JOHNS HOPKINS
UNIVERSITY

Department of Electrical and Computer Engineering

Graduate Student Advising Manual

2021 - 2022

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Department of Electrical and Computer Engineering
The Johns Hopkins University

Table of Contents

1. WELCOME

Welcome to the Department of Electrical and Computer Engineering! This manual can help you plan a program of graduate study leading to the Master of Science in Engineering (M.S.E.) degree, Doctor of Philosophy (Ph.D.) degree, or both. Its pages are devoted to policies, rules, procedures (in italics), and suggestions about our program with the intention of providing useful information about these programs. However, uncertainty is implicit in any endeavor, and this document is not phrased to professional legal standards and remaining questions should be addressed to your advisor, the Director of Graduate Studies, or the Department Chair.

2. GENERAL INFORMATION

Having noted what this manual is about, it is important to emphasize that the most important aspect of graduate study is seldom mentioned. As a student entering our program, you are beginning a joint enterprise with other students and the faculty that, at its best, is stimulating, enjoyable, and rewarding for all concerned. Advanced study, innovative fundamental research, and publication of results are the goals. The mechanics documented here are in place to help you achieve these goals.

Note that all students who wish to be admitted to our graduate program leading to either an M.S.E. or Ph.D. must have a bachelor's degree or its equivalent upon entry.

2.1. Required Introductory Courses and Tutorials

There are two introductory courses and tutorials that most or all graduate students must take.

2.1.1. Responsible Conduct of Research Course

All M.S.E. and Ph.D. graduate students will be required to take the "Responsible Conduct of Research" course.

- M.S.E. students must complete the online training course (AS.360.624) before the end of their first semester of enrollment.

- M.S.E. students receiving payment from NIH Training Grants must take the in-person training course (AS.360.625).

- All Ph.D. students must complete the in-person training course (AS.360.625). Doctoral students are expected to complete the course by the end of the first year but have until the start of the fourth semester to meet this requirement. Failure to comply with this requirement could result in a loss of funding.

Note for Ph.D. students who completed the in-person course previously as an undergraduate or master's student at Johns Hopkins: Verification of course completion can be re-used, with two exceptions: (1) for those doctoral students on formal NIH training grants or fellowships, the in-person course must be completed at each level funding is received (i.e., the course must be re-taken as a doctoral student); and (2) for those doctoral students on NSF funding who have

previously completed the in-person course as a JHU undergraduate or master's student, the online course can be used to satisfy this requirement as a Ph.D. student.

Information is available at http://engineering.jhu.edu/wse-research/resources-policies-forms/responsible-conduct-of-research. Successful completion of this course must be verified before a student's diploma is issued.

2.1.2. Academic Ethics

As a graduate student, you will be automatically enrolled in the online tutorial 500.603 Academic Ethics, which teaches academic and ethical responsibilities. This approximately 30-minute tutorial must be completed in the first eight weeks of the student's first semester. The Whiting School of Engineering will notify new students when the course is available.

2.2. Course Registration and Credits

2.2.1. Credits and Full-Time Status

Since 2016, all Whiting School of Engineering graduate courses have been assigned credit hours. Note that:

- To maintain full-time status, WSE graduate students must be enrolled in at least 9 credits in each semester. Students enrolled in fewer than 9 credits per semester will not meet the full-time enrollment requirement, which may affect residency requirements for all and visa concerns for international students.
  - Seminars – 1 credit
  - WSE courses, both undergraduate and graduate – 3 or 4 credits
  - 520.801/520.802 Ph.D. Dissertation Research – 3-20 credits
  - NOTE:
    - Audited courses do not count toward a full-time credit load.
    - While Krieger School of Arts and Sciences' (KSAS) graduate-level courses do not have credits listed in SIS, they are recognized as 3-4 credits toward the full-time credit load. KSAS graduate-level courses are 400 level and above.
- Full-time MSE students are expected to take at least three, 3 credit courses for each of their first two semesters.
- All full-time Ph.D. students must satisfactorily complete at least nine credits per semester (fall/spring) until they have a Research Advisor. Until the Departmental Examination is passed, no more than one Independent Study course per faculty member can be counted toward these three courses.
- PhD students are expected to register for 20 credits of Dissertation Research 520.801/520.802 once they pass the DQE.
- Visit the Whiting School's Frequently Asked Questions page at http://homewoodgrad.jhu.edu/academics/wse-graduate-credit-hours/ for more information.

2.2.2.   Interdivisional Course Registration

Students may wish to register in another division, like the Engineering for Professionals program or in any of Hopkins's eight other schools. Such students should complete the Interdivisional Registration (IDR) Form. Visit https://studentaffairs.jhu.edu/registrar/students/interdivisional-registration/ for information and a link to the IDR form. Once completed, the form can be submitted in person at the Office of the Registrar, or via email at GRRegistration@jhu.edu.

