

Student Handbook



Welcome

Welcome to the Biomedical Engineering (BME) Ph.D. Program. Boise State's BME is an interdisciplinary program that seeks to integrate knowledge from diverse scientific fields to solve biomedical problems that span from whole body and organ systems to molecular interactions. The BME program brings together a diverse group of faculty from the Departments of Biological Sciences, Community and Environmental Health, Electrical and Computer Engineering, Kinesiology, Materials Science and Engineering, Mechanical and Biomedical Engineering, and Physics. By building a program that leverages faculty expertise across campus, this doctoral program aims to produce researchers who can work seamlessly across disciplines to develop innovative solutions to improve human healthcare and well-being.

The program is designed to give students the technical skills and fundamental knowledge to address significant challenges related to human health, and gain expertise across the diverse scientific fields necessary for success in the biomedical industry. Successful graduates of the BME Ph.D. Program will:

- Master knowledge in their research area.
- Design and conduct independent research using scientific methods.
- Effectively communicate scientific findings.
- Make meaningful contributions to the scientific literature.
- Work effectively in transdisciplinary teams.
- Demonstrate proficiency to solve significant problems of healthcare importance.

Information regarding the application and admissions process can be found online at <u>https://www.boisestate.edu/bme/admissions/</u>.

This handbook is a resource for BME students and supplements our program policies and the Graduate Catalog, which details university resources, regulations and processes for students and graduate programs. Together, the BME Handbook, BME program policies, and the Graduate Catalog articulate the academic life cycle - from admissions to degree completion. Students are responsible for understanding and following the policies and procedures outlined in these resources, as well as in the Boise State University Policy Manual, and the Student Code of Conduct. Further student and research expectations are defined by each research advisor. Please note that the student handbook is not a policy, but rather is a set of guidelines that may summarize program policies. Any differences between the handbook and the written or stated program policies should be immediately brought to the attention of the program director.

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People

Leadership Team

The leadership team for the BME PhD program consists of a program director, an associate program director, and a program coordinator. The following is the current leadership team:



Dr. Trevor Lujan Program Director <u>trevorlujan@boisestate.edu</u> (208) 426-2857 RUCH 235



Dr. Tyler Brown Associate Program Director tynbrown@boisestate.edu (208) 426-5613 BGYM 108E



Morgan Zabriskie Program Coordinator morganzabriskie@boisestate.edu MEC 202A

Main Office and Administrative Staff

The program coordinator for the BME PhD Program is available to provide support in the following areas throughout the duration of your degree:

- Hiring paperwork
- Academic advising
- Scheduling of dissertation proposal and defense
- Event planning
- Work/study space assignment.
- General support throughout the degree program

The BME program coordinator is located in MEC 202A.

Research Advisor

Your research advisor (also known as "major advisor") is your primary mentor and will be actively engaged in your academic, research, and professional success. He or she will provide guidance on your dissertation topic, guide your research efforts, provide direction on your academic plan and may potentially provide funding support. Frequent interaction between you and your research advisor is encouraged. It is both the responsibility of the student and the research advisor to have regular meetings and to communicate effectively.

All prospective and active BME students need to identify a research advisor willing to supervise their doctoral research, and will need to meet the expectations of their research advisor in terms of hours dedicated to research and job performance.

Before You Begin

To provide a smooth transition into the Ph.D. in BME, please take time to do the following:

On your own

My.boisestate.edu account

When your application was originally processed, you received a notification letter from the Graduate College containing your username, student ID Number, and Boise State email address. Set up your my.boisestate account by going to my.boisestate.edu using the login information provided in the letter. My.boisestate.edu is your source for all of your campus information. You can access your email, calendar, course websites, student center, and much more through this portal.

