Biological and Agricultural Engineering (MS): Systems Analysis Concentration

Degree Requirements

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

**Math / Statistics / Biomathematics Courses**

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

**Elective Courses**

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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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>
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<tbody>
<tr>
<td>BAE 501</td>
<td>Sensors and Controls</td>
<td>3</td>
</tr>
<tr>
<td>BAE 427/527</td>
<td>Metabolic Systems Analysis (pending Admin Board approval 2020)</td>
<td>3</td>
</tr>
<tr>
<td>BAE 535</td>
<td>Precision Agriculture Technology</td>
<td>3</td>
</tr>
<tr>
<td>BAE 541</td>
<td>Foundation Tools to Agriculture, Food and Life Sciences Data (pending Admin Board approval 2020)</td>
<td>3</td>
</tr>
<tr>
<td>BAE 542</td>
<td>Advanced Analytics to Agriculture, Food and Life Sciences Data (pending Admin Board approval 2020)</td>
<td>3</td>
</tr>
<tr>
<td>BAE 455/555</td>
<td>R Coding for Data Management and Analysis (pending Admin Board approval 2020)</td>
<td>3</td>
</tr>
<tr>
<td>BAE 565</td>
<td>Environmental and Agricultural Analytics and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GIS 512</td>
<td>Introduction to Environmental Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>MEA 582</td>
<td>Geospatial Modeling</td>
<td>3</td>
</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

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