3. M.S.E. DEGREE PROGRAM

The requirements for the Master of Science in Engineering (M.S.E.) degree, along with general information, are described here. Every graduate student in the Department of Electrical and Computer Engineering must follow a program approved by a faculty advisor in the department. The advisor assigned to the student upon admission may be changed, subject to the approval of the new advisor.

3.1.   University and Whiting School Degree Requirements

Visit https://e-catalogue.jhu.edu/arts-sciences/full-time-residential-programs/graduate-policies/academic-policies/#text for information on school-wide requirements. These include:

• Two semesters of full-time course registration, also called "residency" (this rule does not apply to students in the concurrent B.S./M.S.E. program or those who enter the M.S.E. program after two or fewer semesters following completion of a JHU undergraduate degree).

• Course registration every semester.

• Completion of academic ethics and responsible conduct of research courses.

• If a student is submitting a formal M.S.E. essay (see Sections 3.2 and 3.5 below), the essay must be approved by at least one reader/advisor who has ECE advising privilege.

3.2.   M.S.E. Electrical and Computer Engineering – Degree Requirements

Some students are interested solely in the M.S.E. degree, while others may elect to receive an M.S.E. on the way to the Ph.D. Either way, the requirements are the same and the advisor's approval is required. Students enrolled solely in the M.S.E. program are not guaranteed admission to the Ph.D. program on successful completion of their degree. The departmental requirements for the M.S.E. degree subsume the university-wide requirements.

The requirements for the M.S.E. degree in Electrical and Computer Engineering (ECE) are as follows:

1. Satisfactory completion of eight one-semester 3-4 credit graduate courses (xxx.400 - xxx.799) approved by the advisor.

    a) At least five of these courses must come from the full-time ECE department (EN.520.XXX).

    b) Courses that are primarily Independent Study or Dissertation Research may not count as part of these five courses. These courses include 520.700-Master's Research, 520.800-Independent Study, and 520.801-Dissertation Research. Students may count one of these primarily research courses as one of the additional 3 courses that make up the 8 3-4 credit courses required. Students must submit a research report for this course.

c) The ECE Seminar Course (520.895) and Special Studies courses cannot count towards the 5 ECE courses.

d) Students are required to take EN.520.895 ECE Seminar for two semesters.

2. In addition to the eight courses above, students must also fulfill <u>one</u> of the following three requirements:

a) Satisfactory completion of two additional one-semester 3-4 credit graduate courses (xxx.400 - xxx.799) approved by the advisor. At least one of these courses must come from the full-time ECE department (520.XXX). These can include Independent Study and Dissertation or Master's Research, accompanied by the research report.

b) Write an M.S.E. essay (the official name of the master's theses at Johns Hopkins) acceptable to a member of the ECE faculty. The M.S.E. essay must be submitted to the library and must follow the guidelines described in http://www.library.jhu.edu/library-services/electronic-theses-dissertations/; or

c) Completion of a special project acceptable to a member of the ECE faculty and writing a corresponding report. A copy of this report must be submitted to the ECE office and becomes a permanent part of the student's record.

3. Every graduate course designated Independent Study, Dissertation Research, or Special Studies counted toward the M.S.E. degree must include a written report. A copy of the report will become a part of the student's permanent file.

4. Full-time MSE students are expected to take at least three, 3-4 credit courses for each of their first two semesters.

3.2.1.   Course Grade Policy

- To fulfill requirements 1 or 2, a course is satisfactorily completed if a grade from A+ to C- or a "P" is obtained. No more than one C+, C, or C- and/or "P/S" grade can be counted toward the degree requirements.

- A single grade of D or F or two C's (C+, C, C-) result in academic probation. Following probation, receiving a grade of C+ or lower in any further course will result in the student's termination from the program.

3.2.2.   Course Transfer and Double Counting of Courses

- Subject to the approval of the advisor, students may transfer up to two courses from outside JHU if they have not been applied to a degree elsewhere. Evidence that they were not applied to a degree elsewhere will need to be provided by the degree granting institution. These courses cannot count for the 520.xxx requirement.

- The ECE department does not allow Bachelor's/Master's double counting of courses. Students in the combined B.S.E./M.S.E. program can take courses concurrently for the two degrees, but each course may only count for either the B.S.E. or M.S.E. program.

- Every student must be registered in the semester that degree requirements are met; this includes students who have no courses remaining in which to enroll but must resolve coursework for which an "Incomplete" grade was assigned and those who must complete

other academic requirements, such as a language or computing requirement (these students may apply for Nonresident Status).