<u>Email</u>

Boise State students receive email via BroncoMail. Your BroncoMail address is typically your first and last name followed by @u.boisestate.edu. As a graduate assistant, you will also receive an employee email address. Employee email addresses are typically the employee's first and last name followed by @boisestate.edu. Employee email accounts are immediately deactivated if your employment is suspended (e.g., you receive a fellowship or there is any lapse in your funding). *Thus, we recommend that you use your BroncoMail email account as your primary account and forward your employee email to your BroncoMail account. You are responsible for checking both accounts.*

<u>Housing</u>

Ample housing options are available near campus. You can work with <u>University</u> <u>Housing</u> for on-campus options if you apply early. <u>The Boise Chamber of Commerce</u> has information and resources about moving to Boise that may be helpful. If you are using Craigslist or Classified Ads, common searches for housing near the university (less than 3 miles away from campus) include BSU, Downtown Boise, East End, North End, the Bench, and Southeast Boise. Peruse the bulletin boards in the Student Union Building (SUB) if you are already on campus.

With your Research Advisor and the Program Director

<u>Coordinate your start date with your research advisor or the Program Director.</u> Most students will start one week before the first day of classes of the designated

semester. If you and your advisor determine an earlier start date, please notify the program director as soon as possible.

Discuss first semester courses & register online

As soon as possible, you should register for classes. In order to make informed decisions on the courses you register to take, it is advised that you put together a graduate course plan and discuss this plan with your research advisor.

To register for classes, use the student center on my.boisestate.edu. Instructions are found online on the <u>registrar's website</u>.

After you arrive on campus

Introduce Yourself

In addition to meeting with your research advisor and new labmates, please stop by the main office, RUCH 201, to say hello and meet the office staff. They can provide information about keys, parking, purchasing, room and building access, timecards, travel, mail, making copies etc.

<u>Complete your employment documents (for students on graduate assistantship)</u> Some items (Federal Form I-9, Employee Information Form) must be completed on or before your first day of employment. Other items (W-4 Tax Form, Direct Deposit, and Compliance Certification) must be completed immediately after you begin employment. Check the <u>Boise State New Employee website</u> for a complete listing of immediate action items. Please be aware that the hiring process does include a background check.

Note: Tax rates on paychecks will fluctuate throughout the year. During the summer (or anytime you are not enrolled as a student), taxes are withheld at a higher percentage than during periods of student enrollment.

Obtain your Boise State University identification, the "BroncoCard"

After completing your employment documents at Human Resources, take your Student ID # and valid photo ID to the BroncoCard office in the Student Union Building to obtain your BroncoCard. Be sure to request a proxy BroncoCard. Your BroncoCard gives you card reader access to select laboratories and study areas. You will use your BroncoCard to access the Recreation Center, purchase meal plans, and can also, optionally, make cashless purchases on campus.

Find out more about obtaining your BroncoCard

Purchase a Parking Pass if you plan to park on campus

Parking on University Drive and other city-maintained streets is permitted without a Boise State parking permit. Signs posted on city-maintained streets describe any restrictions. Otherwise, parking on campus requires a Boise State parking permit.

You can purchase your parking permit and find out more about transportation options online.

Expectations

When you come to Boise State, we agree to offer our time and resources in exchange for your commitment to make your best effort. This includes making satisfactory performance and progress towards your degree. To ensure transparency of expectations, the BME program, Graduate College, and University have policies in place with which you should be familiar. These policies are outlined in this handbook, Boise State University Policies, Student Code of Conduct, Graduate Catalog, Graduate College Policy and Procedure Manual, and Standards and Guidelines for Theses and Dissertations. Please take the time to read and understand these policies.

If questions arise that are not addressed within this handbook or the policies outlined by Boise State University and the Graduate College, students are encouraged to first meet with their Research Advisor. If still unresolved, please contact the BME Program Administrator or the BME Program Director for further assistance. Similarly, if a student has a grievance about the program or an individual, the student should immediately contact their research advisor, associate director, or program director, as appropriate.

Safety

The safety of students, staff, faculty and visitors is of paramount importance to the Biomedical Engineering Ph.D. program. All students must comply with University policies and all regulations and procedures while working inside and outside of laboratories.

Academic Integrity

Academic Integrity is a core belief of the Biomedical Engineering Ph.D. Program, the Graduate College and Boise State University. Cheating, plagiarism, and academic dishonesty in the classroom or in research endeavors are serious offenses that will be addressed. All forms of academic dishonesty can lead to suspension or expulsion from the University. The University <u>Academic Integrity Policy</u> can be found on the registrar's website.

