



BIOLOGICAL SYSTEMS ENGINEERING

PROGRAM HANDBOOK

2025-2026

Reference this handbook to learn about the unique policies, requirements, procedures, resources, and norms for graduate students in the Biological Systems Engineering MS and PhD Programs.



Biological Systems Engineering

COLLEGE OF AGRICULTURAL & LIFE SCIENCES

UNIVERSITY OF WISCONSIN-MADISON

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NAVIGATING POLICY AND RESOURCES AT UW-MADISON

This handbook is one of many sources to consult as you become familiar with the policies, procedures, requirements, resources, and norms of graduate education at UW-Madison:



Program Handbook (add your hyperlink)

[Graduate Guide](#)

[Graduate School AP&P](#)

[UW-Madison Policy Library](#)

[Graduate Student Life](#)

[Graduate School at UW-Madison](#)

WHOM TO CONTACT FOR QUESTIONS

Many of your questions about how to meet expectations and thrive as a graduate student will be answered by the various sources of policies, procedures, requirements, resources, and norms listed above. Several key positions in this department and on campus are ready to answer your remaining questions:

GRADUATE PROGRAM COORDINATOR

Each graduate program will have at least one department staff person typically called a Graduate Program Coordinator who serves as a point person for program policy and procedures. Graduate Program Coordinators are well versed in most elements of graduate education that extend beyond academic instruction in your program and will likely be your first stop for questions related to anything in this handbook.

DIRECTOR OF GRADUATE STUDIES

Each graduate program has one faculty member designated to direct its educational vision and structure.

Names and contact information of your Graduate Program Coordinator and Director of Graduate Studies can be found on your program's page in the *Graduate Guide* (guide.wisc.edu/graduate). Simply navigate to the "Degrees/Majors" tab, click on your program's name, and look for the contact information box on the righthand side.

FACULTY ADVISOR

Each student will be assigned a faculty advisor in each graduate program in which they are enrolled. Your faculty advisor(s) will be a key source of guidance for your academic development. Further definition can be found here: policy.wisc.edu/library/UW-1232. Guidelines for finding, changing, and working with your advisor can be found in the Advising & Mentoring section below.

The name and contact information of your faculty advisor can be found on your Student Center on MyUW (my.wisc.edu) under "Academic Progress" and then "Advisors."

GRADUATE SCHOOL SERVICES

For general inquiries and graduate student services from the Graduate School, see the operations and front desk contact information on this contact page: grad.wisc.edu/contacts

DEPARTMENT AND PROGRAM OVERVIEW

INTRODUCTION

Graduate students in Biological Systems Engineering (BSE) Department strive to better understand the current theories, principles, and issues in wide-ranging biologically related fields of engineering. The students focus on better understanding how research helps generate new knowledge and how knowledge is applied to address both practical and fundamental problems. Through this process, graduate students improve their ability to think critically and creatively and to synthesize, analyze, and integrate ideas for decision-making and problem solving.

The graduate programs in BSE are "tailor-made" to meet the specific needs and interests of a student and his/her major professor. The graduate students have the primary responsibility for developing their program of study, conducting research, and preparing a thesis. However, the students must maintain close contact with their major professors for advice and supervision in all phases of research.

The departmental admission requirements are often more rigorous than the minimum set by the Graduate School. However, the department may be flexible on some requirements based on an individual student's background and the faculty needs. This handbook provides an overview of the requirements, policies and resources for graduate study in the BSE Department at the University of Wisconsin-Madison.

PROGRAMMATIC OVERVIEW:

<https://guide.wisc.edu/graduate/biological-systems-engineering/biological-systems-engineering-ms/>

<https://guide.wisc.edu/graduate/biological-systems-engineering/biological-systems-engineering-phd/>

DIVERSITY, EQUITY, AND INCLUSION

DEPARTMENT DIVERSITY STATEMENT

The UW-Madison, College of Agricultural and Life Sciences, and the Department of Biological Systems Engineering is committed to maintaining and growing a culture that embraces diversity, inclusion, and equity, believing that these values are foundational elements of our excellence and fundamental components of a positive and enriching learning and working environments for all students, faculty, and staff.

DEPARTMENT CODE OF CONDUCT

The UW-Madison Department of [Biological Systems Engineering Code of Conduct](#) outline standards for everyone in the department to uphold to provide an inclusive and equitable environment that allows all members to thrive. We are guided by the

[Code of Ethics of the ASABE](#), namely the Fundamental Canon to “...act in such a manner as to uphold and enhance the honor, integrity, and dignity of the profession.” (See also the [National Society of Professional Engineers Code of Ethics for Engineers](#))

Our department upholds the following values:

- **Respect:** treat all individuals with respect and uphold values described in this document in all of our interactions.
- **Inclusion:** BSE is a space for everyone, no exceptions, and we strive to make our department welcoming for all.
- **Integrity:** strive to conduct fair, ethical research and hold ourselves to the highest standards of academic honesty in all aspects of our work.
- **Honesty:** we hold honesty and integrity in interpersonal interactions as core values in our department.
- **Collaboration:** strive to create an environment where there are no barriers to interactions, collaborations, and sharing resources and knowledge.
- **Community:** strive to cultivate a community where everyone feels welcomed and supported in the work they do.
- **Enthusiasm:** share a collective enthusiasm for science and engineering.
- **Environment:** strive to protect and improve the environment and all within it.

LAND ACKNOWLEDGEMENT:

The University of Wisconsin-Madison occupies Ho-Chunk Land, a place their nation has called Teejop (Day-JOPE) since time immemorial. In an 1832 treaty, the Ho-Chunk were forced to cede this territory. Decades of ethnic cleansing followed when both the federal and state governments repeatedly, but unsuccessfully, sought to forcibly remove the Ho-Chunk from Wisconsin.

This history of colonization informs our shared future of collaboration and innovation. Today, UW-Madison respects the inherent sovereignty of the [Ho-Chunk Nation](#), along with the eleven other First Nations of Wisconsin.

HOW TO GET INVOLVED

As a graduate student at UW-Madison, you have a multitude of opportunities to become involved on campus and in your academic discipline. This involvement often enhances your academic, professional, and personal growth through developing advanced leadership, communication, and collaboration skills. It also provides opportunities for professional networking.

IN OUR DISCIPLINE

[UW-Madison Student Chapter of the American Society of Agricultural & Biological Engineers \(ASABE\)](#)

ASABE is the UW-Madison branch of a nationally affiliated pre-professional organization for any student interested in engineering for agriculture, food, and

biological systems. Members are able to establish contacts with peers, faculty, and professionals in industry to build networking relationships in their area of interest within biological engineering. ASABE holds monthly meetings, social events, and other activities that encourage students to get to know their peers and the department faculty. Students in the organization gain leadership abilities and knowledge of industry.