3.3. M.S.E. Essay
3.3.1.   M.S.E. Essay Reader

The ECE department requires one official reader. This is the person who supervised the student's project. This must be a member of the Department's primary or secondary faculty.

3.3.2.   Submission and Printing of Essays

Masters essays may be submitted only electronically. For information, contact the Electronics Theses and Dissertations (ETDs) office of the Sheridan Library at etd-support@jhu.edu.

3.4. Degree Completion
3.4.1.   Degree Completion Deadlines

The master's degree completion schedule and deadlines are available at
http://engineering.jhu.edu/graduate-studies/academic-policies-procedures-graduate/.
Be sure to meet the deadlines when completing your degree and related applications to graduate.

3.4.2.   Degree Completion Time Limit

The Whiting School of Engineering requires that students earn the M.S.E. degree within five consecutive academic years (10 semesters). The only exemption from this limit is for semesters in which a student has a university-approved leave of absence. Otherwise, all semesters from the beginning of the student's graduate studies – whether resident or not – count towards the ten semester limit.

3.4.3.   Degree Completion Forms

Students who have completed the requirements for the M.S.E. degree should complete both the "Application for Graduation" form, through their SIS record, and the "MSE Checklist" form.

3.4.4. ECE Master of Science in Engineering Graduation Process
1. The candidate gets the "WSE Master's and CAS Completion Confirmation and the MSE Checklist" form from the ECE website at http://engineering.jhu.edu/ece/departmental-forms

2. The student fills out the student section of the WSE Master's and CAS Completion Confirmation form and returns to the Senior Academic Program Coordinator. Student also fills out the MSE Checklist and has it approved and signed by his/her advisor and gives the form to the Coordinator.

    Students who choose to submit a master's essay must submit it electronically to the JHU Library's ETD office https://www.library.jhu.edu/library-services/electronic-theses-dissertations/. Hardbound books will not be printed on campus, but information will be provided on where they can be printed and bound. The library will do some brief format checking. They will then approve the submission or email you about necessary changes. For information, see https://www.library.jhu.edu/library-services/electronic-theses-dissertations/formatting-requirements/

If students choose completion of a special project report, the candidate gives a copy of the report to the Administrator, who makes a copy of the title page for the WSE Graduate Committee, and files the report in the candidate's departmental file.

3. The candidates apply for graduation through their SIS record.

4. Documentation submitted to the WSE Graduate Committee by the Administrator:
   - "WSE Master's and CAS Completion Confirmation" form
   - MSE Checklist
   - Title page of special project report or master's essay, if applicable
   - The student's transcript if transferring courses from EP or another university

Deadlines for Terminal M.S.E. Degree

End of August: If M.S.E. paperwork is submitted by that deadline, the student need not register for classes for the fall semester and may request an interim certificate in December.

Beginning of September: Student must register for classes if M.S.E. paperwork has not been submitted. If the student intends to submit M.S.E. paperwork by the mid-October deadline, the student may request a tuition waiver.

Mid-October: If M.S.E. paperwork is submitted by this deadline, the student is entitled to a tuition refund and may request an interim certificate in December.

Mid-January: If M.S.E. paperwork is submitted by this deadline, the student need not register for classes for the spring semester.

Early May: Deadline to submit M.S.E. paperwork in order to get a degree in May.

3.5. Part-Time Status and Tuition

Master's students of the Department of Electrical and Computer Engineering may become eligible for part-time status.

"ALL-COURSE" MASTER'S STUDENTS
Master's students must register full-time for all semesters with a minimum of nine credits. If in a student's final semester, a student needs fewer than nine credits to complete the degree requirements, the student can switch to part-time status.

"ESSAY/PROJECT" MASTER'S STUDENTS
After meeting the minimum two-semester "full-time" residency requirement - where a student pays full-time tuition for a minimum of two semesters - Whiting School master's students who have not yet completed the research to the point where the final and sole activity is essay/project writing must maintain their "residency" status, but can register as "part-time" students by registering for eight credits or less per semester.

PART-TIME TUITION (2020-2021 academic year)
Students who enroll as part-time students are charged $5701 minimum for up to 3 credits: then $1,900.35 per credit after minimum tuition

PART-TIME RESTRICTIONS

Students are ineligible to work as student workers, including as Course Assistants.

HOW TO OBTAIN PART-TIME STATUS

Contact one of the Senior Academic Program Coordinators to confirm eligibility to switch. International students must first obtain approval from the International Office and complete a Reduced Course Load Request form through iHopkins.

RESOURCES

Whiting School Graduate Credit Hours: http://homewoodgrad.jhu.edu/academics/wse-graduate-credit-hours/

3.6 Non-Residency Status and Tuition

"ALL-COURSE" MASTER'S STUDENTS

Students taking the "all-course" master's degree are not eligible for non-residency status.