Professionalism

A core mission of the BME program is to create a respectful culture that fosters a productive and positive learning environment. Towards this mission, students and faculty in the Biomedical Engineering Ph.D. program are expected to act in a professional, responsible, and courteous manner at all times. Inappropriate conduct by

students is cause for disciplinary action, up to and including suspension and expulsion from the University.

Non-Discrimination on the Basis of Disability

Boise State University has issued a notice of Non-Discrimination on the Basis of Disability, which can be viewed <u>here</u>. As required by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA), and the regulations set forth at 34 CFR 104.7, 34 CFR 104.8, and 28 CFR 35.107, it is the policy of Boise State University not to discriminate against individuals in its programs or activities on the basis of physical or mental disability. Boise State University's NonDiscrimination Policy, which includes the University's grievance procedures, can be found at this <u>link</u>. Qualified students who require disability-related services or accommodations are encouraged to contact the University's Disability Resource Center, located in the Lincoln Garage on the University's Main Campus, or by telephone at 426-1583. Information concerning services provided by the Educational Access Center can be found on its <u>website</u>.

Other individuals requiring disability-related services or accommodations, or, who have questions or concerns related to the University's obligations described in this notice are encouraged to contact the University's Interim 504/ADA Coordinator, located in Room 306 of the River Front Hall on the University's Main Campus, or by telephone at 426-1238.

Values

University's Statement of Shared Values

Boise State University is committed to personal and social development, educational excellence, and civic engagement. Membership in the campus community is a privilege and requires its members to conduct themselves ethically with integrity and civility. Campus community members enjoy the same rights and freedoms that all U.S. citizens enjoy, including personal responsibility for one's own conduct, behavior and speech.

<u>Academic Excellence</u> – engage in our own learning and participate fully in the academic community's pursuit of knowledge.

<u>Caring</u> – show concern for the welfare of others.

<u>Citizenship</u> – uphold civic virtues and duties that prescribe how we ought to behave in a self-governing community by obeying laws and policies, volunteering in the community, and staying informed on issues.

<u>Fairness</u> – expect equality, impartiality, openness and due process by demonstrating a balanced standard of justice without reference to individual bias.

<u>Respect</u> – treat people with dignity regardless of who they are and what they believe. A respectful person is attentive, listens well, treats others with consideration and doesn't resort to intimidation, coercion or violence to persuade.

<u>Responsibility</u> – take charge of our choices and actions by showing accountability and not shifting blame or taking improper credit. We will pursue excellence with diligence, perseverance, and continued improvement.

<u>Trustworthiness</u> – demonstrate honesty in our communication and conduct while managing ourselves with integrity and reliability.

To view the entire Statement of Shared Values please see the website found at https://www.boisestate.edu/president/values/statement-of-shared-values/

Interdisciplinary Program Structure

The Biomedical Engineering Ph.D. program is an interdisciplinary program that brings together a diverse group of faculty from the College of Health Sciences, the College of Engineering, and the College of Arts and Sciences. Departments involved in this program include Biological Sciences, Community and Environmental Health, Electrical and Computer Engineering, Kinesiology, Materials Science and Engineering, Mechanical and Biomedical Engineering, and Physics. As a transdisciplinary Ph.D. program that spans numerous departments and multiple colleges, the BME program is housed in the Graduate College. By building a program that leverages faculty expertise across campus, this doctoral program aims to produce researchers who can work seamlessly across disciplines to develop innovative solutions to improve human healthcare and well-being.

Resources

Program Coordinator

Morgan Zabriskie is the Program Coordinator for the BME program. Her office is located in the Micron Engineering Center, room 202A. You can contact her via email at <u>morganzabriskie@boisestate.edu</u>, or stop by her office.

Website

The Ph.D. in BME website: <u>https://www.boisestate.edu/bme/</u> contains student resources including program specific forms, emphasis area requirements, and contact information for all participating faculty and staff.

IT Support, travel assistance, and materials and supplies

IT support, travel assistance, office supplies, and other resources related to your research projects can be obtained through your major advisor's department. Please ask your advisor who to contact.

