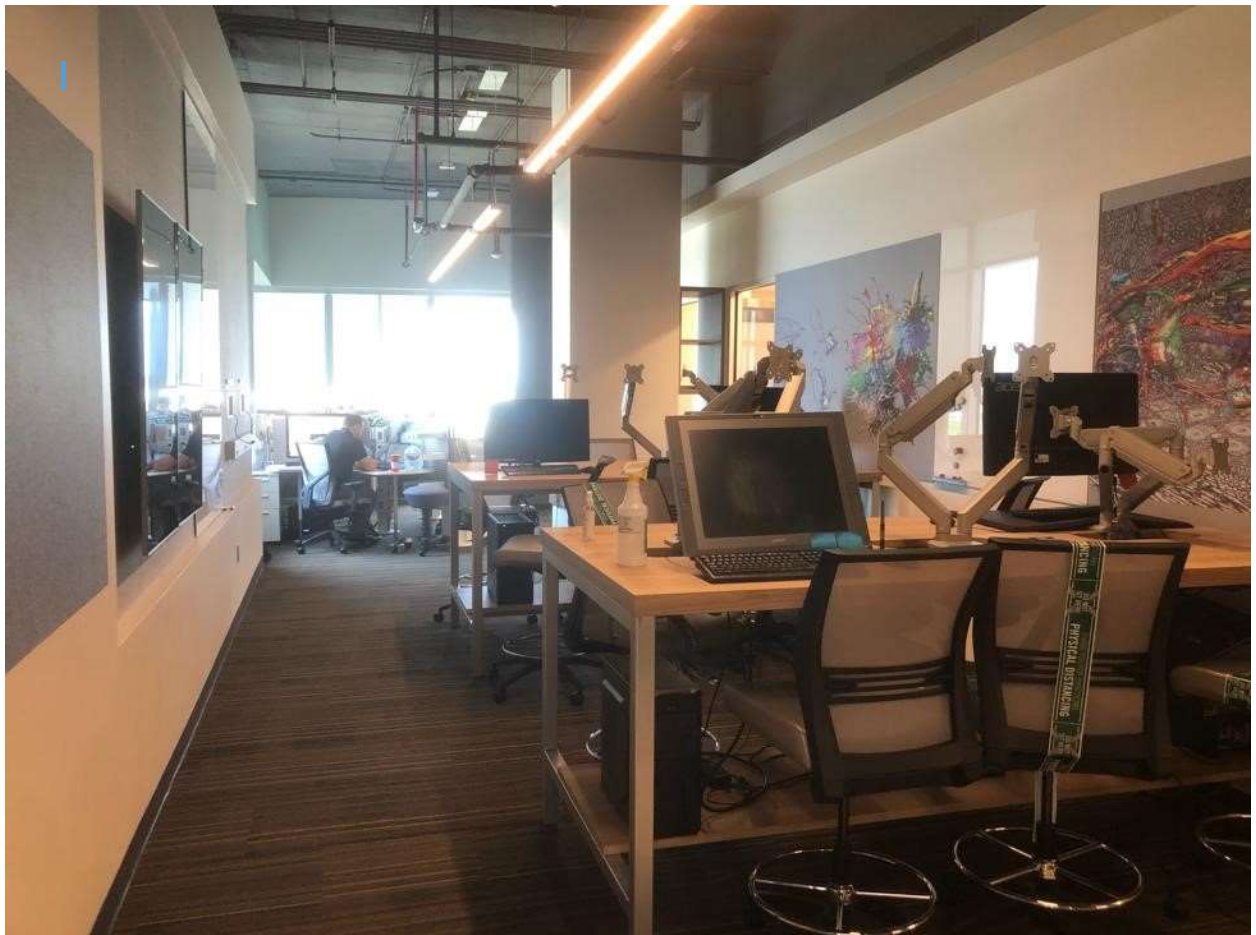


Department of Medical Engineering

Graduate Student Handbook (FALL 2024)



Welcome to the University of South Florida Biomedical Engineering – BME - Graduate Program. I am Dr. Robert Frisina, Chair and Graduate Program Director. I look forward to meeting with you to plan your courses each semester, and assist you in choosing a research advisor and committee for Ph.D. students and those pursuing a master's degree with thesis. Communicating with me each semester is important to optimize your academic and course plans, and for meeting college and graduate program requirements. There are important links in the side navigation bar which you should familiarize yourself with for your program. Use the student advising [web scheduler](#) for making appointments.

You are entering a great new phase of your career here in Tampa. Do not hesitate to [contact me](#) with any questions or concerns that you have. Our Academic Program Specialist, [Davina St. Catherine](#), is also a great resource for navigating through the milestones of your program in the administrative structure here at the University of South Florida College of Engineering and Graduate School.



Bob Frisina, Ph.D.