"ESSAY/PROJECT" MASTER'S STUDENTS

Whiting School graduate students are eligible for non-residency status when all degree requirements except the writing of the master's essay/project are complete. The essay/project research must be finished before the non-resident status can be requested. Note that WSE graduate students are typically granted only one semester of non-residency with the expectation that the essay/project will be written, read, and approved in that semester. The WSE will consider exception requests for an additional semester of non-residency.

NON-RESIDENT TUITION

Non-resident students pay only 10% of the full-time tuition but have all the privileges of full-time students including access to campus services and faculty advising.

NON-RESIDENT RESTRICTIONS

Non-resident students cannot enroll in courses; they also lose the Whiting School's financial support for health insurance.

Non-resident students are automatically enrolled in health insurance, but can waive the insurance, if eligible for waiver by proof of enrollment in another health insurance plan with similar coverage.

To maintain non-resident status, students will have to register for non-resident status each semester and provide a letter explaining their progress toward the degree's completion.

HOW TO OBTAIN NON-RESIDENT STATUS

• Contact one of the Senior Academic Program Coordinators to confirm eligibility for non-resident status.
• Complete the Non-Resident Status for Whiting School form. This form will be sent by the Senior Academic Program Coordinator to the Whiting School Academic Affairs office for review and approval.
• If the Non-Resident request is denied, a student may be eligible for part-time status.

RESOURCES

- Graduate Residency and Registration Policies:
  http://homewoodgrad.jhu.edu/academics/graduate-board/new-grad-board-residency-page/
- Graduate Board Forms, which include the Non-Resident Application and the Non-Resident Annual Report: http://homewoodgrad.jhu.edu/academics/graduate-board/policies-and-forms/
- Whiting School of Engineering Policy on Health Insurance page:
  http://engineering.jhu.edu/graduate-studies/academic-policies-procedures-graduate/ (then select the Health Insurance tab)

3.7   Home2Homewood Program

The Whiting School of Engineering is pleased to announce Home2Homewood (H2H), an option for students admitted to the ECE Master's program. Students may take up to four courses online at home before spending two full-time semesters on the Homewood campus in Baltimore, MD.

The JHU Whiting School of Engineering's Engineering for Professionals division, https://ep.jhu.edu/programs-and-courses/programs/electrical-and-computer-engineering, will provide the online "at home" courses.

H2H OPTIONS

- Traditional program-1.5 to 2 years' full-time residency

- Two online courses in summer before starting two full-time semester residency in the Fall semester

- Two online courses in summer and fall before starting two full-time semester residency in the Spring semester

- Four online courses in the Fall semester before starting two full-time semester residency in the Spring semester

- Start two full-time semester residency in the Fall semester, completing the remainder of courses online

If you are an international student, the two in-residence semesters will meet the necessary requirement to apply for Optional Practical Training (OPT).

4. Ph.D. DEGREE PROGRAM

The Ph.D. requirements apply to all part-time and full-time students in the program. Time limits, however, are stated in the context of full-time graduate study. Time limits for part-time programs must be individually arranged with the student's advisor and the Director of Graduate Studies. The Ph.D. degree certifies that the holder has demonstrated research capability. Accordingly, the Ph.D. requirements are used as checkpoints leading the student through this research experience. Because students tend to spend more than ample time on the path to research, several requirements prescribe time limitations. The requirements stated below include university-wide requirements for the Ph.D.

4.1.   PhD Requirements Summary

To fulfill the requirements for the Ph.D. degree in ECE, the student must:

1. Satisfy the University Ph.D. residency and the Department course load requirements.

2. Pass the Departmental Qualifying Examination and select a Research Advisor.

   - Departmental Qualifying Examination: The student must select and complete the examinations posed by three examiners eligible to supervise doctoral dissertations in the ECE Department, of which at least two must be tenure-track ECE faculty.

   - Research Advisor Selection: The Research Advisor must be eligible to supervise doctoral dissertations in ECE.

3. Pass the Graduate Board Oral Examination.

4. Submit a Preliminary Research Proposal and a proposed Dissertation Committee consisting of between three and five members, including the Research Advisor. At least two must have tenure-track appointments (from the list in §13.1) and three have Ph.D. supervising privileges in the ECE Department (from list in either §13.1 or §13.2.).

5. Successfully present a Departmental Seminar.

6. Submit a dissertation and successfully complete a Public Dissertation Defense.

   - The dissertation must have two Dissertation Readers with the first reader being the Research Advisor.
   - The Dissertation Committee administers a Public Dissertation Defense and votes on the acceptance of the dissertation.

4.2. Residency and Course Load Requirements

To fulfill the requirements for the Ph.D. degree in ECE, the student must:

Satisfy the University Ph.D. residency requirement and the Departmental course load requirements.

