**Program Structure**

**Core Courses (20 hours)**
- Programming
- Databases
- Algorithms
- Statistics
- Analytics
- Modeling

**Non-Thesis (13 hours)**
- Electives - 9 hours
- Engineering Practicum - 4 hours

**Thesis (10 hours)**
- Electives - 3 hours
- Engineering Practicum - 1 hour
- Research Project - 6 hours
# Program Course Schedule

<table>
<thead>
<tr>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CS 5005:</strong></td>
<td><strong>CS 4513:</strong> Database Management Systems</td>
<td><strong>ISE 5113:</strong> Advanced Analytics and Metaheuristics</td>
<td><strong>3 Credit Hours Practicum or Research</strong></td>
</tr>
<tr>
<td><strong>Computing Structures</strong></td>
<td><strong>Statistical Analysis for System Design</strong></td>
<td><strong>CS 4413:</strong> Algorithm Analysis</td>
<td><strong>3 Credit Hours Elective</strong></td>
</tr>
<tr>
<td><strong>ISE 5013:</strong></td>
<td><strong>ISE 5103:</strong> Intelligent Data Analytics</td>
<td><strong>3 Credit Hours Elective or Research</strong></td>
<td><strong>3 Credit Hours Elective (non-thesis option)</strong></td>
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<tr>
<td><strong>Statistical Analysis for System Design</strong></td>
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</tbody>
</table>

**Features**
- 14 months
- Electives can be from CS, ISE or any domain discipline
- Online and on-campus options