Professor and Chair

Graduate Program Coordinator

Medical Engineering Department

TABLE OF CONTENTS

Mission and Objective	3
Graduate Student Information	3
Department of Medical Engineering Policies and Procedures	4
Advising	6
Master of Science in Biomedical Engineering (MSBE)	6
• Program Requirements	6
• Non-Thesis/Thesis Requirements	9
• MSBE Semester Milestones	12
Biomedical Engineering Ph.D. Program	13
• Program Requirements	13
• Dissertation Requirements	16
• PhD BME Semester Milestones	17
Graduation	18

Mission and Objective

USF Department of Medical Engineering seeks to advance excellence in biomedical engineering and improve patient care by conducting innovative research, developing impactful technologies, and training students for success as multidisciplinary global leaders.

Graduate Student information

OASIS: Students use a self-selected personal identification number (PIN) in the University's **Online Access Student Information System (OASIS)** to:

- view registration appointment information
- view registration hold information
- view the Schedule of Classes
- register and drop/add courses
- view their grades
- request address changes
- request privacy
- request transcripts

Registration: To register for classes students must login to the OASIS system. Current course offerings and registration requirements are listed in the Schedule of Classes, viewable on OASIS. Note that some courses may require permits from the department for registration.

OASIS: <https://webauth.usf.edu/login>

Schedule: https://usfonline.admin.usf.edu/pls/prod/bwskfcls.p_sel_crse_search

Late Registration: Degree-seeking students who do not register prior to the first day of classes may register the first week of classes. However, a late registration fee is charged during this week. To avoid cancellation of registration, fees and tuition are due and payable for all registered courses of record on the fifth day of classes (end of drop/add period). Students are responsible for verifying the accuracy of their course registration by the end of the drop/add period (i.e. by the fifth day of classes). In the event there are courses incorrectly listed or missing on the record, students should go into OASIS and make the necessary corrections. Course registration not corrected by the end of the fifth day of classes will result in liability of tuition and fees. If courses need to be added or dropped after the fifth day of classes, refer to the Add / Drop sections of the Catalog.

Drops/Withdrawals

Drop - A student may drop a course(s) during the drop/add periods (first five days of classes) in order for the course(s) not to appear on any permanent academic records. No tuition or fees will be assessed for course(s) dropped within that period. Courses may not be dropped after the last day of classes except in cases of University Administrative error.

If a student needs to drop a course after the drop/add period, the student must submit a Graduate Studies Petition form with the approval of the instructor of the course and the chair. Once complete, the student must submit the petition and a statement explaining the reason for the request to the departments Graduate Program Specialist.

Graduate Studies Petition- [Graduate Studies Petition Form](#)

Withdrawal - A student may withdraw from a course(s) between the second and tenth week of the semester (except for summer sessions - see the Summer Schedule of Classes for dates). However, tuition and fees will be assessed for any course(s) withdrawn by the student after the first week. The student's academic record will reflect a "W" grade for any course(s). Under specific conditions, consideration for refund of tuition and fees may be requested if a Fee Adjustment Request form accompanied by verifiable supporting documentation is submitted to the Office of the Registrar within six (6) months from the end of the semester to which any refund would be applicable. Students who withdraw may not continue to attend classes.

Effective fall 2016, all graduate students will be limited to a total of **two course** withdrawals while enrolled as a degree-seeking or a non-degree seeking taking graduate courses at USF. Only in extenuating circumstances will approval be granted for more than two course withdrawals. Appeals for additional course withdrawals due to extenuating circumstances must be submitted to the Office of Graduate Studies via the Graduate Petition process

Department of Medical Engineering Policies and Procedures

Academic Integrity: As a student in the Masters or Doctoral program in Medical Engineering, you agree to adhere to the academic policies and regulations put forth by the University of South Florida. This includes upholding academic integrity and honesty at all times. Violations in academic integrity and honesty include but are not limited to cheating, plagiarism, fabrication, forgery and obstruction, multiple submissions, complicity, misconduct in research and creative endeavors, computer and intellectual property misuse.

University Regulations & Policies:

<https://www.usf.edu/graduate-studies/students/academic-integrity-of-students/index.aspx>

For more information on violations of Academic Integrity & Honesty, follow the link below,

<https://www.usf.edu/graduate-studies/students/academic-integrity-of-students/violations-of-academic-integrity.aspx>

Sanctions may include but are not limited to:

- An "F" or "O" grade on a paper, report...etc.
- An "F" in the course or activity in which credit is earned.
- An "FF" in the course (leading to expulsion from the university)

- Academic Dismissal for any violations of academic dishonesty policies or regulations
- Possible revocation of the degree following a thorough investigation

For more information on sanctions, follow the link below,

<https://www.usf.edu/graduate-studies/students/academic-integrity-of-students/violations-and-sanctions.aspx>

Academic Probation: Students who are not in good academic standing (3.0 or above) at the end of a semester shall be considered on probation as of the following semester. Notification of probation shall be made by the department, each semester a student is on academic probation. At the end of each probationary semester, the department will make one of the following recommendations:

1. Removal of probation
2. Continued probation; OR
3. Dismissal from the major

Each level of probationary status will constitute various actions that will meet the department's requirements:

Probation 1 (P1): Students who have below a 3.0 GPA requirement will be placed in P1 status. A departmental hold will be placed on the student's registration, preventing them from adding courses the following semester. To remove the hold, students must schedule an appointment with their advisor, and bring a completed copy of their probation form for review. Once an academic plan has been created, the department will remove the hold, and the student may register for classes. If the student's GPA increases to 3.0 or above, they will be removed from probation status.

