

# BIOLOGICAL SYSTEMS ENGINEERING, M.S.

## 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	30 credits
Minimum Residence Requirement	16 credits
Minimum Graduate Coursework Requirement	15 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** All students must complete a graduation checklist and be certified by the GIRC before taking their final oral examination.

**Language Requirements** n/a

### REQUIRED COURSES

#### Thesis Pathway<sup>1</sup>

If your objective is to pursue a Ph.D. degree and/or research-oriented career, you are strongly encouraged to select the thesis pathway. Course credits taken to satisfy admission requirements do not count toward the minimum degree requirements.

Code	Title	Credits
BSE Graduate Instruction and Research Committee approved Science and Engineering coursework <sup>2</sup>		18
Thesis research credits		6
BSE 990	Research	
Graduate seminar credits <sup>3</sup>		2
BSE 900	Seminar	
BSE 901	Graduate Research Seminar	
Additional BSE Graduate Instruction and Research Committee approved Science and Engineering coursework or BSE 990 to reach 30 credits <sup>4</sup>		4
<b>Total Credits<sup>5,6</sup></b>		<b>30</b>

**1**

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

**2**

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 A-F.
- A minimum of 9 credits must hold the 50% Graduate 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.
- BSE 900, BSE 901, BSE 990, and BSE 999 credits may not be used to meet this requirement.

**3**

BSE 900 is offered in the Fall semester only. It is 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

"BSE Graduate Instruction and Research Committee approved Science and Engineering coursework" used to meet this requirement must be letter-graded and numbered 300+.

5

BSE 999 credits for thesis track MS students 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.

5

Not including prerequisite course credits taken to satisfy admission requirements.

**Non-Thesis Pathway<sup>1</sup>**

Code	Title	Credits
BSE Graduate Instruction and Research Committee approved Science and Engineering coursework <sup>2</sup>		21
Independent study credits		3
BSE 999	Special Problems	
Graduate seminar credits <sup>3</sup>		2
BSE 900	Seminar	
BSE 901	Graduate Research Seminar	
Additional BSE Graduate Instruction and Research Committee approved Science and Engineering coursework or BSE 990 to reach 30 credits <sup>4</sup>		4
<b>Total Credits<sup>5</sup></b>		<b>30</b>

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These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

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All courses for the "BSE Graduate Instruction and Research Committee approved Science and Engineering coursework" 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 A-F.
- A minimum of 9 credits must hold the 50% Graduate 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 UW-Madison undergraduates can be included, following the Graduate School policy.
- BSE 900, BSE 901, BSE 990, and BSE 999 credits may not be used to meet this requirement.

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BSE 900 is offered in the Fall semester only. It is 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

"BSE Graduate Instruction and Research Committee approved Science and Engineering coursework" used to meet this requirement should be letter-graded and numbered 300+.