

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

## Degree Requirements

Code	Title	Hours	Counts towards
<b>Required Courses</b>			<b>2</b>
BAE 591	Master's Research Methods I		
BAE 592	Master's Research Methods II		
<b>Math / Statistics / Biomathematics Courses</b>			<b>6</b>
The required "Mathematics / Statistics / Biomathematics Courses" are determined in conjunction with the academic committee			
<b>Elective Courses</b> <sup>1, 2</sup>			<b>22</b>
"Elective Courses" are determined in conjunction with the academic committee to meet the 30 total credit hours			
<b>Total Hours</b>			<b>30</b>

<sup>1</sup> Minimum of 20 credit hours must come from 500-level and above courses

<sup>2</sup> Maximum 6 hours S/U graded courses

## Concentration Electives

Code	Title	Hours	Counts towards
<b>A minimum of 6 hours of elective courses must be taken from the following courses:</b>			<b>6</b>
BAE 501	Sensors and Controls	3	
BAE 527/427			
BAE 535	Precision Agriculture Technology	3	
BAE 541	Foundation Tools to Agriculture, Food and Life Sciences Data	3	
BAE 542/542	Advanced Analytics to Agriculture, Food and Life Sciences Data	3	

BAE 555	R Coding for Data Management and Analysis	3
BAE 565	Environmental and Agricultural Analytics and Modeling	3
GIS 512	Introduction to Environmental Remote Sensing	3
MEA 582	Geospatial Modeling	3

## Faculty

Geng (Frank) Bai, *Assistant Professor*

**Area of Research:** Precision and Digital Agriculture

Francois Philippe Birgand

Michael D. Boyette

Michael R. Burchell II

Celso Francisco Castro Bolinaga

Jay Jiayang Cheng

John J. Classen

Barbara A. Doll

Grant H. Ellington

Garey Alton Fox

Khara Deanne Grieger

Lucie S. G. Guertault

Scott A. Hale

Steven George Hall

William F. Hunt III

Daniela Jones

Praveen Kolar

Suzanne McKay Leonard

Chad Ashley Poole

Gary T. Roberson

Natalie G. Nelson Sagues

Ryan Sartor, *Assistant Professor*

**Area of Research:** Bioprocess Engineering

Chadi Sayde

Sanjay Bikram Shah

Mahmoud A. N. A. N. Sharara

Lingjuan Wang Li

Jason Kellam Ward

Lirong Xiang

Sierra Young

Mohamed A. Youssef

Wenqiao Yuan

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

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### **Practice/Research/Teaching Professor**

Otto DeBruhl Simmons III

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### **Adjunct Professors**

Christopher R Daubert

Sheila Marie Saia

Ratna Rani Sharma

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### **Adjunct Associate Professor**

Wesley Mark Porter

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### **Adjunct Assistant Professor**

Kristina Hopkins