Graduate Student Association

The Graduate Student Association (GSA) is a student-run organization that aims to create a sense of community among graduate students of all disciplines at Boise State. The GSA's goal is to bring together students from diverse programs and backgrounds for networking, discussion, and collaboration.

Navigating your Degree

Our staff in the BME Ph.D. program are here to help each student navigate the academic program efficiently and effectively. To help ensure that you stay on your desired schedule for graduation, we encourage you to use the following resources.

Program Timeline. This timeline shows a high level view of all the activities that need to be completed to earn your Ph.D.

Course Plan. This form should be completed during your first semester with the help of your Research Advisor and should be returned to the Program Coordinator. It helps establish a plan for coursework and degree milestones.

PhD Degree Checklist. This checklist shows all degree requirements for your program, as described in this handbook, in an easy-to-use one page format.

Progress Report. This report should be completed with your Research Advisor at least once a year. It helps evaluate progress in the program and is key to ensuring you are succeeding in your degree plan.

Satisfactory Progress Policy. When a BME student's research advisor finds that they are not making satisfactory progress towards their degree and that satisfactory progress cannot be anticipated, a performance plan should be created by the research advisor, according the following steps:

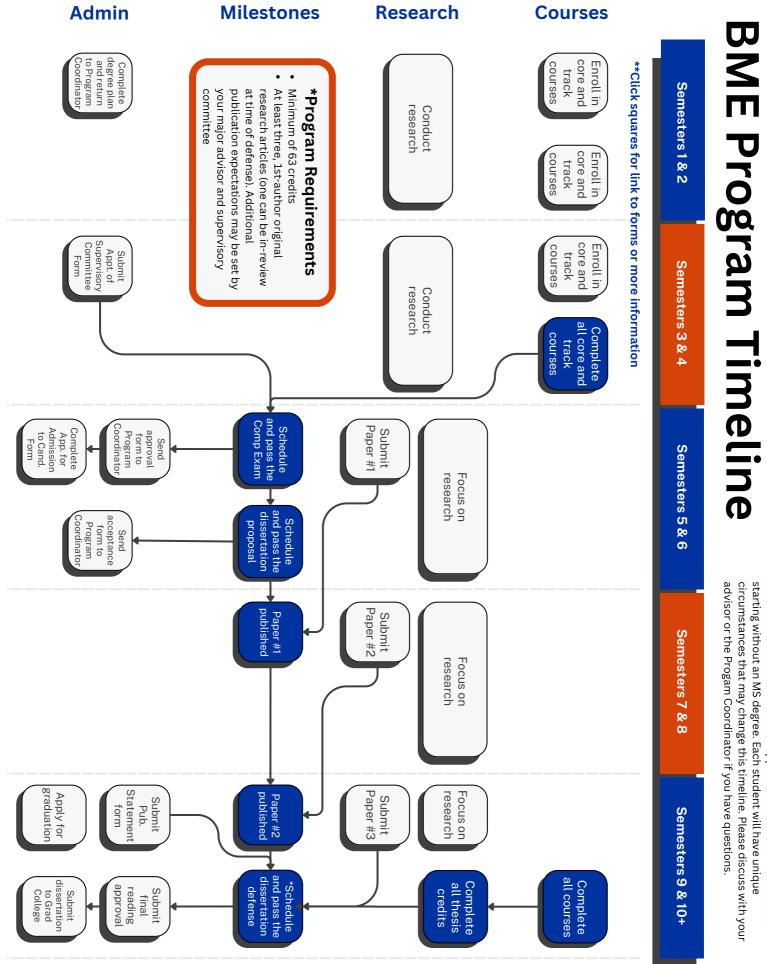
<u>Inform the student of the concerns</u>. The research advisor will create a written performance plan with the student to develop a timeline for making satisfactory progress and inform the student of the potential consequences if their progress towards completion is not satisfactory. The performance plan should be written, signed by both the supervisor and the student, and provided to the student.

<u>Provide the student feedback</u>. The research advisor will keep in contact with the student to give feedback during the plan timeline and document such contacts (written, email, or otherwise) and their outcomes.

<u>Final Recommendation</u>. At the end of the timeline, if progress is not adequate, the research advisor may recommend dismissal from the program. The recommendation should be sent to the Program Director and the Dean of the Graduate College, and should include documentation of the steps that have been taken with justification for the dismissal from the BME program.