IN OUR PROGRAM/DEPARTMENT

Graduate students are encouraged to join and engage in various professional and social activities throughout the year.

- **[Biological Systems Engineering Graduate Student Organization](#)**

Our BSE GSO group looks for opportunities to bring graduate students and postdoctoral researchers together to build community through social interactions. Undergraduate students who want to learn about the BSE graduate program are invited to participate and join the group.

- **[BSE Graduate Student Representative](#)**

A graduate student volunteer serves as the representative of their peers at the monthly department general meetings and serving as the graduate student representative on the Graduate Instruction and Research Committee (GIRC), which meets approximately once per semester.

ON CAMPUS & IN THE COMMUNITY

The Wisconsin Idea is the principle that education should influence and improve people's lives beyond the university classroom. For more than 100 years, this idea has guided the university's work.

You will find a list of ways to engage in campus and local community life at:

The Graduate School's Current Student Page

grad.wisc.edu/current-students

If you are a student actively involved in leadership and service activities, consider nominating yourself for membership in the following honor society:

Edward Alexander Bouchet Graduate Honor Society

grad.wisc.edu/diversity/bouchet

GETTING STARTED AS A GRADUATE STUDENT

NEW GRADUATE STUDENT CHECKLIST

Be sure to review all steps listed on this webpage for new graduate students (grad.wisc.edu/new-students).

In addition to a checklist for all new graduate students, that webpage includes sections with additional steps to take if you are a new international student, student with a disability, student veteran, student with children, or student with funding.

IN OUR PROGRAM

New graduate students should complete the following:

- Schedule an appointment with the Graduate Program Coordinator to review program requirements, timelines, and policies.
- Schedule an appointment with the department's Payroll and Benefits Specialist, if a Research Assistantship (RA) or Teaching Assistantship (TA) appointment, or a Fellowship has been offered.
- Check in at our departmental administration desk to get the keys you will need (ask your advisor which keys are needed).
- Contact your Faculty Advisor to learn about your office/desk assignment, to meet fellow lab mates and to schedule a laboratory and building tour.

ADVISING AND MENTORING

Advising relationships are a central part of academia, important to both the experience and development of students and faculty members alike.

The Graduate School's definition of an advisor can be found here: policy.wisc.edu/library/UW-1232.

FACULTY ADVISOR

Your faculty advisor has two main roles: 1) To assist you in acquiring the highest possible level of knowledge and competence in the field, and 2) to chair the committee that will determine whether you have performed at an acceptable level in each of your degree milestones (see "Degree Requirements" section below for further information on building your committee). Other roles of your advisor may include tracking your progress in completing your degree (note: this may include use of the Graduate Student Tracking System at gsts.grad.wisc.edu), assisting with course selection and planning your academic path, and helping you identify possible research mentors, committee members, and research opportunities.

ADVISEE (ADOPTED FROM HIGH POINT UNIVERSITY)

An advisee is an equal partner in the academic advising process and is ultimately responsible for their educational decisions. Advisees are expected to:

Take responsibility: Take personal responsibility for their academic, professional, and personal development. This includes understanding and meeting the requirements of their academic programs and university.

Set goals: Identify short, intermediate, and long-term goals, and steps to achieve them. This includes clarifying their personal values, abilities, interests, and goals for academics and life.

Prepare for meetings: Come to meetings with questions, concerns, and any documents requested by their advisor. For example, continuing advisees should come to pre-registration meetings with a preliminary course schedule.

Be knowledgeable: Become familiar with university, college, and academic program's policies, procedures, and rules. They should also be aware of prerequisites and academic deadlines.

Communicate with advisor: Maintain open communication with their faculty advisor to seek support, advice, feedback, and insight on topics such as research practices, writing, publishing, attending conferences and professional development opportunities, career initiatives, and other concerns as suitable.

Share progress: Monitor and reflect on their progress and share successes and failures with their faculty advisor. Remember, some is learned through success, and much is learned through failures. They should also keep a personal record of their progress.

Both the student and advisor are responsible for making their expectations clear to each other. Be sure to discuss this with your advisor.

FINDING AND SELECTING A FACULTY ADVISOR

Your advisor should be a faculty member in the program whose expertise and project/research interests match closely with those that you intend to acquire. To learn more about the faculty in your program, consider consulting the following sources:

- Courses and seminars you attend
- Our program website (<https://bse.wisc.edu/>)
- Faculty publications
- Students currently in a prospective advisor's group/lab

Additionally, you may wish to have a discussion with a prospective advisor. Below are some questions to consider asking in this discussion, though it is not a complete list. You should spend some time identifying what is most important to you in your graduate training and ask questions accordingly.

QUESTIONS TO ASK OF PROSPECTIVE ADVISORS (ADAPTED FROM IPIB HANDBOOK)

- What thesis projects would be available to me if I were to join your group?

- Would these projects expose me to a variety of different approaches?
- In general, how available will you be to answer questions I might have?
- What is your philosophy regarding the amount of guidance the advisor should provide to a student during preparation of the thesis proposal, literature seminars, thesis writing, etc.?
- What are your expectations for the amount of time I should spend each day/week in your group/lab?
- What regularly scheduled activities (e.g., group meetings, joint group meetings, research clubs) does your group participate in that provide an opportunity to get outside input on my research project and to hear about the work of other students and postdocs?
- Do you encourage your students to attend seminars and journal clubs, including those that may be outside of their narrow field of interest/research?
- Do students in your group/lab have the opportunity to attend professional meetings where they can interact with colleagues/researchers from other institutions?
- Do you include your graduate students in professional activities that will familiarize them with their field of interest/research, such as reviewing manuscripts and meeting with visiting speakers?
- How long do you think it should take me to get my degree?
- What are your former graduate students (if any) doing now?
- What is your general philosophy of graduate training and what goals do you have for your graduate students?

A GRADUATE STUDENT GUIDE TO WORKING WITH FACULTY ADVISORS

Through [this interactive, self-paced micro-course](#), graduate students learn about the characteristics of functional and dysfunctional relationships with faculty advisors, strategies for communicating effectively and aligning expectations, as well as program grievance processes and Hostile and Intimidating Behavior resources. Completion of the micro-course takes about 20 minutes and is optional but encouraged for all graduate students.