Probation Level 2 (P2): Students who still have below 3.0 after their first semester in P1 status. Students will have a department hold placed on the student's account, preventing them the registration of the following semester. To remove the hold, students must schedule an appointment with their advisor, and bring a completed copy of their probation form for review. Once an academic plan has been created, the department will remove the hold, and the student may register for classes. If the student's GPA increases to 3.0 or above, they will be removed from probation status.

Probation Level 3 (P3): Students who still have a below 3.0 GPA after their second semester of probation, will be placed on P3. Students will have a department hold placed on the student's account, preventing them from registration of the following semester. To remove the hold, students must schedule an appointment with their advisor and department chair, and bring a completed copy of their probation form for review. Once an academic plan has been created, the department will remove the hold, and the student may register for classes. If the student's GPA increases to 3.0 or above, they will be removed from probation status.

** In the event that a student is unable to maintain a 3.0 GPA status after being on academic probation, students may be academically dismissed.

Advising: Dr. Robert Frisina is the Department Chair of the Medical Engineering Department. He also serves as the faculty advisor for Biomedical Engineering graduate students, and you may meet with him to discuss your educational and career goals, or to review your program of study. To schedule an appointment, [click here!](#)

Permits: Permits may be required in order to register for certain courses. You can see on the Schedule Search if a permit is required, or if you receive a registration error when attempting to register in OASIS.

- For permit requests for BME-prefix courses ONLY, please use our online form: [Permit Request Form -- Medical Engineering.](#)
- For College of Medicine courses for BME electives, use the online permit form here: <http://health.usf.edu/medicine/graduatestudies/permit-request>
- For College of Public Health courses, please contact Student Affairs at COPH for assistance: COPhPermits@usf.edu

Master of Science in Biomedical Engineering (MSBE)

The MSBE degree program is designed to combine engineering and the medical sciences. The student will work with an advisor to develop a graduate plan that draws on courses from engineering, medicine, public health, and the life sciences.

MSBE Program Requirements

Master of BME Plan of Study Form (Thesis Option) – [MSBE Plan of Study \(Thesis\)](#)

Master of BME Plan of Study Form (Non-Thesis Option) - [MSBE Plan of Study \(Non-Thesis\)](#)

Total Minimum Hours: 30 credit hours

Core Requirements- 6 credit hours

BME 5913 Research & Innovation Principles & Practice (3)

BME 6723 Biomedical Data Analysis (3)

Life Science Requirement – 3 credit hours

Students are required to take (1) course from the following list:

BME 5313 Molecular and Cellular Engineering (3)

BME 6000 Biomedical Engineering (3)

BME 6410 Engineering Physiology (3)

GMS 6605 Medical Anatomy (3)

Analytic Requirement – 6 credit hours

Students are required to take (2) courses from the following list:

BME 6510 Biomedical Signals and Systems Analysis (3)

BME 6634 Biotransport Phenomena (3)

BME 6931 Connectomics (3)

BME 7718 Advanced Math for Biomedical Engineering (3)

Elective Course Requirements - 15 credit hours

Students may either opt for the General Track or the Concentration in Biomedical Imaging & Bioelectronics, Cell & Tissue Engineering, Molecular Medicine & Drug Delivery, Neuroengineering & Rehabilitation Engineering, and Pharmacy.

General Track

Students select from additional approved courses to complete the 30-hour requirement. In addition, all of the elective courses must consist of engineering-prefix courses, although the Thesis Committee (thesis option) or the BME Major Advisor (non-thesis option) may approve courses in relevant areas such as chemistry, physics, pharmacy, communications sciences & disorders public health or medicine, in their place.

Refer to the graduate catalog for the full list of approved elective courses.

Concentration in Neuroengineering & Rehabilitation Engineering (9 credit hours)

Students may pursue a Concentration in Neuroengineering & Rehabilitation Engineering by taking at least nine (9) credit hours from the courses listed below or other relevant courses approved by the BME graduate program coordinator.

BME 6107 Biomaterials: Material Properties (3)

BME 6410 Engineering Physiology (3)

BME 6500 Bioelectricity (3)

BME 6510 Biomedical Signals & Systems Analysis (3)

BME 6931 Connectomics (3)

EML 6801 Robotic Systems (3)

GMS 6020 Neuroscience (3)

GMS 6771 Aging and Neuroscience (3)

Concentration in Molecular Medicine & Drug Delivery (9 credit hours)

Students may pursue a Concentration in Molecular Medicine & Drug Delivery by taking at least nine (9) credit hours from the courses listed below or other relevant courses approved by the BME graduate program coordinator.