1. **Residency**: Every student must complete a minimum of two consecutive semesters of registration as a full-time, resident graduate student. To qualify as a resident student, the student must be present on campus and working toward fulfilling the requirements for the degree. Complete information is available on the JHU Graduate Board's website at http://homewoodgrad.jhu.edu/academics/graduate-board/

2. **Coursework**: All full-time students must satisfactorily complete at least nine credits per semester until they have a Research Advisor. Additionally, students must enroll in the ECE Departmental Seminar (520.895) during this time. Until the Departmental Examination is passed, no more than one Independent Study course per faculty member can be counted toward these three courses.

   A course is satisfactorily completed if a grade from A+ to C- or a "P" is obtained. No more than one C+, C, or C- and/or "P/S" grade can be counted toward the degree requirements. A single grade of D or F or two C's (C+, C, C-) result in academic probation. Following probation, receiving a grade of C+ or lower in any further course will result in the student's termination from the program.

4.3. Ph.D. Departmental Qualifying Examination

Pass the Departmental Qualifying Examination before the beginning of the fourth semester of graduate study.

A student can take the Departmental Qualifying Examination only if enrolled in the Ph.D. program. The student must select and complete the examinations posed by three examiners eligible to supervise doctoral dissertations in the Department of Electrical and Computer Engineering (see lists in §13), of which at least two must be tenure-track ECE faculty (listed in §13.1). The respective examiners grade completed examinations, but it is the ECE Department faculty that makes a collective decision on whether the student has adequately fulfilled the Departmental Qualifying Examination requirement. This decision involves the student's cumulative academic performance in the graduate program, as well as performance on the examination. The Departmental Qualifying Examination cannot be taken more than twice. The fall and spring qualifying examinations are given over a period of seven days immediately preceding the start of classes.

Select a Research Advisor before the end of the semester in which the student met the Departmental Qualifying Examination requirement.

A student cannot have a Research Advisor before passing the Departmental Qualifying Examination. The Research Advisor sets requirements for the remainder of the program. These may include a teaching requirement, particular coursework, a reading program, or a preliminary research project.

Note: Either the student or the Research Advisor can discontinue the relationship for any reason. When a Student-Research Advisor relationship is discontinued, a new Research Advisor must be selected within two months. Note that once the student chooses a research advisor, the student must obtain a research advisor form from the Academic Program Administrator, have their advisor sign the form and then return it to the Administrator.

4.4. Ph.D. Graduate Board Oral Exam

Take the Graduate Board Oral Examination before the end of the sixth semester.

The purpose of the examination is to test the depth and breadth of the student's knowledge and reasoning abilities. The examination typically is based on the student's course background but may include the proposed dissertation topic. The examination is conducted by five faculty members: two ECE professors and three from outside the Department. One departmental alternate and one outside alternate are also required. The members of the GBO examination committee are selected by the Chair or Director of Graduate Studies and approved by the Chair of the Graduate Board. Although consultation with candidates and their faculty advisors regarding possible exam committee members is appropriate, election of the committee is the Department Chair's responsibility and is not the candidate's responsibility or prerogative.

Students preparing to take the GBO must contact Senior Academic Program Coordinator to make arrangements at least five weeks prior to the intended exam date. Five weeks' notice will allow time to confirm availability of the proposed examiners and notify the Graduate Board by their notification deadlines. The Administrator is responsible for finding a room and submitting the form entitled *Oral Examination for Degree of Doctor of Philosophy* to the Graduate Board Office.

The Graduate Board chooses a GBO committee chair from among the three committee members that are not from the ECE Department and sends an information letter and the GBO report form back to the Administrator who forwards a copy to the chair of the examination committee. The

Administrator sends a confirmation email to all the committee members, committee alternates, and the candidate.

The possible outcomes of the GBO examination include: an unconditional pass, a conditional pass (with the requirements to be met written down on the report form), or failure. In the latter case, if the chair of the GBO committee recommends reexamination, he/she must indicate with whom and when. At least one person from the original committee must be on the next committee. The Graduate Board does not allow more than two examinations. After the GBO examination, the chair of the GBO committee submits the original signed GBO report form to the Administrator, where a copy will be placed in the student's file and updates the ECE graduate student list.