ADVISING COMPACT

Clearly defined expectations for both the student and advisor are a crucial starting point for a strong relationship, and "Advising Compacts" can help clarify and document mutually agreed upon expectations for both the student and advisor. Information about advising compacts can be found here: kb.wisc.edu/grad/page.php?id=35489. While our department does not currently explicitly require them, we recommend all advisors use them and encourage you to discuss this with your advisor.

You may also wish to incorporate further information about Individual Development Plans (IDPs) here if they are to be used in concert with or in lieu of Advising Compacts. Further information about IDPs can be found at: grad.wisc.edu/professional-development/individual-development-plan

MENTORING NETWORKS

In addition to your faculty advisor, you are encouraged to develop a broad network of individuals who can provide academic and professional mentorship during and beyond your time as a graduate student. Establishing your Examination Committee members early in your career allows you to develop greater mentorship.

ADDITIONAL ADVISING CONTACTS

The BSE Graduate Program Coordinator serves as an excellent resource for graduate students on various matters of BSE Graduate Program and UW Graduate School policies. Email the Graduate Program Coordinator to schedule an appointment. Students should first refer to the BSE Guide website (<https://guide.wisc.edu/graduate/biological-systems-engineering/>), this Handbook, the UW Graduate School website (<https://grad.wisc.edu/>), and the Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/academic-policies/>) for answers on various program-related questions.

CHANGING YOUR FACULTY ADVISOR

As the advisor-student relationship is one of mutual agreement, it may be terminated by either party. Funding resources provided by your current advisor are unlikely to transfer with you when changing to a different advisor. If you decide that you would prefer working with a different advisor, discuss all aspects of this change (e.g., academics, funding, expectations) with your prospective advisor prior to making a change. If you change your advisor, you must notify your Graduate Program Coordinator and follow any related procedures.

Every graduate student in BSE must have a faculty advisor or else they may be suspended from graduate study at UW-Madison by the Graduate School. Be sure to follow procedures to re-select a new advisor (described above) prior to finalizing the termination of your current advising relationship. You can confirm that the name of your faculty advisor has been updated in the official record by looking in your Student Center on MyUW (my.wisc.edu) under "Academic Progress" and then "Advisors."

GIVING AND RECEIVING FEEDBACK

All graduate students in the Department of Biological Systems Engineering will engage in completing an Annual Graduate Student Performance Review with their advisor during the spring term. The department uses a standardized template

(Appendix A) that allows the student and the advisor to share relevant information about successes, challenges, and future goal setting. Upon completing the written sections of the form (both student section and faculty advisor section) the department expects the student and advisor to meet and discuss the information shared by both parties and sign the document. A copy of the signed document should be sent to the Graduate Program Coordinator.

BSE MASTER OF SCIENCE (MS) DEGREE REQUIREMENTS

All students in the Biological Systems Engineering Master of Science (MS) program are responsible for being aware of the following requirements to complete the degree. Graduates of our MS program help fill the need for highly educated engineers in industry, consulting firms, government agencies, and educational institutions.

REQUIREMENTS

For all current requirements to complete your degree (e.g., credits, courses, milestones, learning outcomes/goals, etc.) visit the Biological Systems Engineering program page in the *Graduate Guide* (<https://guide.wisc.edu/graduate/biological-systems-engineering/>). You will be taken to a subsection of your program's *Guide* page that contains all official requirements for your degree. Similarly, see "Policies" from the navigation bar of your program's page to learn about policies affecting these requirements (e.g., prior coursework, probation, credits per term allowed, time constraints, grievances and appeals, etc.). Note that when you look at the *Guide* to learn about program requirements, you will be viewing the current year's version. To find past versions of program requirements, see the [Guide Archive](#) and search for your program and the year you would like to reference.

BSE MS DEGREE OPTIONS

Two options are available for the MS degree in BSE: a thesis option and a non-thesis option (i.e., an independent study). The thesis option requires a final thesis be deposited to the Graduate Program Coordinator. *If your objective is to pursue a Ph.D. degree or a research-oriented career, you are strongly encouraged to select the thesis option.* Graduate research assistantships are generally not awarded to students pursuing the non-thesis option. Admission to the MS degree program typically requires a bachelor's degree (BS) in an engineering or related discipline.

THESIS PATHWAY

The thesis option requires a final thesis be deposited to the department's Graduate Program Manager. *If your objective is to pursue a Ph.D. degree or a research-oriented career, you are strongly encouraged to select the thesis option.*

NON-THESIS PATHWAY

Non-thesis students are expected to complete more classroom courses and conduct an in-depth study of a research or design and development problem under the supervision of their faculty advisor. Graduate research assistantships are not generally awarded to students pursuing the non-thesis option.

THESIS PATHWAY

Students completing the thesis pathway are expected to enroll in BSE 990 research credits during each semester. The student is expected to write an original thesis paper on the subject of their research. The thesis paper should follow the formatting requirements of the Graduate School as listed on their website (<https://grad.wisc.edu/current-students/masters-guide/>).

GRADES

The BSE MS program follows the grade requirements of the Graduate School (<https://policy.wisc.edu/library/UW-1203>).

SEMINARS (BSE 900 AND BSE 901)

BSE 900 Seminar - All new BSE graduate students must enroll in BSE 900 Seminar during their first Fall semester of their program. This seminar is only taken one time.

BSE 901 Graduate Seminar - All BSE graduate students must enroll in this seminar every Spring semester while in the program. During a student's final Spring semester, they are required to give a presentation.

TIME REQUIREMENTS FOR PHD DEGREE COMPLETION

There are no deadlines for completing the MS degree. However, students enrolled full time generally complete the degree in 2 years.

EXAMINATION COMMITTEE

Master's committees advise and evaluate satisfactory progress, evaluate a thesis, and sign a degree warrant. For general guidance from The Graduate School on the role and composition of committees as well as an online tool to determine if your committee meets minimum requirements, see the following policy page: policy.wisc.edu/library/UW-1201. The Department of BSE requires all committee members to hold a degree equivalent or greater to the degree being sought. Your faculty advisor chairs your committee and provides individualized guidance on how to select committee members.

RESEARCH TOPIC

Your advisor can provide guidance on selecting your research topic. It is common for BSE graduate students to work on a research topic aligned with the grant project that is funding their Research Assistantship.

MASTER'S THESIS AND FINAL EXAM

A candidate for the MS-thesis degree is required to prepare a thesis on original research. Original research includes comprehensive and original interpretations of the literature. It must be approved by the Major Professor under whose guidance it has been produced and by the Examination Committee. An electronic pdf version of the final document must be deposited with the Graduate Program Coordinator prior to the degree completion dates set forth by the Graduate School.