The recommendation must be referred to the Program Director and the Dean of the Graduate College for final action. Any student that has been dismissed from the BME program for failure to make satisfactory progress may appeal the decision using the Graduate College Appeals Policy.

The course plan, degree checklist and progress forms can be found on the program website at <u>https://www.boisestate.edu/bme/current-students/forms/</u>.



Congratulations Doctor!

Please note: this flowchart is an approximate timeline for a student

Program Requirements

The program leading to the Ph.D. in Biomedical Engineering is a research-intensive program. In total, the BME program requires a minimum of 63 credits representing advanced coursework (30 credits) and dissertation research (33 credits) constituting an original and significant contribution to the discipline.

Selecting coursework for your graduate degree should take into account your research goals and future career plans. Beyond the required core coursework, significant flexibility is available for students to create a degree plan that meets their needs with tracks of study. There are multiple tracks of study that students can select for specialization. Students are expected to take three approved courses (9 credits) within their track of study. Further descriptions for each track can be found on the BME website and the current list of approved courses for each track is delineated in Appendix A.

BME PhD Course Timeline	hD	Co	urs		me	line	D			
COURSE	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6	SEMESTER 7	SEMESTER 8	SEMESTER 9	SEMESTER 10+
BME 601 PROF. DEVELOPMENT (OFFERED FALL ONLY)	<									
CORE COURSES	<	<	<	<						
TRACK COURSES	<	<	Κ	<						
ELECTIVE COURSE										
BME 598 GRADUATE SEMINAR* (OFFERED SPRING ONLY)		<		<						
BME 696 DIRECTED RESEARCH										
BME 691 DOCTORAL COMP EXAM**					<					
BME 689 DISSERTATION PROPOSAL						<				
BME 693 DISSERTATION***	<	<	<	<	<	<	<	<	<	<
*Graduate seminar should not be taken in a student's first semester. Two semesters are required ** Core and track courses must be completed or in progress before taking BME 691 Comprehensive Exam	t be taken in a Ist be complet	a student's firs ied or in prog	st semester. T ress before ta	wo semesters king BME 691		✔ When r will tak	When most students will take course(s)		Range when course(s) should be taken	ı course(s) ıken
*** Students should take enough BME 693 credits to get to <u>full time status</u> each semester (9 credits) - 33 credits is a minimum, students may take more as needed	ugh BME 693 . dits is a minim	credits to get ium, students	to <u>full time st</u> may take mor	<u>atus</u> each 'e as needed						

Degree Requirements

Doctor of Philosophy in Biomedical Engine	ering
Course Number and Title	Credits
Core Requirements Select one course from each of the following areas, or alternative course(s) as approved by the program coordinator: Engineering KINES 520/ME 520 Advanced Biomechanics	
Life Sciences KINES 510 Physiology of Activity KINES 560 Motor Learning ZOOL 501 Human Physiology	9-10
Research Methods EEB 603 Reproducible Science BIOL 601 Biometry KINES 551 Research Design in Exercise and Sport KINES 552 Applied Statistical Methods	
Track Courses Track courses approved by the program coordinator and the student's advisor.	9
Elective Courses Elective course(s) approved by the student's advisor.	3
BME 598 Graduate Seminar Enrollment in two semesters of Graduate Seminar is required.	2
BME 601 Graduate Professional Development	1
BME 689 Dissertation Proposal	1
BME 691 Doctoral Comprehensive Examination	2
BME 696 Directed Research	3
Culminating Activity BME 693 Dissertation	33
Total	63-64

Transfer courses

Graduate coursework can be transferred to Boise State University and applied for credit to the Biomedical Engineering Ph.D. program requirements in accordance with Graduate College policy. Instructions for transfer courses can be found <u>here</u>.

Students with a master of science degree in a related field may transfer up to 21 credits toward the Ph.D. program degree requirements. For a student entering with a bachelor of science degree in a relevant field, a maximum of 9 credits of graduate coursework may be applied toward the Ph.D. program degree requirements. In all cases, the transfer credit must meet Graduate College requirements and be approved by the Program Director. Transfer credit accepted into the program will be applied on a course-by-course basis toward the degree requirements.

