# BIOINFORMATICS, GCRT

**Requirements for Students Matriculating in or before Academic Year 2019-2020.** Learn more about Graduate College Academic Regulation 7.0 (http://catalog.okstate.edu/graduate-college).

**Total Hours:** 16 Hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 5203</td>
<td>Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>BIOC 5930</td>
<td>Advanced Biochemical Techniques (Capstone Project)</td>
<td>1</td>
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</tbody>
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**Electives**

Select 12 hours from the following:

1. **Life Sciences Core**
   - BIOC 6733 Functional Genomics
   - PBIO 5553 Molecular Phylogenetic Analysis
   - ANSI 5010 Special Problems (Mapping and Marker Assisted Selection)
   - PBIO 5110 Special Topics in Plant Biology (Phylogenomics)
   - BIOC 5102 Molecular Genetics

2. **Statistics Core**
   - STAT 6013 Genetic Statistics
   - STAT 5013 Statistics for Experimenters I
   - STAT 5023 Statistics for Experimenters II
   - STAT 5093 Statistical Computing
   - STAT 4203 Mathematical Statistics I
   - STAT 4213 Mathematical Statistics II

3. **Computer Science Core**
   - CS 5423 Principles of Database Systems
   - CS 5433 Big Data Management
   - CS 5070 Seminar and Special Problems
   - CS 4433 Introduction to Database Systems

4. **Math Core**
   - MATH 6590 Topics in Applied Mathematics

**Hours Subtotal**

16

**Total Hours**

16

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1 Select 3 hours from each discipline or more than one from various disciplines with Advisory Committee approval.