THESIS FORM AND CONTENT

Your thesis should follow the formatting requirements laid out on the Graduate School's website page titled, *Completing your Master's Degree* (<https://grad.wisc.edu/current-students/masters-guide/>). Your faculty advisor is best suited to assist you with determining what type of information to include in your thesis. Previous students often include the following:

- Title Page (*required*)
- Advisor Signature Page (*required with your advisor's signature*)
- Acknowledgements (*optional*)
- Table of Contents (*required*)
- Abstract (*optional*)
- List of Figures, Tables, Charts, and Graphics (*as applicable*)
- Introduction (*may be embedded within each chapter*)
- Chapters on Research (*e.g., Introduction, Study Site, Materials and Methods, Research Objectives, Results, Discussion, Conclusions, as applicable*)
- Literature Review (*if required by advisor*)
- References/Bibliography (*required*)
- Appendices (*e.g., Figures, Tables, Charts, Graphics, as applicable*)

NON-THESIS PATHWAY

Students completing the non-thesis pathway are expected to enroll in 3 credits of BSE 999 Special Problems while working on their independent project. Students must prepare a written report of approximately 20-30 pages (double-spaced), as well as prepare and give a short presentation on the project followed by a Question-and-Answer segment with their examination committee members.

GRADES

The BSE MS program follows the grade requirements of the Graduate School (<https://policy.wisc.edu/library/UW-1203>).

SEMINARAS (BSE 900 AND BSE 901)

BSE 900 Seminar - All new BSE graduate students must enroll in BSE 900 Seminar during their first Fall semester of their program. This seminar is only taken one time.

BSE 901 Graduate Seminar – All BSE graduate students must enroll in this seminar every Spring semester while in the program. During a student’s final Spring semester, they are required to give a presentation.

TIME REQUIREMENTS FOR PHD DEGREE COMPLETION

There are no deadlines for completing the MS degree. However, students enrolled full time generally complete the degree in 2 years.

EXAMINATION COMMITTEE

Master’s committees advise and evaluate satisfactory progress, evaluate the written paper, and sign a degree warrant. For general guidance from The Graduate School on the role and composition of committees as well as an online tool to determine if your committee meets minimum requirements, see the following policy page: policy.wisc.edu/library/UW-1201. The Department of BSE requires all committee members to hold a degree equivalent to or greater than the degree being sought. Your faculty advisor chairs your committee and provides individualized guidance on how to select committee members.

INDEPENDENT STUDY TOPIC

Your advisor can also provide guidance on selecting your topic.

MASTER’S NON-THESIS PAPER AND FINAL EXAM

A candidate for the MS Non-thesis degree is required to prepare a paper on their original independent study topic. Original written work includes comprehensive and original interpretations of the literature. It must be approved by the Major Professor under whose guidance it has been produced and by the Examination Committee.

INDEPENDENT STUDY PAPER FORM AND CONTENT

Your faculty advisor is best suited to assist you with determining what type of information to include in your paper. Previous students often include the following:

- Title Page (*required*)
- Table of Contents (*required*)
- List of Figures, Tables, Charts, and Graphics (*as applicable*)
- Introduction (*may be embedded within each chapter*)
- Chapters on Research (*e.g., Introduction, Study Site, Materials and Methods, Research Objectives, Results, Discussion, Conclusions, as applicable*)
- Literature Review (*if required by advisor*)
- References/Bibliography (*required*)
- Appendices (*e.g., Figures, Tables, Charts, Graphics, as applicable*)

MASTER’S DEGREE CHECKLIST – TIMELINE AND DEADLINES

The Graduate School maintains a list of steps to complete your master’s degree, including deadlines and important things to know as you progress toward graduation: grad.wisc.edu/current-students/masters-guide. In addition to what is

posted on this webpage from the Graduate School, you must meet all required steps of the program (outlined below).

PROGRAM CHECKLIST FOR DEGREE COMPLETION

It is important to begin planning for your final defense exam early. The checklist below will be helpful in staying on track.

- Schedule a meeting with the Graduate Program Coordinator at the beginning of the semester in which you plan to complete your degree.
- Solidify your Examination Committee makeup and confirm with your committee a defense exam date and time.
- The Graduate Program Coordinator can assist you in reserving a room for the public presentation and the closed examination.
- Request your warrant from the Graduate Program Coordinator no later than 3 weeks prior to the defense exam date (Appendix B).
- Send your thesis paper to your examination committee members no less than 2 weeks prior to the defense exam date.
- If you wish to advertise your public presentation to a wider audience (other graduate students, staff, and faculty) within or outside the department, coordinate that with the Graduate Program Coordinator.
- Once you have passed your defense exam, your committee members will sign your warrant. The Graduate Program Coordinator will submit the signed warrant to the Graduate School.
- Thesis Pathway only: You must deposit your final thesis paper (after all recommended revisions, edits, and corrections are complete) as a pdf document via email to the Graduate Program Manager. This must be completed by noon of the MS Degree Deadline, which can be found on this Graduate School's website page (<https://grad.wisc.edu/current-students/masters-guide/>).
- If you are on a paid appointment, contact the department's Payroll and Benefits Specialist to notify them of your last day of employment.

BSE DOCTORAL (PHD) DEGREE REQUIREMENTS

All students in the Biological Systems Engineering Doctoral (PhD) program are responsible for being aware of the following requirements to complete the degree. Students in the PhD degree program prepare for independent research careers in the public and private sectors. Admission to the PhD degree program typically requires a MS degree in engineering or a closely related field of science. In rare circumstances, an outstanding applicant who holds a BS degree without a MS degree may be admitted.

The Doctor of Philosophy (PhD) degree, the highest degree offered by the University, is a research degree and is never conferred solely as a result of any prescribed period of study, no matter how faithful. The degree is granted solely upon evidence of general proficiency, distinctive attainment in a special field, and particularly on ability for independent investigation as demonstrated in a dissertation presenting original research or creative scholarship with a high degree of literary skill.

REQUIREMENTS

For all current requirements to complete your degree (e.g., credits, courses, milestones, learning outcomes/goals, etc.) visit the Biological Systems Engineering program page in the *Graduate Guide* (<https://guide.wisc.edu/graduate/biological-systems-engineering/>). You will be taken to a subsection of your program's *Guide* page that contains all official requirements for your degree. Similarly, see "Policies" from the navigation bar of your program's page to learn about policies affecting these requirements (e.g., prior coursework, probation, credits per term allowed, time constraints, grievances and appeals, etc.). Note that when you look at the *Guide* to learn about program requirements, you will be viewing the current year's version. To find past versions of program requirements, see the [Guide Archive](#) and search for your program and the year you would like to reference.