At least one committee member from outside the department must be an Associate Professor or higher (to satisfy the requirement that the committee chair must be an Associate Professor or higher). Note that for GBO examination committee purposes, the research advisor is counted as a member of the ECE Department. The Graduate Board *must approve* any committee member who is either from outside the university or who is from a department, laboratory or institute within Johns Hopkins that does not sponsor a Ph.D. program. The Director of Graduate Studies or Department Chair must provide a letter describing the need for a non-Hopkins committee member, a CV, and the examination form must be submitted to the Graduate Board *four weeks* before the proposed examination. At most one committee member must need approval by the Graduate Board. Note that a committee member that has a joint appointment in a JHU Ph.D. sponsoring department does not need to be approved by the Graduate Board. For more information, consult the following website:

http://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams

4.5. Dissertation Committee

Prior to the preliminary research proposal, the student must propose a dissertation committee consisting of between three and five members, including the Research Advisor. At least two must have tenure-track appointments and three have Ph.D. supervising privileges in the ECE Department (see §13.2).

While it is envisioned that members of the Dissertation Committee will continue until the Dissertation defense (item 5.6, below), changes can be made at any time before the dissertation is submitted, with approval of the faculty.

4.6. Ph.D. Preliminary Research Proposal

Submit a Preliminary Research Proposal before the start of the seventh semester of graduate study.
The purpose of the preliminary research proposal is to ensure that the student is planning a research project that is both significant and realistic. A preliminary research proposal should contain the following:

1. **Cover Page:** The cover page of the proposal should list a working title for the student's research activities, the students name, and a proposed Dissertation Committee.

2. **Project summary:** The proposal must contain a summary of the proposed research, not more than one page in length. This should be a self-contained description of the research to be undertaken.

3. **Project Description:** The description should state the objective of the intended research, explain why the topic selected is of interest, provide a brief overview of what has already been done in the area, indicate how the student plans to conduct the research, and provide a rough time table.

4. **Page limits:** The project description may not exceed fifteen (15) pages. These page limits include references, figures, and tables. Text should not be smaller than 12pt, with 1" margins throughout.

The proposal must be submitted during <u>the first week of the student's seventh semester</u> to the Administrator who will distribute it to the proposed committee members for evaluation. The committee will evaluate the proposal and vote on whether to approve the proposal. If approved, the student will have met the requirements for the Preliminary Research Proposal and a Departmental Seminar will be scheduled (item 5.5, below). If not approved, the student will be given feedback, but will be allowed to submit a second Preliminary Research Proposal. Failure to meet the requirements a second time will result in dismissal of the student from the ECE doctoral program.

4.7. Departmental Seminar

Present a Departmental Seminar within one semester after having the Preliminary Research Proposal approved.

The Departmental Seminar is a public presentation of the student's proposed research. Its purpose is to provide an opportunity for the student to present the research to an audience unfamiliar with the student's work. Also, it affords the student an opportunity to demonstrate how the proposed research is progressing. Finally, it provides an opportunity for others in the department to become familiar with the student's work. A majority of the members of the Dissertation Committee are required to be present at the student's Departmental Seminar; other faculty members and all graduate students are encouraged to attend. At the conclusion of the seminar, all ECE faculty members present meet to vote on whether the student has passed the seminar requirement. The faculty may take into consideration the knowledge displayed by the student of the proposed research and whether the successful completion of the proposed research would satisfy the dissertation requirement. A student may be requested to prepare another research proposal and/or seminar if the faculty decides that the research proposal and seminar requirement were not satisfied, or if the student makes a major change in research topic.

The seminars are usually held on Thursday afternoons at 3pm. Students should give a title and abstract as well as a headshot to the ECE Communications Specialist at least two weeks before it is to be presented.

4.8. Ph.D. Dissertation Defense

Submit a Dissertation and successfully complete a Public Dissertation Defense.

1. Dissertation defense preparation steps are available at http://engineering.jhu.edu/ece/dissertation-defense-preparation

2. All international students must visit the International Office at least two months in advance of the defense date to ensure that their visa status and application for their EAD card and Optional Practical Training is in place.

3. The guidelines for the preparation of dissertations can be obtained from https://www.library.jhu.edu/library-services/electronic-theses-dissertations/formatting-requirements/ Students are responsible for paying the submission fee.

4. **The dissertation must have two Dissertation Readers with the first reader being the Research Advisor.** The Director of Graduate Studies approves the choice of readers nominated by the Research Advisor. https://homewoodgrad.jhu.edu/academics/graduate-board/degree-candidacy/

   Referees (also known as readers) are responsible for signing the 'readers letter/report' that confirms that the dissertation is a significant contribution to knowledge and worthy of publication. At least one referee should be internal to the student's academic program, external referees (to the university) must be approved by the Graduate Board through the same process as external examiners participating in the Graduate Board oral examination.

   The Graduate Board specifies that:

   > The two principal readers are responsible for submitting a written report recommending acceptance of the dissertation. The report should testify that the work is a significant contribution to knowledge worthy of publication in its present form or with appropriate modifications and that it is worthy of acceptance in partial fulfillment of the University requirements for the Ph.D. It must contain the student's full name and the complete final title of the dissertation. The letter must be on letterhead, signed by both readers, and include the readers' ranks, titles, departments, and schools.