Transfer Credit Procedures

<u>Students with an MS or BS from a school other than Boise State:</u> Students must submit a Request for Approval of Transfer Credits, available on the <u>Graduate</u> <u>College Forms page</u>.

<u>Students with an MS from Boise State:</u> Students should meet with their advisor or the program director to determine what degree requirements have been met as part of their MS degree and should be included on the student's course plan.

MS courses from Boise State being used to meet Ph.D. degree requirements <u>do not</u> need to be submitted for approval through the Graduate College and are instead included on the Application for Admission to Candidacy.

<u>Students with a BS from Boise State:</u> The procedure is the same for students with an MS from Boise State, however, students may only apply a maximum of 9 credits of graduate coursework taken as an undergraduate.

Supervisory Committee

Your supervisory committee is charged with general guidance and mentorship, including evaluation of your comprehensive exam, supervision of the dissertation, and participation at your proposal and final defense. The supervisory committee consists of a major advisor (your research advisor) who acts as chair, and at least two, but no more than three additional members. At least two members of the committee must be faculty participating in the Biomedical Engineering program, including at least one committee member must be from the life sciences (i.e. COHS or COAS) and at least one committee members must be from engineering (COEN). Biomedical Engineering faculty members must be University regular or research faculty and members of the Graduate Faculty. The committee members are selected by the student and the research advisor and are approved by the program director. A complete list of <u>faculty</u> affiliated with the Biomedical Engineering Ph.D program can be found on the program's website.

You should form your supervisory committee through consultation with your research advisor and submit an Appointment of Supervisory Committee form, available on the Graduate College <u>forms page</u>, to the Graduate College once research toward your dissertation has commenced. A change in the membership of the supervisory committee can be made after initial appointment by submitting an updated Appointment of Supervisory Committee form.

You are expected to send an email update to the entire supervisory committee every fall in the month of October to report progress and outline your upcoming plans.

Comprehensive Examination

The objective of the comprehensive examination is to judge depth and breadth of knowledge in the biomedical engineering field, and to prepare students for writing grant proposals. The student must enroll in BME 691 Doctoral Comprehensive Examination for the semester during which they plan to take the comprehensive exam. Students are eligible to take the comprehensive exam after completing all core course requirements and track course requirements (these courses can also be in-progress).

Detailed information on the comprehensive exam can be found in our online policy titled "<u>BME Comprehensive Exam Policy</u>".

Admission to Candidacy

Upon completion of the comprehensive exam, you are eligible to complete an <u>Application for Admission to Candidacy</u>. Once this application is accepted by the Graduate College, the student becomes a Ph.D. Candidate. The Graduate College strongly recommends that the AAC be submitted when the student has finished approximately half of the degree requirements.

Dissertation Proposal

The dissertation proposal should be presented **within one year** of satisfactory completion of the comprehensive examination. The objective of the written and oral dissertation proposal is to evaluate the suitability of a PhD student to conduct research in the biomedical field in a manner that meets rigorous peer-reviewed standards. After the proposal is approved, it is expected that the student will proceed with the research outlined in the approved written proposal. Major deviation from the proposed research requires majority approval of the supervisory committee.

Detailed information on the dissertation proposal and a template for the written proposal can be found in our online policy titled "<u>BME Dissertation Proposal Policy</u>."

Dissertation (Defense and Final Reading Approval)

The written dissertation consists of original research articles authored by the student, as well as introductory and concluding chapters. A template for the written dissertation along with a detailed policy for the dissertation can be <u>found on the BME website</u>.

Publication Rule: The dissertation must be the result of independent and original research by the student and must constitute a significant contribution to the current

knowledge in the biomedical field. The policy of the BME program is that a student's dissertation will include (at least) *three original research articles that the student has written as sole 1st author* and that have been published in peer-reviewed journals (one of these papers can still be in-review at the time of the defense). These original research articles are expected to be full-length, however, it's acceptable for one of these three papers to be a shorter original research article (e.g. technical note, short communication). A review paper would not count towards the publication quota for graduation, since it does not represent original research conducted by the candidate. It's important to note that the three-publication policy is the minimal requirement for the BME program, and there may be additional publication goals or expectations set by the student and their supervisory committee. Moreover, the papers in the dissertation must not duplicate thesis or dissertation work from *prior* graduate degrees (Masters or Doctoral). In addition to the original research articles, the dissertation will also include introductory and concluding chapters. The style and format of the dissertation must conform to the standards of the Graduate College.