BME 5313 Molecular and Cellular Engineering (3)

BME 6055 Modern Biomedical Technologies (3)

BME 6500 Bioelectricity (3)

BME 6573 Nanomedicine (3)

BME 6634 Biotransport Phenomena (3)

BME 6931 Regenerative Medicine (3)

BCH 6627 Molecular Basis of Disease (3)
PHA 6119 Micro-/Nanoscale Drug Delivery Systems (3)
PHA 6148 Nanoformulations and Nanopharmaceuticals (3)
GMS 6101 Molecular/Cellular Immunology (3)
GMS 6069 Translational Biotechnology (3)
GMS 6410 Cardiovascular Regulation (3)
GMS 7930 Applied Bioinformatics (3)

Concentration in Biomedical Imaging & Bioelectronics (9 credit hours)

Students may pursue a Concentration in Biomedical Imaging & Bioelectronics by taking at least nine (9) credit hours from the courses listed below or other relevant courses approved by the BME graduate program coordinator.

BME 6055 Modern Biomedical Technologies (3)
BME 6500 Bioelectricity (3)
BME 6510 Biomedical Signals & Systems Analysis (3)
BME 6563 Biomedical Optical Spectroscopy (3)
BME 6931 Bioelectronics (3)
BME 6931 Fundamentals of BioMEMs (3)
BME 6931 Introduction to Medical Imaging (3)
BME 7718 Advanced Math for Biomedical Engineering (3)
GMS 7930 Applied Bioinformatics (3)

Concentration in Cell and Tissue Engineering (9 credit hours)

Students may pursue a Concentration in Cell and Tissue Engineering by taking at least nine (9) credit hours from the courses listed below or other relevant courses approved by the BME graduate program coordinator.

BME 5313 Molecular and Cellular Engineering (3)
BME 6107 Biomaterials I: Material Properties (3)
BME 6235 Tissue Biomechanics (3)
BME 6410 Engineering Physiology (3)
BME 6931 Regenerative Medicine (3)
EML 6930 Biofluids & Bio-inspired Design (3)
PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine (3)
GMS 6069 Translational Biotechnology (3)
GMS 6111 Basic Medical Pathology (3)
GMS 6773 Stem Cells and Brain Repair (3)

Concentration in Pharmacy (PRMY) (9 credit hours)

In lieu of the general track elective requirement, students should take at least (9) credit hours from the following options, or other pharmacy courses, as approved by their Pharmacy and BME Advisors:

BME 6573 Nanomedicine (3)
BME 6634 Biotransport Phenomena (3)
PHA 6140 Introduction to Nanotechnology (3)
PHA 6116 Micro-/Nanoscale Drug Delivery Systems (3)
PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine (3)

PHA 6147 Nanotechnology and Risk Management (3)
PHA 6148 Nanoformulations and Nanopharmaceuticals (3)

Comprehensive Exam

Students in the non-thesis track will complete a comprehensive exam. For students in the thesis track, the thesis and oral defense serve as the comprehensive exam.

Thesis Requirements

Thesis Option

Thesis option students can count up to six hours of thesis research towards the elective requirements. Each student is responsible for finding a Major/ Co professor and select a committee to review their thesis defense. Students will be required to submit an electronic thesis to the College of Engineering for review. Students must comply with the College requirements and deadlines. In addition, students must complete a thesis defense with their supervisory committee by their final semester. ****Please be sure to pay attention to College deadlines in the College of Engineering guidebook****

To register for thesis research hours, the student must submit a course contract form with the approval of their major/co professor every semester research hours are taken. Once the contract is signed, it should be submitted to the departments Graduate Program Specialist.

Course Contract Form-

[Independent Study, Directed Research & Master's Thesis Contract](#)

Selecting a Supervisory Committee: Students are required to select a minimum of 3 committee members: Major Professor or 2 Co-Major Professors, and an additional graduate faculty member, who will serve as a supervisory board for thesis completion. While your Major Professor(s) must be within the BME Program Faculty, additional members may be graduate faculty from the student's general research area. 1 member of the Committee must be a Medical Engineering Core Faculty member. BME Program Faculty consist of the Medical Engineering Core Faculty, and the Medical Engineering Affiliate Faculty.

The committee will approve the plan for research, supervise the research, and read and approve the thesis for content and format. The student and his/her major professor will identify the two other faculty committee members jointly. Only tenure-line faculty members can serve as chair or co- chair of a thesis committee. A faculty member may not serve as a (sole) chair of a thesis committee until s/he has served as a member or co-chair of a thesis to completion. A student who nominates a person from outside the Medical Engineering department to serve as a member of the committee a CV must be submitted for that person.

Once a proposed committee has been determined, a Supervisory Committee Form needs to be completed by the student and submitted to the committee members for signature. The student should submit the form to the Graduate Academic Program Specialist, who, if s/he approves the committee

makeup, will maintain a copy in the student's file and forward the original to the Dean's Office in the College of Engineering. The committee appointment is official only after receiving College approval. An approved and current Supervisory Committee Form must be on file in the College before graduation may be certified. Committee forms need to be processed as early in the program as possible, but no later than the semester prior to graduation.