GRADES

The BSE PhD program follows the grade requirements of the Graduate School (<https://policy.wisc.edu/library/UW-1203>).

SEMINARS (BSE 900 AND BSE 901)

BSE 900 Seminar – All new BSE graduate students must enroll in BSE 900 Seminar during their first Fall semester of their program. This seminar is only taken one time.

BSE 901 Graduate Seminar – All BSE graduate students must enroll in this seminar every Spring semester while in the program. During a student's final Spring semester, they are required to give a presentation.

BREADTH REQUIREMENT (OFTEN REFERRED TO AS 'MINOR')

Breadth is a required component of doctoral training at UW–Madison. Students achieve breadth through a doctoral minor, graduate/professional certificate, or other means as determined by their doctoral major program.

<https://policy.wisc.edu/library/UW-1200>

Option A (external doctoral minor): Requires a minimum of 9 credits in a doctoral minor program (single disciplinary or multi-disciplinary) outside of the student's doctoral major program. Fulfillment of this option requires the approval of the doctoral minor program. <https://guide.wisc.edu/graduate/#doctoralminorstext>

Option B (distributed doctoral minor): Requires a minimum of 9 credits in one or more programs forming a coherent topic and can include coursework in the student's doctoral major program. Fulfillment of this option requires the approval of the student's doctoral major program.

Option C (graduate/Professional certificate): Requires successful completion of a Graduate/Professional certificate in a program outside of the student's doctoral major. <https://guide.wisc.edu/graduate/#graduateprofessionalcertificatestext>

BSE 799 PRACTICUM IN BSE TEACHING

PhD BSE students are required to complete a teaching practicum. Students may elect to enroll in 1-3 credits based on the amount of work they will conduct in the practicum. (should we have a form?).

The purpose of this practicum in BSE is to provide an opportunity for PhD students to develop, practice, and refine their instructional skills in a traditional classroom setting or through outreach and extension activities. The specific learning outcomes of the practicum are to 1. develop a list of one or more learning outcomes for the activity consistent with a Backward Design model, 2. demonstrate mastery in the communication of course content using the modality appropriate to the chosen audience, 3. develop and execute an assessment plan to evaluate the learning outcomes, and 4. write a short (5 pages or less) metacognitive reflection paper (structure determined by student in conjunction with his/her major advisor) that demonstrates lessons learned from the activity.

The Teaching Practicum experience must be supervised by a faculty member in the department. The major professor will typically serve in this supervisory role however another faculty member can serve as the course instructor supervisor as long as it is done in collaboration with the major professor. The specific practicum can include a variety of activities so long as it includes a teaching, extension or outreach motif and is consistent with the venue for delivery. The minimal level of effort expected per credit hour of the teaching practicum is 45 hours in a semester, including time spent during training, preparation, and evaluation.

It is strongly encouraged that the major professor and/or instructional supervisor of the practicum provide timely and substantive feedback to the student following an activity. Specifically, the student should meet with their supervisor weekly to assess progress. Discuss the style, speed, preparedness, and thoroughness (clarity, depth, and accuracy) appropriate for the activity. Also discuss upcoming prepared activities, homework, assessments (both formative and summative) to determine clarity, depth, and accuracy of meeting the learning outcomes. The evaluation should be reasonable, explicit, written, and transparent to the student.

A written plan shall be prepared by the student in conjunction with his/her advisor. The plan shall include the process/procedure for mentoring of the student, evaluation of their performance, and letter grade assignment.

The practicum should consist of four phases: 1. Instructional Orientation, 2. Direct Teaching Experience, 3. Experience in Testing and Evaluation of Students, and 4. Analysis of the Graduate Student's Performance.

DOCTORAL COMMITTEE

Committees advise and evaluate satisfactory progress, administer the preliminary and final oral examinations, evaluate a thesis or dissertation, and sign a degree warrant. The Doctoral Committee, chosen by the student and their major advisor should include members with appropriate expertise to afford the breadth and depth needed in degree examinations. The responsibilities of individual committee members are determined by the program. The executive committee (or its equivalent) of a program/department is responsible for approving the composition of all graduate committees. The final warrant request which includes committee membership must be submitted to the Graduate School at least three weeks before the examination date. Students should consult their advisor and their program's student handbook for the specific function of degree committees in their program. For more information about guidance and examination committees, visit the graduate school's website at <https://grad.wisc.edu/documents/committees/>.

QUALIFYING EXAM

Although it is *not* a *required* element of the BSE PhD program, faculty advisors reserve the right to require successful completion of a qualifying exam, on a case-by-case basis as deemed appropriate for the student's development and progress in the program.

PRELIMINARY EXAM

The purpose of this exam is to establish that the student has gained an appropriate level of knowledge in Biological Systems Engineering and related fields and is able to apply this knowledge in pursuing independent research. Preliminary exams may be written and/or oral, as directed by the student's Doctoral Committee.

TIMELINE

The Preliminary Exam may only be conducted after all required program coursework is completed or is in process, with the exception of BSE 901 Graduate Seminar and BSE 990 Research.

REQUESTING PRELIMINARY WARRANT

The PhD student must complete and submit a Preliminary Warrant request form (Appendix C) to the graduate program coordinator at least 3 weeks prior to the established Preliminary examination date. The Graduate Program Coordinator will then prepare all necessary documentation and communicate the next steps to the Preliminary Examination Committee members.

EXAMINATION RESULTS

Upon satisfactory completion of the preliminary examination, the signed warrant will be submitted to the Graduate School by the graduate program coordinator initiating the status of 'Dissertator'.

A copy of the signed Graduate School warrant and the completed preliminary evaluation forms are retained in the student's departmental file.

If the candidate fails the preliminary examination, the Doctoral Examination Committee must decide if the candidate may retake the examination. The format and extent of the second examination is determined by the Doctoral Examination Committee. A student may, if denied the right to retake an examination, appeal to the Department Chair/DGS who then may appoint a special committee to study the case and make recommendations as to further action. Whenever possible, the Preliminary Examination Committee for an examination retake should be the same as the Preliminary Examination Committee for the original examination.

DISSERTATOR STATUS

<https://policy.wisc.edu/library/UW-1247>.

DISSERTATION AND FINAL ORAL EXAM/DEFENSE

The final exam includes the review of your dissertation paper by the Doctoral Committee, a public presentation, and a closed oral examination covering the dissertation topic and general fields of the major and minor studies.

RESEARCH TOPIC

You will work closely with your advisor in selecting and developing your dissertation topic. It is common for BSE graduate students to work on the research topic of the grant project funding their Research Assistantship.