Defense Committee: The defense committee consists of the supervisory committee, plus an external examiner and a Graduate Faculty Representative (GFR). External examiners must have a terminal degree (Ph.D., M.D.) be external to Boise State University (e.g. industry or faculty at another university) and have no conflicts of interest. A conflict of interest is defined as any situation that could cause a reasonable person with all the relevant facts to question the impartiality of the external examiner or that leads the external examiner to question his or her objectivity. Examples include the Ph.D. student or research advisor having a personal or professional relationship with the prospective external examiner in the past three years (e.g. mentor, mentee, co-worker, collaborator). The GFR is a nonvoting member who is nominated by the student to facilitate the oral examination according to Graduate College procedures. The GFR must be a member of the graduate faculty, but cannot be an affiliate of the BME program. The Graduate College maintains a list of <u>Approved Graduate Faculty</u> from which the doctoral candidate may identify potential GFRs to contact.

Dissertation Defense

Prior to scheduling the defense, the candidate needs to submit a 'Publication Statement Prior to Defense' form to the program directors to demonstrate that the candidate has met the publication requirements of the BME program (see 'Publication Rule' above). Once this form is approved, the candidate may work with their defense committee to schedule the defense. For the defense examination to be valid, all committee members must be present. On the day of the defense, the student will give a 30-45 minute presentation about their research. After the general audience asks questions to the student, the general audience is dismissed and the student will then receive questions from the committee.

Final Approval: Majority approval of the defense committee is required to pass the defense. If the defense is passed, the defense committee can prepare a list of modifications to the written dissertation that the student needs to complete in order to receive final reading approval. Any requested modifications should be minor revisions that the student can complete within a month.

Final Oral Approval: When the written dissertation has met to the satisfaction of the defense committee, the 'BME Final Reading Approval' form is signed by the committee members.

Detailed information on the dissertation proposal can be found in our online policy titled "<u>Dissertation Defense and Final Reading Approval Policy</u>".

Program Timeline

The Ph.D. program is expected to take between 4 and 6 years, but this can vary based on student background, research project, and any number of other variables. All program requirements must be started and completed within a single continuous interval of no more than ten years.

The following table summarizes recommended milestones for full-time PhD students who are admitted with a Bachelor's degree.

Year		Milestone
Year	<u>Semester 1</u> ar	Complete a degree plan and submit it to the Program Coordinator. Take core and track courses. Conduct research.
<u>1</u> <u>Semester 2</u>	Complete provisional requirements for regular admission status, if applicable. Take core and track courses. Conduct research.	
Year	Semester 3	Submit the Appointment of Supervisory Committee Form. Take core and track courses. Conduct research.
<u>2</u>		Complete the majority of coursework. Conduct research.
<u>Year</u> <u>Semesters 5</u> <u>3</u> <u>& 6</u>	Semesters 5	Take and pass the Comprehensive Examination. Complete the Application for Admission to Candidacy Form. Conduct research.
	<u>& 6</u>	Schedule and pass the dissertation proposal. Conduct research.
<u>Year</u>	Year Semesters 7	Focus on research.
4 & 8	<u>& 8</u>	Focus on research.
<u>Year</u> <u>5</u>	<u>Semesters 9</u> <u>& 10+</u>	Focus on research.
		Take and pass the dissertation defense, and submit final reading approval. Congratulations, Doctor!

The following table summarizes recommended milestones for full-time Ph.D. students who have earned a Master of Science in a related field.