5. The student submits a copy of their Ph.D. dissertation, the readers' letter, the names of the Dissertation Committee, and an abstract of the dissertation (used for the defense announcement) to the Administrator, who informs the faculty by email that the dissertation and readers' letter are available in the department office (Barton 105), schedules the Dissertation Defense. The student also sends the abstract and a headshot to the Communications Specialist who is responsible for producing and posting the announcement of the defense. Note that there will be a minimum of three weeks needed between this submission and the dissertation defense described next.

6. Once the Dissertation Committee has been approved (see section 4.4 on page 14), the Administrator prepares the Doctoral Dissertation Defense Report Form. The Dissertation Committee administers a Public Dissertation Defense no sooner than three weeks after submission of the dissertation, following which the Dissertation Committee votes on the acceptance of the dissertation. The chairman of the Dissertation Committee is responsible for getting the Doctoral Dissertation Defense Form from the Administrator, signing the form, and returning it to the Administrator.

7. Dissertations will be submitted only by electronic media. Hardbound books will not be printed on campus, but information will be provided on where dissertations can be printed and bound. The library will do some brief format checking. They will then approve the submission or email the student about necessary changes. For information, see http://www.library.jhu.edu/library-services/electronic-theses-dissertations/.

5. MISCELLANEOUS ACADEMIC INFORMATION

5.1. *Departmental Seminars*

Part of the Johns Hopkins graduate experience is to become informed about the research done by others, both here at Johns Hopkins and at leading institutions worldwide. The ECE Department hosts Ph.D. student proposal seminars during the fall and spring semesters.

There are also several distinguished seminars in the department and regular seminars in other departments and Centers that may be of interest. M.S.E. students are encouraged, although not required, to attend at least some of these seminars.

5.2. *Course Assistant Positions*

To assist in the teaching function of the Department, Course Assistant (CA) opportunities are provided to students to grade homework and papers, conduct laboratories, and hold office hours. CAs are remunerated for their efforts. Any position openings are announced at the beginning of each semester.

5.3. *Ethics*

Graduate students are expected to be aware of academic ethics and of actions that constitute unethical behavior. In brief, students must submit work that represents their own efforts. When ideas and/or results are drawn from other sources, those sources must be cited in the submitted work. Students may not collaborate or discuss solutions of any assignment prior to submission without explicit permission from the instructor. Use of email is to be strictly professional in nature. Unprofessional or inappropriate email will be considered a violation of University ethical policies.

Violations of academic ethics can have a severe impact on a student's program beyond the penalties described below. Those involved in unethical behavior will lose the confidence of the faculty and may be unable to find any faculty member willing to serve as their Research Advisor.

Faculty members will usually deal directly with students suspected of unethical behavior in their courses and will assign an appropriate penalty. The penalty may be failure in the assignment or examination or failure in the course. Faculty and students may seek the assistance of the Department Chair when agreement on the charges and penalties cannot be reached. In all cases, a summary of the charges and penalties will be placed in the student's permanent file.

Information about academic policies of the Whiting School of Engineering can be found at http://engineering.jhu.edu/graduate-studies/academic-policies-procedures-graduate/. Please read them.

5.4. *Research/Academic Probation*

Whenever it is determined that a graduate student has failed to meet minimum academic, research, and/or TA requirements, that student may be placed on academic probation.

This change in status requires a formal letter and a meeting between the student and either their faculty advisor, chair, and/or departmental director of graduate studies. The letter should clearly outline the student's academic shortcomings, indicate the corrective measures necessary to

remain in the program and state the length of the student's probationary period. Any funding ramifications for the student should be included as well.

Please see the full policy for more information on process, appeals, etc.

5.5. Graduate Student Annual Review Policy

The Johns Hopkins University and Whiting School of Engineering require that once per academic year, all full-time Homewood graduate programs carry out a written review of all doctoral and master's students conducting thesis research. The review includes the opportunity for the student to offer self-evaluation on his or her research and academic progress. The evaluation form used in the ECE department is at the end of this advising manual under Academic Resources.

In Spring, advisors will initiate the evaluation process with their doctoral students and master's students conducting thesis research, who will be expected to complete the evaluation form and meet with their advisors to discuss progress and goals for the next year.

The student and advisor will both sign the evaluation, after which it will be delivered to the Academic Administrative staff by June 30.

For students with more than one advisor - both advisors should participate in the evaluation process and must sign the evaluation form.

For students with a primary advisor outside the Department of Electrical and Computer Engineering and have a second advisor who is a full-time tenure-track Electrical and Computer Engineering professor - both professors must participate in the evaluation and sign the evaluation form.