FORM AND CONTENT

The form and content of your dissertation and the final defense exam will be determined in consultation with your faculty advisor. In our department, dissertations typically include introduction and conclusion sections or chapters, in addition to the research chapters. The research chapters may take the form of papers that are published, under review, or prepared for submission to journals, or

they may be prepared specifically for your dissertation. Further formatting guidelines are stipulated by the graduate school as described below.

TIMELINE

All degree requirements must be completed in order to be eligible to take the final examination.

REQUESTING FINAL DEFENSE WARRANT

The PhD student must complete and submit a Final Defense Warrant request form (Appendix C) to the graduate program coordinator at least 3 weeks prior to the established final defense examination date. The graduate program coordinator will then prepare all necessary documentation and communicate the next steps to the examination committee members.

PHD DISSERTATION

The PhD dissertation must be the candidate's own work. It may be the result of research enterprises in which others have collaborated, but in such cases, candidates are required to clearly indicate the portions that represent their own contribution. The dissertation should be sent to the committee at least 2 weeks prior to the final defense examination date.

Detailed information concerning the current requirements for the preparation of the dissertation and abstract of the dissertation should be obtained from the Graduate School webpage, *Completing your Doctoral Degree* (<https://grad.wisc.edu/current-students/doctoral-guide/>). The dissertation is required to be deposited with the Memorial Library via the ProQuest/UMI ETD portal and following the guidelines prescribed by the Graduate School.

DEFENSE

Candidates must present an open seminar on their PhD research findings, followed by a closed oral defense of the dissertation with the Doctoral Committee. PhD candidates are subject to a final oral examination on their dissertation and the general fields of the major and minor studies. The preliminary examination is typically construed as the final benchmark for these subject matter fields. The final examination is usually focused on the findings of the research and the overall dissertation. The candidate should, however, be prepared to answer questions in the major and minor fields as well. In addition to recording the results on the Graduate School warrant and the official advisor signature page of the dissertation, the Doctoral Committee must complete the department PhD Defense Evaluation form for inclusion in the student's file.

POLICY ON PERMISSION TO RETAKE THE PHD FINAL EXAMINATION

The decision as to whether or not a student may retake the examination is ordinarily made by the Doctoral Committee. A student may, if denied the right to

retake the Final Examination, appeal to the Department Chair, who may then appoint a special committee to study the case and make recommendations as to further action. Whenever possible, the Doctoral Committee for an examination retake should be the same as the Doctoral Committee for the original examination.

DOCTORAL DEGREE CHECKLIST: TIMELINE & DEADLINES

The Graduate School maintains a list of steps to complete your doctoral degree, including deadlines and important things to know as you progress toward graduation: grad.wisc.edu/current-students/doctoral-guide. In addition to what is posted on this webpage from the Graduate School, you must meet all required steps of the program (outlined below).

Programmatic Checklist

- (Required) Schedule an appointment with the Graduate Program Coordinator prior to the start of your last semester.
- (Required) In coordination with your faculty advisor and your entire examination committee, schedule the date and time of your final presentation and defense examination.
- (Optional) Reach out to the Graduate Program Coordinator for assistance in reserving rooms for your public presentation and the closed-door committee examination.
- (Required) Request your warrant from the Graduate Program Coordinator at least 3 weeks prior to your examination. (Appendix C) The Graduate Program Coordinator will communicate to the examination committee members how to access and sign the warrant as well as how to access and complete the evaluation.
- Apply to Graduate (via MyUW Portal)
 - (Required) All students must 'Apply to Graduate' once they have determined when they plan to complete their degree regardless of whether they wish to have their name printed in the commencement ceremony program.
 - (Optional) In order to have a student's name printed in the commencement ceremony program, students may 'Apply to Graduate' by the deadline established by campus, which can be found here: <https://commencement.wisc.edu/>
- (Required) Follow all Graduate School requirements found on their webpage, *Completing your Doctoral Degree* (<https://grad.wisc.edu/current-students/doctoral-guide/>) for completing your degree.

ENROLLMENT REQUIREMENTS

You are responsible for following Graduate School policies related to course enrollment requirements and limitations:

- **Minimum Enrollment Requirements**
Enrollment requirements vary based on many different factors such as citizenship status, employment status (RA, TA, PA, self-funded, etc.), and academic term (beginning term, ending term, summer term). Please ensure you are appropriately enrolled following all Graduate School, employment, and visa requirements: <https://policy.wisc.edu/library/UW-1208>
- **Adding / Dropping Courses** grad.wisc.edu/documents/add-drop
- **Auditing Courses** policy.wisc.edu/library/UW-1224
- **Canceling Enrollment** grad.wisc.edu/documents/canceling-enrollment
- **Continuous Enrollment Requirement for Dissertators**
policy.wisc.edu/library/UW-1204
- **Enrollment Accountability** grad.wisc.edu/documents/enrollment-accountability
- **Minimum Enrollment Requirements** policy.wisc.edu/library/UW-1208
- **Programmatic Enrollment Requirements** see the Graduate Program Coordinator

ACADEMIC EXCEPTION PETITIONS

Some academic exceptions may need to be approved by the Graduate School. For further information about this, contact the Director of Academic Services and visit this webpage: <https://grad.wisc.edu/documents/exceptions/>

PROGRAM EXCEPTIONS

Academic exceptions are considered on an individual case by case basis and should not be considered a precedent. Deviations from normal progress are highly discouraged, but the program recognizes that there are in some cases extenuating academic and personal circumstances. Petitions for course exceptions/substitutions or exceptions to the Satisfactory Progress Expectations (academic or conduct) shall be directed to the Director of Graduate Studies, who reserves the right to seek out further input from the department's Graduate Instruction and Research Committee (GIRC) for which they are the chairperson. The following procedures apply to all petitions:

1. The specific requirement/rule/expectation pertinent to the petition must be identified in writing.
2. The student's academic advisor must provide written support for the petition.
3. All course work substitutions and equivalencies will be decided by appropriate area-group faculty or curriculum chair.

More generally, the Director of Graduate Studies, in consultation with the student's advisor, may grant extensions to normal progress requirements for students who face circumstances (similar to tenure extensions) as noted in university regulations, this includes childbirth, adoption, significant responsibilities with respect to elder or dependent care obligations, disability or chronic illness, or circumstances beyond one's personal control. Where warranted, the petition should provide good evidence of plans and ability to return to conformance with the standard and to acceptably complete the program. The normal extension will be one semester; anything beyond this will be granted only in the event of highly extraordinary circumstances. Extensions will be granted formally with a note of explanation to be placed in the student's file.