Graduate Student Supervisory Committee Form –
[Graduate Student Supervisory Committee Appointment Form](#)

Changes to the Supervisory Committee: Change of Committee Forms should be submitted for approval if the student wants to change the makeup of his/her committee or the status of a member (e.g., changing a member to chair). Faculty members who are removed from the Committee are not required to sign the revised form, provided that the Major Professor has signed indicating approval of the change. Any member who is not a USF Graduate Faculty being added to a committee must submit a CV for approval. Changes to a committee are official once approved and filed by the Graduate School.

Changes to Supervisory Committee Form-
[Changes to the Graduate Student Supervisory Committee Form](#)

Thesis Defense: Oral Defense of Thesis: The student will complete the thesis with the guidance of his/her Major Professor and Committee. Upon completion of the thesis, the student will submit to an oral defense before the thesis is submitted for final approval to the College of Engineering. Students will be required to schedule their thesis defense with the Medical Engineering department, complete and submit the Request for Thesis Defense form and announcement to the department Graduate Program Specialist. All committee members must be present for the thesis defense. Upon successful completion, students must submit Successful Defense Completion form to the department.

Request for Master's Thesis Defense - [Request for Master's Thesis Defense Form](#)

Thesis of Defense Announcement template, please visit,
<https://www.usf.edu/engineering/graduate/thesis-dissertation-info.aspx>

Defense Notification: It is the student's responsibility to schedule the Thesis Defense in a timely manner. The student must fill out the Masters Defense Announcement and email it to the Graduate Academic Program Specialist to send out notification to the department faculty of the defense at least 14 days prior to the defense. The student should also provide assessment rubrics for the committee to fill out upon completion of the oral defense. Your major professor/advisor should submit all scored rubrics to the Graduate Academic Program Specialist.

The Thesis Committee administers the oral examination. Any faculty member in the department may attend and examine if desired, but the right of voting is reserved to members of the thesis committee. The thesis and oral defense will be evaluated as a combined effort. There are three possible outcomes: Pass, Pass provided specific modifications are made, or Fail. If the outcome is a failure, the oral defense

must be repeated within one semester of the first attempt. It is the responsibility of the chair of the Thesis Committee to notify the Graduate Director in writing of the action taken by the Thesis Committee. Students who are passed conditionally upon modifications to the thesis will have such time to complete them as the committee determines appropriate. The modified thesis will be resubmitted to the Committee for final approval. After this step is completed, they may then submit their thesis to the College of Engineering.

After the student has successfully passed their defense, the student must complete the following forms (requires signatures from their supervisory committee). Students should provide their committee members with the successful defense form and defense assessment forms. The major professor/advisor should submit all scored assessments to the Graduate Program Specialist.

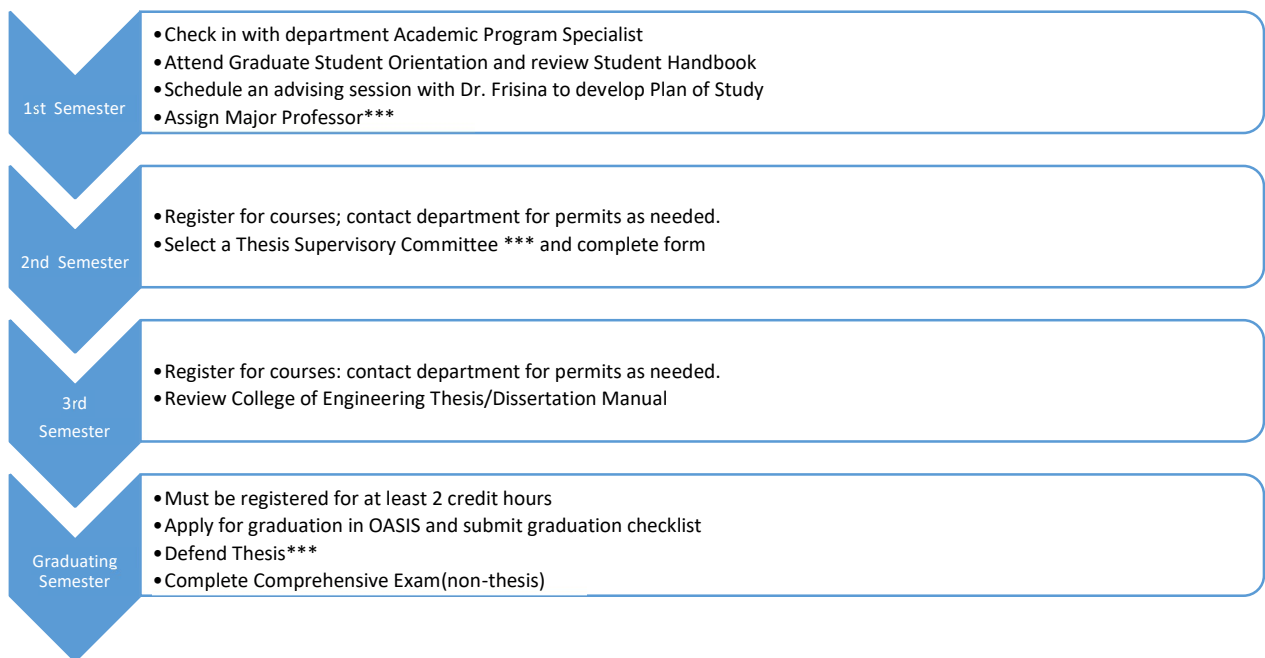
Successful Defense Form - [Successful Defense Form](#)

