

# BIOLOGICAL SYSTEMS ENGINEERING, PH.D.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS

#### MODE OF INSTRUCTION

Face to Face	Evening/Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW-Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

### CURRICULAR REQUIREMENTS

Requirement Detail	
Minimum Credit Requirement	51 credits
Minimum Residence Requirement	32 credits
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy ( <a href="https://policy.wisc.edu/library/UW-1244">https://policy.wisc.edu/library/UW-1244</a> ).
Overall Graduate GPA Requirement	3.00 GPA required. This program follows the Graduate School's GPA Requirement policy ( <a href="https://policy.wisc.edu/library/UW-1203">https://policy.wisc.edu/library/UW-1203</a> ).

**Other Grade Requirements** Graduate students in BSE must maintain a minimum overall B average (3.0 GPA) during their graduate studies. Seminars, research, or other special problems credits may not be used to offset BC or C grades. No grade below a C will be accepted for fulfilling course work requirements for the degree.

**Assessments and Examinations** Doctoral students are required to take a comprehensive preliminary/oral examination after they have cleared their record of all Incomplete and Progress grades (other than research and thesis). Deposit of the doctoral dissertation in the Graduate School is required.

**Language Requirements** n/a

**Graduate School Breadth Requirement** All doctoral students are required to complete a doctoral minor or graduate/professional certificate.

### REQUIRED COURSES

Code	Title	Credits
BSE Graduate Instruction and Research Committee approved Science and Engineering coursework <sup>1</sup>		30
Research Credits <sup>2</sup>		16
BSE 990	Research (Thesis)	
Graduate seminars <sup>3</sup>		2
BSE 900	Seminar	
BSE 901	Graduate Research Seminar	
Teaching Practicum/Studies <sup>4</sup>		3
BSE 799	Practicum in Agricultural Engineering Teaching	
or E P D 654	Teaching in Science and Engineering	
<b>Total Credits<sup>5,6</sup></b>		<b>51</b>

#### Footnotes

1

All courses for the "BSE Graduate Instruction and Research Committee approved Science and Engineering" requirement should be selected in consultation with your advisor to create a cohesive program of study.

- These courses must be numbered 300+ and letter graded with A-F. A minimum of 15 credits must hold the 50% Grad Attribute.
- If a course is offered for credit/no-credit only, prior approval from an advisor may be given for a student to complete no more than 1 credit for credit/no-credit.
- Up to 7 credits of classes taken as a UW-Madison undergraduate can be included, following the Graduate School policy. A maximum of 18 course credits can be used from an MS degree obtained elsewhere. If applying coursework from a previous MS degree elsewhere, half of the remaining courses taken at UW-Madison (to meet the 30 cr. Science and Engineering requirement) should be courses with the 50% Grad Attribute. For example, if transferring 18 credits from a previous MS degree, at least 6 credits taken at UW-Madison must have the 50% Grad Attribute for this requirement.
- BSE 900, BSE 901, BSE 990, and BSE 999 may not be used to meet this requirement.

2

A maximum of 6 research credits can be used from a MS degree obtained elsewhere.

**3**

BSE 900 is offered in the Fall semester only. It is to be taken during the first Fall semester of graduate study. BSE 901 is offered in the Spring semester and can be taken each spring. During a student's last Spring semester, they give a presentation in BSE 901 to meet the second seminar credit requirement.

**4**

Teaching Practicum Experience: Some possible courses are E P D 654 Teaching in Science and Engineering or BSE 799 Practicum in Agricultural Engineering Teaching. Other course options need to be pre-approved by student's advisor and the Graduate Instruction and Research Committee chair.

**5**

BSE 999 credits are limited to 3 credits and are required to be separate from the work the student is doing for BSE 990 credit and shall be taken under the direction of an instructor other than the major advisor.

**6**

Not including prerequisite course credits taken to satisfy admission requirements.