## Biological and Agricultural Engineering (PhD): Systems Analysis Concentration

### Degree Requirement

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE 791</td>
<td>Doctoral Research Methods I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BAE 792</td>
<td>Doctoral Research Methods II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAE 885</td>
<td>Doctoral Supervised Teaching</td>
<td></td>
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</tbody>
</table>

**Mathematics / Statistics / Biomathematics Courses**  
*“Mathematics / Statistics / Biomathematics Courses” are determined in conjunction with the academic committee*

**Minor Courses**  
Students must select a minor, by which courses are determined in conjunction with the academic committee

**Elective Courses**  
*“Elective Courses” are determined in conjunction with the academic committee to meet the 72 total credit hours*

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE 501</td>
<td>Sensors and Controls</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BAE 527/427</td>
<td>Metabolic Systems Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAE 535</td>
<td>Precision Agriculture Technology</td>
<td>3</td>
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</tbody>
</table>

**Total Hours**  
72

1 Students with a previous Master's Degree are only required to complete 54 total hours

### Concentration Elective Courses

A minimum of 6 hours of elective courses must be taken from the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE 51</td>
<td>Foundation Tools to Agriculture, Food and Life Sciences Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAE 542/542</td>
<td>Advanced Analytics to Agriculture, Food and Life Sciences Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAE 555</td>
<td>R Coding for Data Management and Analysis</td>
<td></td>
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</tr>
<tr>
<td>BAE 565</td>
<td>Environmental and Agricultural Analytics and Modeling</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GIS 512</td>
<td>Introduction to Environmental Remote Sensing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEA 582</td>
<td>Geospatial Modeling</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Faculty

- Michael D. Boyette
- Khara Deanne Grieger
- Michael R. Burchell II
- Jay Jiayang Cheng
- Mari S. Chinn
- Garey Alton Fox
- Scott A. Hale
- William F. Hunt III
- Lingjuan Wang Li
- Gary T. Roberson
- Sanjay Bikram Shah
- Lirong Xiang
- Mohamed A. Youssef
- Wenqiao Yuan
- Francois Philippe Birgand
- John J. Classen
- Barbara A. Doll
- Steven George Hall
- Praveen Kolar
- Celso Francisco Castro Bolinaga
- Grant H. Ellington
Lucie S. G. Guertault
Daniela Jones
Suzanne McKay Leonard
Chad Ashley Poole
Natalie G. Nelson Sagues
Chadi Sayde
Mahmoud A. N. A. N. Sharara
Jason Kellam Ward
Sierra Young
George Maynard Chescheir III
Robert O. Evans Jr.
Garry L. Grabow
Rodney L. Huffman
Gregory Donald Jennings
Richard W. Skaggs
Jean Spooner
Larry F. Stikeleather
Daniel H. Willits

Practice/Research/Teaching Professor
Otto DeBruhl Simmons III

Adjunct Professors
Christopher R Daubert
Sheila Marie Saia
Ratna Rani Sharma

Adjunct Associate Professor
Wesley Mark Porter

Adjunct Assistant Professor
Kristina Hopkins