Assessment of Defense - [Defense Assessment Form.pdf](#)

Student must adhere to the formatting guidelines as put forth by the College of Engineering, [COLLEGE OF ENGINEERING THESIS/DISSERTATION GUIDE](#)

Once the student receives approval of their final draft by their committee, and approval from the College of Engineering, they must submit an Electronic Thesis/Dissertation packet to the College of Engineering.

MSBE Semester Milestones



Biomedical Engineering Ph.D. Program

The Ph.D. in Biomedical Engineering at the University of South Florida prepares individuals to contribute in this highly interdisciplinary field both as individuals and as members of interdisciplinary teams. Graduates are prepared to solve complex problems in areas such as diagnostic instrumentation, artificial organs, prosthetic devices, rehabilitation, and health care system design and operations, biomechanics, biomaterials, imaging, neuroengineering, tissue engineering, sensors, cellular-level drug delivery. The doctoral Major capitalizes on USF's strong programs in Engineering and in the Health Sciences as well as the contiguously located H. Lee. Moffitt Cancer Center and Research Institute, and the James Haley Veterans Administration Hospital

PhD Program Requirements

PhD in Biomedical Engineering Plan of Study Form - [PhD in BME Plan of Study](#)

Total Minimum Hours: 90 hours

Students with an approved master's degree: 60 hours minimum post-master's

Students without a master's degree: 90 hours minimum post- bachelors

Core Requirements: 6 credit hours

BME 5913- Research & Innovation Principles & Practice (3)

BME 6723 Biomedical Data Analysis (3)

Life Science Requirement: 3 credit hours

Students are required to take (1) course from the list below:

BME 5313 Molecular and Cellular Engineering (3)

BME 6000 Biomedical Engineering (3)

BME 6410 Engineering Physiology (3)

GMS 6605- Medical Anatomy (3)

Analytic Requirement: 6 credit hours

Students are required to take (2) courses from the list below:

BME 6510 Biomedical Signals and Systems Analysis Credit Hours: 3

BME 6634 Biotransport Phenomena (3)

BME 6931 Connectomics (3)

BME 7718 Advanced Math for Biomedical Engineering (3)

Elective Requirements: 15 credit hours*

A minimum of 15 credit hours is required from any combination of graduate courses in the BME catalog or non-BME courses approved by the advisor and graduate program coordinator.

Additional Elective Requirements: 30 credit hours*

After completing the M.S. degree coursework and passing the Ph.D. Qualifying Exam, a minimum of 30 credit hours is required from any combination of graduate courses in the BME catalog or non-BME courses approved by the advisor and graduate program coordinator.

** Students are required to take 2 credit hours of BME 6920 Seminar & Professional Development that can count towards Elective credit hour requirements*

Seminar Requirements and Guidelines

Students are required to take 2 credit hours of the department seminar course, which count as elective course credits. Students are also expected to participate in the department seminar every semester in the Ph.D. program separate from taking the department seminar course for required elective credits. For the course or degree progression, students are required to give at least one (1) seminar before their prospectus defense and one (1) seminar before their dissertation defense. Seminar dates should be coordinated with the students' thesis committee to fulfill research progress updates below. The seminars must present both biomedical aspects (e.g., biology-based design, experimental testing) and engineering aspects (e.g., development of computational models and/or instrumentation) of their thesis research but may emphasize one of these aspects.

Supervisory Committee

In consultation with the student and faculty of the department, the Chair will appoint an advisor (Major Professor) at the University of South Florida to the doctoral student. The advisor will help determine the student's area of research interest and delineate preliminary course assignments in consultation with the Graduate Program Coordinator of the Medical Engineering Department. The advisor will also help the student form a Supervisory Committee. This committee monitors the student's progress through the program of study and has full responsibility for conducting the student's qualifying examinations.

- **Supervisory Committee Appointment Process**

The student must confirm selection of a Major Professor and Supervisory Committee by the end of the first year in the Ph.D. program. A request for extension with written justification and proposed deadline may be submitted, which the Chair will consider in consultation with the graduate affairs committee but might not grant. Failure to submit an extension request will result in a registration hold. The Major Professor or Co-Major Professor should be Core Faculty of the Medical Engineering Department but may be Affiliate Faculty with approval. The Supervisory Committee consists of a minimum of five members. At least two members must be from the Medical Engineering Department Core Faculty, 1 member from the BME Program Faculty (Medical Engineering Core Faculty and Affiliate Faculty), 1 member from the College of Engineering outside the Medical Engineering Department, and 1 member from outside the College of Engineering. Any member who is not a USF Graduate Faculty must submit a CV for approval. Once the committee has been established, the student should submit their proposed Supervisory Committee membership to the Graduate Program Coordinator for approval. After approval, the student is required to submit a completed Supervisory Committee Form to the Graduate Program Specialist of the Medical Engineering Department, signed off by all Committee Members and the Chair. At the time of the Final PhD Defense, a Committee Chair will need to be added from outside the Core Faculty of the Medical Engineering Department.