Year		Milestone
<u>Semester 1</u> <u>Year</u> 1	Complete a degree plan and submit it to the Program Coordinator. Include transfer credits of graduate courses that are being requested to be applied to the Ph.D. program degree requirements. Take core and track courses. Conduct research.	
_	Semester 2	Complete the majority of coursework. Conduct research.
<u>Year</u> 2. <u>Semester 3</u> <u>Semester 4</u>		Submit the Appointment of Supervisory Committee Form. Conduct research.
	Take and pass the Comprehensive Examination. Complete the Application for Admission to Candidacy Form. Conduct research.	
Year <u>Semesters 5</u> <u>3</u> <u>& 6</u>	Semesters 5	Schedule and pass the dissertation proposal. Conduct research.
	<u>& 6</u>	Focus on research.
	Semesters 7	Focus on research.
	<u>& 8</u>	Take and pass the dissertation defense, and submit final reading approval. Congratulations, Doctor!

Graduate Assistantships

Unless supported through other means, all full-time Ph.D. students are financially supported by a graduate assistantship. A Graduate Assistant (GA) is a Ph.D. student financially supported by a graduate assistantship under the mentorship of a Research Advisor. A primary part of a GA's professional development includes assisting their Research Advisor with research responsibilities (i.e. a research assistantships are governed by <u>University Policy 7170</u>.

During the academic semester, a GA is compensated for an average of 20 hrs per week (for a total of 1000 hours per year). Effort above and beyond the 20 hours is considered professional and academic development for things such as dissertation research and writing, as well as coursework. During breaks (i.e. fall break, spring break, summer break), GAs work on average 40 hrs per week.

Assistantship Termination or Reduction

To maintain your Graduate Assistantship you must comply with all policies, procedures and timelines outlined in this handbook, your assistantship contract with your Research Advisor, and the policies of Boise State University and the Graduate College. A Graduate Assistantship may be terminated or reduced at any time by the program for just cause such as unsatisfactory performance of assigned duties, dereliction of duties, unprofessional or inappropriate behavior, insubordination, unsatisfactory academic performance, unsatisfactory progress toward the degree, a felony conviction, or for any other cause of similar magnitude as determined by the graduate program and the Dean of the Graduate College.

Vacation

Vacation must be approved by your research advisor. Make requests for vacation in accordance with the requirements provided to you by your research advisor.

Leave of Absence for Graduate Assistants

You must be continually enrolled in the program and making satisfactory progress to maintain your Graduate Assistantship. If you cannot maintain continuous enrollment in any given semester, you may apply to the department for an official leave of absence. Official leaves of absence will be reviewed on a case-by-case basis. Your assistantship may be affected by an official leave of absence. Although we cannot guarantee availability, we will attempt to provide you an assistantship upon your return.

The Unexpected

As you pursue your graduate degree, it is likely you will encounter something, either major or minor, that is not addressed in this handbook. As you encounter these unexpected moments, we encourage you to meet with your research advisor, the program administrator or program director as appropriate and as soon as possible. We will work with you to find the solution, experience, or opportunity that best fits your unique situation.

Appendix A – Approved Track Courses

Biomaterials

Approved courses include, but are not limited to, the following: ECE 500 Applied Electromagnetics ECE 603 Plasma Engineering ECE 557 Digital Image Processing VIP 500 Plasma Medicine and Agriculture MSE 602 Survey of Materials Science MSE 577/ME577 Biomaterials PHYS 523 Physical Methods of Materials Characterization MSE 574 Soft Materials MSE 545 Nanoscale Processing PHYS 520 Nanobiotechnology

Biomechanics

Approved courses include, but are not limited to, the following: ME 510 Continuum Mechanics ME 576 Advanced Dynamics ME 570 Finite Element Methods ME 597 Failure Mechanics KINES/ME 525 Laboratory Techniques in Biomechanics

Human Performance

Approved courses include, but are not limited to, the following: KINES 506 Sports Nutrition KINES 515 Exercise Physiology Lab KINES 540 Applied Principles of Conditioning KINES 545 Clinical Exercise Physiology and Prescription KINES 580 Selected Topics in Hyperbaric Physiology KINES/ME 525 Laboratory Techniques in Biomechanics

Mechanobiology

Approved courses include, but are not limited to, the following: ME 602 Mechanobiology ME 570 Finite Element Methods ME 550 Advanced Mechanics of Materials BIOL 597 Genomics and Bioinformatics PHYS 523 Physical Methods Of Materials Characterization