BREADTH REQUIREMENT

Breadth is a required component of doctoral training at UW–Madison. Students achieve breadth through a doctoral minor, graduate/professional certificate, or other means as determined by their doctoral major program.

<https://policy.wisc.edu/library/UW-1200>

Option A (external doctoral minor): Requires a minimum of 9 credits in a doctoral minor program (single disciplinary or multi-disciplinary) outside of the student's doctoral major program. Fulfillment of this option requires the approval of the doctoral minor program. <https://guide.wisc.edu/graduate/#doctoralminorstext>

Option B (distributed doctoral minor): Requires a minimum of 9 credits in one or more programs forming a coherent topic and can include coursework in the student's doctoral major program. Fulfillment of this option requires the approval of the student's doctoral major program.

Option C (graduate/Professional certificate): Requires successful completion of a Graduate/Professional certificate in a program outside of the student's doctoral major. <https://guide.wisc.edu/graduate/#graduateprofessionalcertificatestext>

SATISFACTORY ACADEMIC PROGRESS

Your continuation as a graduate student at UW–Madison is at the discretion of your program, the Graduate School, and your faculty advisor. Any student may be placed on probation or dismissed from the Graduate School for not maintaining satisfactory academic progress, and this can impact your academic standing (detailed below), financial aid (see this policy page: policy.wisc.edu/library/UW-1040), or funding (consult your sources of funding, as applicable). Our program has

its own definition of satisfactory academic progress and related procedures that supplement Graduate School policy, as described in this section.

Information about how the Graduate School determines satisfactory academic progress can be found at this policy page: policy.wisc.edu/library/UW-1218. In addition to the Graduate School's monitoring of satisfactory academic progress, this program regularly reviews the satisfactory academic progress of its students in the following ways:

- Graduate students and their faculty advisors will complete a written annual review and meet for a follow up discussion. During these summaries and discussions, the academic rigor, accomplishments, and deficiencies (if any) will be discussed. If deficiencies are noted, a plan of action will be developed between the faculty advisor and advisee.
- The Graduate Program Manager conducts enrollment checks during the first couple of weeks of each term to monitor students' progress to complete the program requirements. Likewise, and review of course grades from previous terms are reviewed annually, if not semesterly.

NOT MEETING ACADEMIC EXPECTATIONS

Students who have been identified by the Graduate School of not meeting the minimum cumulative GPA requirement are placed on academic probation for the following semester. Students who successfully raise their cumulative GPA to meet or exceed Graduate School's minimum cumulative GPA requirement, will resume progress in the program as usual. A student who does not meet the Graduate School's minimum cumulative GPA during the probationary term, will need to meet with their faculty advisor to discuss a) the likelihood of the student being able to raise cumulative GPA if allowed to continue in the program, b) if allowed to continue in the program, a determination of whether funding support will continue, c) termination from funded appointment and from the academic program.

PERSONAL CONDUCT EXPECTATIONS

PROFESSIONAL CONDUCT

The Office of Student Conduct and Community Standards maintains detailed guidance on student rights and responsibilities related to learning in a community that is safe and fosters integrity and accountability. You are responsible for keeping aware of these policies and procedures, found on the following website: conduct.students.wisc.edu

ACADEMIC MISCONDUCT

Academic misconduct is governed by state law, UW System Administration Code Chapter 14. For further information on this law, what constitutes academic misconduct, and procedures related to academic misconduct, see:

The Graduate School

Academic Policies & Procedures: Misconduct, Academic
grad.wisc.edu/documents/misconduct-academic

Office of Student Conduct and Community Standards

Academic Misconduct Website conduct.students.wisc.edu/academic-misconduct
Academic Misconduct Flowchart
conduct.students.wisc.edu/documents/academic-misconduct-flow-chart

NON-ACADEMIC MISCONDUCT

Non-academic misconduct is governed by state law, UW System Administration Code Chapters 17 and 18. For further information on these laws, what constitutes non-academic misconduct, and procedures related to non-academic misconduct, see:

The Graduate School

Academic Policies & Procedures: Misconduct, Non-Academic
grad.wisc.edu/documents/misconduct-nonacademic

Office for Student Conduct and Community Standards

Non-Academic Misconduct Website conduct.students.wisc.edu/nonacademic-misconduct

University of Wisconsin System (UWS)

Chapter 17: Student Non-Academic Disciplinary Procedures
docs.legis.wisconsin.gov/code/admin_code/uws/17

Chapter 18: Conduct on University Lands

docs.legis.wisconsin.gov/code/admin_code/uws/18

RESEARCH MISCONDUCT

Graduate students are held to the same standards of responsible conduct of research as faculty and staff. Further information about these standards and related policies and procedures can be found at:

The Graduate School

Academic Policies & Procedures: Responsible Conduct of Research
grad.wisc.edu/documents/responsible-conduct-of-research

Office of the Vice Chancellor for Research and Graduate Education
Research Policies research.wisc.edu/compliance-policy

HOSTILE AND INTIMIDATING BEHAVIOR (BULLYING)

Hostile and intimidating behavior (HIB), sometimes referred to as “bullying,” is prohibited by university policy applicable to faculty, academic staff, and university staff. For further definition, policy, and procedures related to HIB see: hr.wisc.edu/hib. Students who feel they have been subject to HIB are encouraged to review the informal and formal options on the “Addressing HIB” tab of this website.

GRIEVANCE PROCESS

Each college or program on campus has a grievance process that students can use to address other concerns regarding their experience in the program. The program’s grievance process can be found detailed at: <https://guide.wisc.edu/graduate/biological-systems-engineering/biological-systems-engineering-ms/#policiestext>

PROCESS AND SANCTIONS FOR VIOLATIONS OF CONDUCT STANDARDS

The Department of Biological Systems Engineering Director of Graduate Studies, the Department Chair, and the student’s Faculty Advisor will review all violations of Conduct Standards to determine if the student is meeting the program expectations and, if appropriate, they may impose one or more sanctions listed below. The student’s faculty advisor and Examination Committee will determine whether the quality of a student’s work and conduct are satisfactory, while the GIRC will determine whether the student is satisfying the academic requirements in a timely fashion and meeting program conduct expectations. Students who fall behind academically or are not meeting conduct expectations are first warned, then put on probation, and then dropped from the program if they cannot complete the requirements or remedy their conduct. Within boundaries set by the faculty, the GIRC is authorized to take into account individual circumstances and problems, and to grant extensions of deadlines and waivers of requirements. Possible disciplinary actions might include, but are not limited to, the following:

- Written reprimand
- Denial of specified privilege(s)
- Imposition of specific terms and conditions on continued student status
- Removal of funding
- Probation
- Restitution
- Removal of the student from the course(s) in progress

- Failure to promote
- Withdrawal of an offer of admission
- Placement on leave of absence for a determined amount of time
- Suspension from the program for up to one year with the stipulation that remedial activities may be prescribed as a condition of later readmission. Students who meet the readmission condition must apply for readmission and the student will be admitted only on a space-available basis. See the Graduate School policy on readmission: policy.wisc.edu/library/UW-1230.
- Suspension from the program, ranging from one semester to four years
- Dismissal from the program
- Denial of a degree

In addition to the program's disciplinary actions, the Dean of Students Office may also have grounds to issue one or more of the following:

- Reprimand
- Probation
- Suspension
- Expulsion
- Restitution
- A zero or failing grade on an assignment/exam
- A lower grade or failure in the course
- Removal from course
- Enrollment restrictions in a course/program
- Conditions/terms of continuing as a student

INCIDENT REPORTING (HATE, BIAS, SEXUAL ASSAULT, HAZING, STUDENTS OF CONCERN, BULLYING)

The Dean of Students Office maintains a portal to report incidents of hate, bias, sexual assault, hazing, dating/domestic violence, stalking, missing students, and students displaying other concerning behaviors at UW-Madison:

Dean of Students Incident Reporting doso.students.wisc.edu/report-an-issue

As noted above in "Personal Conduct Expectations," students who feel they have been subject to hostile and/or intimidating behavior (i.e., bullying) are encouraged to review the informal and formal options for addressing this behavior (including filing complaints when desired) at:

Human Resources Hostile and Intimidating Behavior Website hr.wisc.edu/hib

FUNDING, EMPLOYMENT, AND FINANCES

“Funding” is a term used to describe university employment or support to cover some or all of your costs of graduate education. It varies in kind, amount, and level of guarantee.

Most graduate students admitted to the Biological Systems Engineering graduate programs are funded by their research faculty advisors, most often in the form of a Research Assistantship (RA). The Department of Biological Systems Engineering rarely offers Teaching Assistantships (TA), although some BSE graduate students have found employment as TAs in other departments across campus. The same is true for Project Assistantships (PA).

Faculty advisors select advisees during the application process and generally provide funding for their admitted students. Students are not admitted to our graduate programs without a faculty advisor in place.

Most graduate students admitted to the Biological Systems Engineering graduate programs are funded by their faculty advisors, most often in the form of a Research Assistantship (RA). Your admissions application also serves as an application to be considered for funding. The Department of Biological Systems Engineering rarely offers Teaching Assistantships (TA), although some BSE graduate students have found employment as TAs in other departments across campus.

Because most of the funds used to support graduate students comes from grants awarded to the faculty advisor, we recommend that prospective students reach out to potential faculty advisors within the department before submitting their applications to the program to learn more about available research opportunities in the faculty member’s research group.

The Graduate School maintains policies related to graduate student funding/employment:

Maximum Levels of Appointments

grad.wisc.edu/documents/maximum-levels-of-appointments

Concurrent Appointments for Fellows/Trainees

grad.wisc.edu/documents/concurrent-appointments

Enrollment Requirements for Graduate Assistants

policy.wisc.edu/library/UW-1208

Eligibility for Summer RA, TA, PA, and LSA Appointments
policy.wisc.edu/library/UW-5089

CAMPUS-WIDE AND EXTERNAL SOURCES

To help you find resources to pay for costs related to graduate education, the Graduate School provides a comprehensive overview of the funding process on campus as well as descriptions of the types of funding available, sources of funding, minimum stipend rates and benefits, and links to applicable human resources policies (e.g. GAPP) at:

Graduate School: Funding and Financial Aid
grad.wisc.edu/funding

External Fellowship Database
grad.wisc.edu/funding/external-fellowship-database

UW-Madison Libraries Grants Information Collection
library.wisc.edu/memorial/collections/grants-information-collection

ADDITIONAL POLICIES & RESOURCES

Graduate School Policy: Residence for Tuition Purposes
grad.wisc.edu/documents/residence-for-tuition-purposes

Employee Disability Resources
employeedisabilities.wisc.edu

Graduate Assistantship Policies and Procedures (GAPP)
hr.wisc.edu/policies/gapp

PROFESSIONAL DEVELOPMENT

When you participate in professional development, you build skills needed to succeed academically and thrive in your career. The following are professional development activities that we recommend for your consideration. Required professional development will be detailed in “Degree Requirements” above.

The Graduate School develops and curates a wide variety of resources for professional development, including a tool to assess your skills, set goals, and create a plan with recommended activities on campus (e.g., the popular “Individual Development Plan” or IDP) as well as programming to help you explore careers, prepare for a job search, build your network and learn from alumni, manage projects, communicate about your research, and much more.

DiscoverPD helps master's and doctoral students at UW-Madison advance their academic and professional goals with customized recommendations based on the results of a skills self-assessment. The 400+ professional development recommendations available in the DiscoverPD database are available in a range of formats to best meet your diverse needs, including in-person, virtual, asynchronous, and synchronous opportunities. All of this can be found at:

Professional Development from the Graduate School

grad.wisc.edu/professional-development

The Graduate School communicates professional development opportunities through an e-newsletter, *GradConnections*, that all graduate students receive at their wisc.edu email. Graduate students in traditional graduate degree programs receive the newsletter weekly during the academic year and every other week in the summer. Graduate students in online degree programs receive the newsletter every other week during the academic year and monthly during the summer.

APPENDICES

Appendix A.

Department of Biological Systems Engineering Annual Graduate Student Performance Review

Student Name: _____ Degree: _____ Date: _____

The student should complete responses for questions 1 through 5.

1. What motivates you to pursue graduate studies? If you are in your second year or later, describe if there have been any changes since you started work, and how?
2. How do you find your classes in terms of their relevance, workload, etc.? Would you like additional classes or a different set of classes? If yes, what are they?
3. How do you find the research climate in the lab, department, and on campus?
4. What are your goals for your thesis research for the coming year?
5. What are your professional growth and career aspirations? How have you explored those opportunities?

The faculty advisor should answer question 6 and select an overall rating. Then schedule a meeting with the student to review and discuss the performance evaluation and both parties should sign.

6. Is the student making satisfactory progress towards their degree? (Be descriptive and provide suggestions for improvement)

Faculty Advisor signature and date verifying approval of this request: _____

Faculty Advisor signature & date

Do not fill in any information below this line.

Director of Graduate Study Approval:

Date: _____