Graduate Supervisory Committee Form-

[Graduate Student Supervisory Committee Appointment Form](#)

- **Changes to the Supervisory Committee**

Change of Committee Forms must be submitted for approval if the student wants to change the makeup of his/her committee or the status of a member (e.g., changing a member to chair). Faculty members who are removed from the Committee are not required to sign the revised form, provided that the Major Professor has signed indicating approval of the change. Any member who is not a USF Graduate Faculty being added to a committee must submit a CV for approval. Changes to a committee are official once approved and filed by the Graduate School. The student should submit the form to the Graduate Program Specialist.

Changes to Supervisory Committee Form-

[Changes to the Graduate Student Supervisory Committee Form](#)

- **Supervisory Committee Meeting Policy**

Students are required to meet twice each academic year (fall, spring) once their Supervisory Committee is formed and present current progress on their doctoral research. The proposal and defense will count toward the meeting requirements for that academic year. It is recommended that students coordinate dates with their supervisory committee so that seminar requirements above can also fulfill committee meeting requirements. Each year students will submit a supervisory committee meeting form to the graduate program specialist, indicating that they have met with their entire committee to review their progress through the program of study. Unless approved by the Chair, students who fail to comply with the committee meeting policy will have a departmental hold placed on their student record, prohibiting registration for the following semester.

Comprehensive Exam

A master's degree may be awarded once thirty (30) hours of required coursework is successfully completed and by passing a written M.S. comprehensive examination. The comprehensive exam must be taken prior to the Ph.D. qualifying examination. The exam is administered by the Graduate Program Coordinator, who will determine satisfactory/unsatisfactory performance and may result in non-awarding of the master's degree. Students who do not pass the exam may still proceed onto the Ph.D. qualifying examination. The student should submit the "Masters Along the Way" form to the Graduate Program Specialist.

Master's Along the Way-

[Master's Along the Way Form](#)

Qualifying Exam

The Ph.D. Qualifying Examination, a required program component, should preferably be completed by the end of the second year of study. The Supervisory Committee will evaluate a written dissertation proposal and an oral defense. Poor performance on the qualifying exam based on the judgment of the Committee may result in the student failing the exam. If a student does not pass on the first attempt, he/she may request in writing to repeat the exam. Students who fail the Qualifying Examination the second time will be dismissed by the department.

Once the student has scheduled the examination with their committee. The student must complete and submit the qualifying exam application form to the Graduate Program Specialist at least one week prior to the exam.

Qualifying Exam Application-

<https://www.usf.edu/engineering/bme/documents/qualifyingexamapp.pdf>

Admission to Candidacy

Students must be admitted to candidacy before they register for dissertation. Before admission to candidacy, students must have: a) successfully passed the qualifying examination; b) demonstrated proficiency in written and spoken English as required for Teaching Assistant (TA) positions; and c) been accepted by a department faculty member credentialed to serve as chair of the dissertation committee (major professor). Once admitted to candidacy, students must enroll for a minimum of 2 dissertation credit hours each semester of the academic year until completion of program.

Students will enter candidacy once they have successfully passed their qualifying exam. They must obtain the signatures of their committee members for the qualifying approval form and the admission to doctoral candidacy form. Once complete, the forms must be submitted to the Graduate Program Specialist.

Qualifying Exam Approval Form- [Qualifying Exam Approval Form.pdf](#)

Admission to Doctoral Candidacy Form- <https://usf.app.box.com/v/admission-to-doc-candidacy>

Dissertation Defense: Oral Defense of Dissertation: The student will complete the dissertation with the guidance of his/her Major Professor and Supervisory Committee. Upon completion of the thesis, the student will submit to an oral defense before the dissertation is submitted for final approval to the College of Engineering.

Students will be required to schedule their dissertation defense with the Medical Engineering department, complete and submit the Request for Dissertation Defense form and announcement to the Graduate Program Specialist. All committee members must be present for the dissertation defense.

