

# BIOLOGICAL SYSTEMS ENGINEERING, MS

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), 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 Credit Requirement 16 credits

Minimum Graduate Coursework Requirement 15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>).

Overall Graduate GPA Requirement 3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

**Other Grade Requirements** Students 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 Biological Systems Engineering Graduate Instruction and Research Committee before taking their final oral examination.

**Language Requirements** n/a

### REQUIRED COURSES

#### Thesis Pathway

If a student's objective is to pursue a PhD degree and/or research-oriented career, they are strongly encouraged to select the **Thesis** pathway. Courses taken to satisfy admission requirements do not fulfill the minimum degree requirements.

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.

Code	Title	Credits
<b>Biological Systems Engineering Graduate Instruction and Research Committee approved Science and Engineering Credits</b>		<b>18</b>
<b>Thesis Research Credits</b>		<b>6</b>
BSE 990	Research	
<b>Graduate Seminar Credits <sup>1</sup></b>		<b>2</b>
BSE 900	Seminar	
BSE 901	Graduate Research Seminar	
<b>Additional BSE Graduate Instruction and Research Committee approved Science and Engineering Credits or BSE 990 to reach 30 credits <sup>2</sup></b>		<b>4</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> 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.

<sup>2</sup> "Biological Systems Engineering Graduate Instruction and Research Committee approved Science and Engineering coursework" used to meet this requirement must be letter-graded and numbered 300 and above.

#### Biological Systems Engineering Graduate Instruction and Research Committee Approved Science and Engineering Credits

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

- These courses must be numbered 300 and above and letter graded A-F.
- A minimum of 9 credits must hold the "Grad 50%" 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.
- BSE 900 , BSE 901, BSE 990, and BSE 699 credits may not be used to meet this requirement.
- BSE 999 credits are limited to 3 credits. These credits must 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.

### Non-Thesis Pathway

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.

Code	Title	Credits
<b>Biological Systems Engineering Graduate Instruction and Research Committee approved Science and Engineering Credits</b>		<b>21</b>
<b>Independent Study Credits</b>		<b>3</b>
BSE 999	Special Problems	
<b>Graduate Seminar Credits <sup>1</sup></b>		<b>2</b>
BSE 900	Seminar	
BSE 901	Graduate Research Seminar	
<b>Additional BSE Graduate Instruction and Research Committee approved Science and Engineering Credits or BSE 999 to reach 30 credits <sup>2</sup></b>		<b>4</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> 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.

<sup>2</sup> "Biological Systems Engineering Graduate Instruction and Research Committee approved Science and Engineering Credits" used to meet this requirement should be letter-graded and numbered 300 and above.

### Biological Systems Engineering Graduate Instruction and Research Committee Approved Science and Engineering Credits

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

- These courses must be numbered 300 and above and letter graded A-F.
- A minimum of 11 credits must hold the "Grad 50%" 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.
- BSE 900 , BSE 901, BSE 990, BSE 699, and BSE 999 credits may not be used to meet this requirement.