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

### Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAE 591</td>
<td>Master's Research Methods I</td>
<td>2</td>
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</tr>
<tr>
<td>BAE 592</td>
<td>Master's Research Methods II</td>
<td></td>
<td></td>
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</tbody>
</table>

**Math / Statistics / Biomathematics Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6</td>
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</tr>
</tbody>
</table>

The required "Mathematics / Statistics / Biomathematics Courses" are determined in conjunction with the academic committee.

**Elective Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>22</td>
<td></td>
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</tbody>
</table>

"Elective Courses" are determined in conjunction with the academic committee to meet the 30 total credit hours.

Total Hours: 30

1. Minimum of 20 credit hours must come from 500-level and above courses
2. Maximum 6 hours S/U graded courses

### Concentration Electives

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 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>
<td></td>
</tr>
<tr>
<td>BAE 541</td>
<td>Foundation Tools to Agriculture, Food and Life Sciences Data</td>
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<tr>
<td>BAE 542/542</td>
<td>Advanced Analytics to Agriculture, Food and Life Sciences Data</td>
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</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>
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<tr>
<td>GIS 512</td>
<td>Introduction to Environmental Remote Sensing</td>
<td>3</td>
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<tr>
<td>MEA 582</td>
<td>Geospatial Modeling</td>
<td>3</td>
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</tr>
</tbody>
</table>

### Faculty

#### Full Professors

- Michael D. Boyette
- 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
- Mohamed A. Youssef
- Wenqiao Yuan

#### Associate Professors

- Francois Philippe Birgand
- John J. Classen
- Barbara A. Doll
- Steven George Hall
- Praveen Kolar

#### Assistant Professors

- 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

Practice/Research/Teaching Professors
Otto DeBruhl Simmons III

Emeritus Faculty
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

Adjunct Professors
Christopher R Daubert
Ratna Rani Sharma