Request for Dissertation Defense - [Request for Doctoral Dissertation Defense form](#)

Dissertation Defense Announcement template, please visit,

<https://www.usf.edu/engineering/graduate/thesis-dissertation-info.aspx-dissertation-info.aspx>

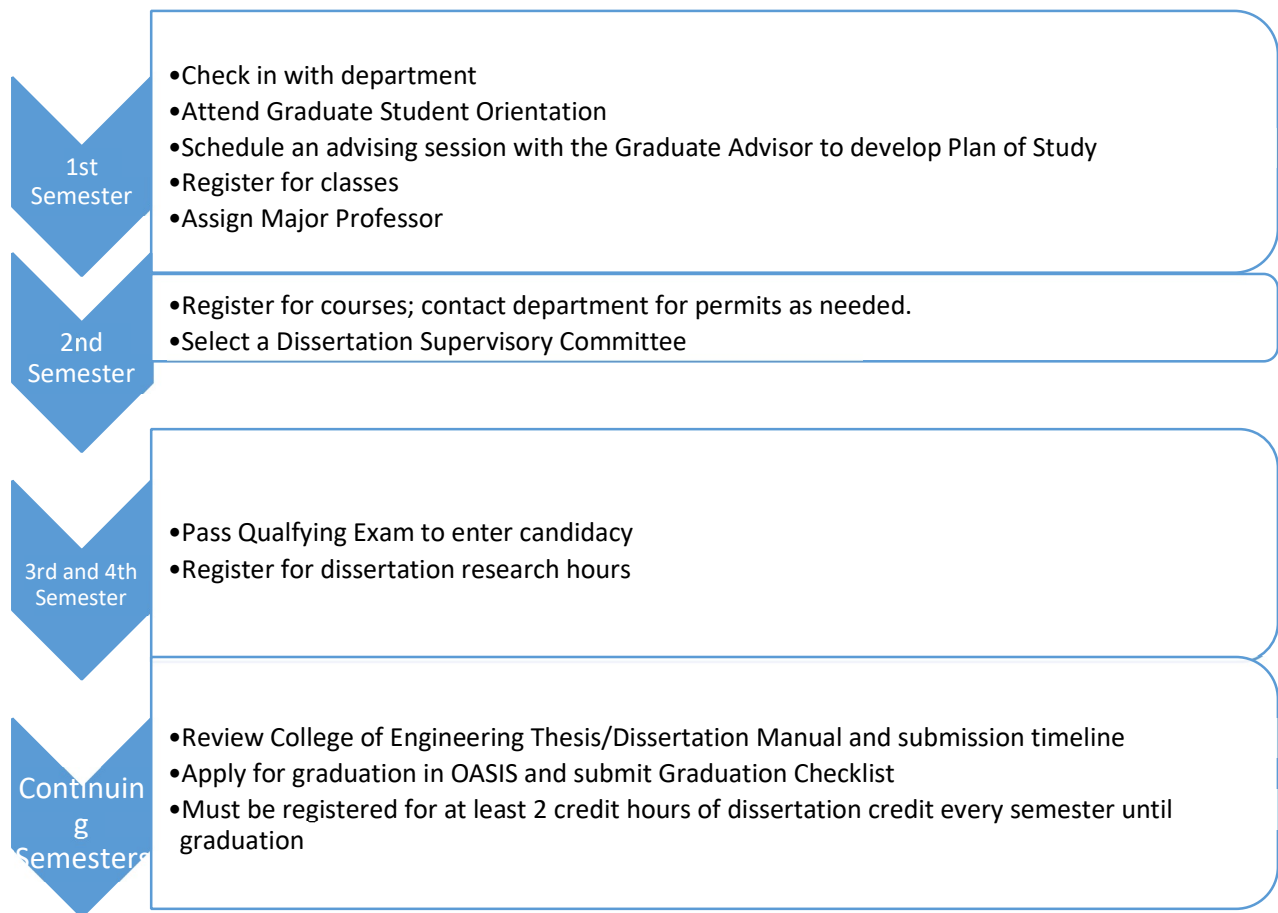
Defense Notification: It is the student's responsibility to schedule the Dissertation Defense in a timely manner. The student must fill out the Request for Dissertation Defense form and Masters Defense Announcement and email it to the Graduate Academic Program Specialist. The College of Engineering will need to send the announcement out at least one week prior to the defense. The student should also provide assessment rubrics for the committee to fill out upon completion of the oral defense. Your major professor/advisor should submit all scored rubrics to the Graduate Academic Program Specialist.

Ph.D. Successful Defense Form - [Successful Defense Form](#)

Assessment of Defense Form - [Defense Assessment Form](#)

Upon successful completion, students must submit Successful Defense Completion form to the Senior Academic Program Specialist, College of Engineering, Ms. Catherine Burton at sburton@usf.edu and the departments Graduate Academic Program Specialist.

Ph.D. Semester Milestones



Graduation

Register for at least 2 credit hours of Thesis/Dissertation and apply to graduate in OASIS. Thesis and dissertation students need to register for at least 2 research credit hours even if no other classes are being taken.

Thesis/Dissertation students should arrange for a departmental seminar through the Medical Engineering department after determining a suitable time in consultation with their Thesis/Dissertation Supervisor and committee members.

All students need to ensure that the Graduate Certification checklist with any supporting documentation is complete. All graduates must submit a Graduation checklist to the Graduate Program Coordinator for approval. Once complete, the form should be submitted to the Graduate Academic Program Specialist. Students will be required to complete a graduation information survey by the end of the semester. A link will be provided via email once a graduation application is complete.

Graduation Checklist- [BME Graduation Checklist Form](#)

DATE	DESCRIPTION
May 1, 2023	Document approved by BME Graduate Affairs Committee.