone. They need 9 hours total.

Individual Project Path:
- CIS 598 Computer Science Project (3)
- Additional Tech Elective (3)
- Additional Tech Elective (3)

OR

Dual Group Project Path:
- CIS 642 Software Engineering Project I- (3) (fall course only)
- CIS 643 Software Engineering Project II- (3) (spring course only)

Three courses taken for graduate credit from the following list:
- CIS 731 Programming Techniques for Data Science and Analytics
- CIS 732 Machine Learning and Pattern Recognition
- MIS 670 Social Media Analytics and Web Mining

At most one of:
- MIS 665 Business Analytics and Data Mining
- MKTG 880 Applied Marketing Analytics
- MKTG 881 Advanced Marketing Analytics

Other data analytics courses, including special topics courses, approved by both the Department of Computer Science and the College of Business Administration.