Incomplete evaluation forms will be returned to the student for completion.

5.6. Academic Deadlines

Students preparing to complete a degree program in a given semester should see the Administrator to ensure that all necessary forms and requirements have been completed and submitted *prior* to the academic deadlines for the semester. Graduation and registration deadlines can be found on the Homewood Registrar's website: https://studentaffairs.jhu.edu/registrar/students/ The deadlines to submit all certification material are usually:

• Fall (late-October)
• Winter (mid- to late-January)
• Spring (early-April for Ph.D., early-May for M.S.E.)
• Summer (late-August)

Students who have not completed their requirements by the first day of classes must register for the current semester. Those who complete their requirements prior to the October deadline will receive a full tuition refund for the fall semester, including any non-resident status fees. Tuition paid from departmental funds or research grants will also be refunded.

Those who have completed their requirements in the summer or fall will receive an interim certificate from the registrar's office indicating that all requirements have been met, and notation will be made on their transcript. Diplomas are awarded once a year, at the May Commencement. Additional information is available at http://homewoodgrad.jhu.edu/academics/graduate-board/deadlines

6. FINANCIAL AID

The Graduate Admissions and Fellowships Committee in the department make decisions on financial aid. Among other actions, this committee awards departmental fellowships to newly admitted students. All PhD students in a full-time, resident status are fully supported (tuition, salary/stipend, and individual health insurance premium) by internal or external funds for the duration of their PhD program while they remain in a full-time, resident status. The University, Department, and Research Advisor share in supporting the student during his/her stay.

The Office of Student Financial Services has other financial aid sources available. Any enrolled or accepted graduate student who is a U.S. citizen, U.S. permanent resident, or eligible non-citizen may apply for federal and state financial aid. Sources of aid, eligibility requirements, applications, and other information are available at https://finaid.jhu.edu/

7. PAYROLL

Paychecks are distributed semi-monthly, on the 15th and the last day of the month. If payday falls on a weekend or holiday, paychecks are distributed the last regular working day preceding the payday. For your convenience, Direct Deposit to your bank account is available; log in to my.jh.edu and select HR, then login to ESS, click Payroll Information and then Direct Deposit. Follow the instructions to set up your Direct Deposit.

Many of our graduate students are paid a salary; a few are paid a stipend. Please make sure you understand whether you receive a *salary* or a *stipend*. The difference may have important tax ramifications, particularly for international students. International students may contact the Office of International Services at ois@jhu.edu or 667-208-7001, or the Tax Office at tax@jhu.edu or 443-997-8688 for assistance.

7.1. Salaries

The department determines standard salaries for all Research Assistants. Research Assistants are paid from the research funds of their advisor.

Salaries are subject to Federal and State tax withholding, which is done automatically through the Payroll Office and will be reflected on the pay stub. U.S. students will want to complete a W-4 Federal Tax withholding form and a MW-507 Maryland State withholding form and return them to the University Experiential Learning. If you do not submit these forms, Payroll will tax you at the higher default rate.

7.2. Stipends

Stipends are paid to those students on Departmental or other Fellowships.

Students usually have no income or other taxes withheld. Students on Fellowships are responsible for filing and paying taxes. Students receiving stipends may have to file quarterly withholding reports with the Internal Revenue Service. For information contact the Tax Office at http://finance.jhu.edu/depts/tax/fellgrad_adm.html, 443-997-8688, or tax@jhu.edu.

8. SECURITY

While the Hopkins Security Department provides ample and appropriate security to the campus, they remind us that we must play our part. Please exercise common sense when entering and leaving your office, classrooms, and labs.

- When you leave your office, if you are the only one there, lock the doors even if you leave only for a minute. Thefts take only a few seconds and valuable equipment and your work can disappear instantly.
- Secure your computers, especially laptops. Take your laptops with you when you leave your office.
- Back up your work onto separate disks or systems in case something happens to computer via virus, equipment problems, or theft. The University provides free anti-virus software that can be downloaded from the website at http://it.jhu.edu.
- Lock your car and do not leave any items inside your car in plain sight. Secure them in your trunk or bring them with you.
- Secure your personal items such as your purse, wallet, books, equipment, and your coat or jacket.
- If you see someone suspicious in your lab or office, don't confront the individual, contact Security at 410-516-7777 right away. Your personal safety is most important.
- If you are uncomfortable walking through campus or to your car at night or otherwise are concerned for your safety, the Security department provides escort services to selected locations. Call 410-516-8700 to arrange for an escort.

9. MISCELLANEOUS INFORMATION

9.1. Academic Information

Further academic information can be found in the JHU catalog. The ECE office has other information that may be of interest to graduate students. This includes faculty vitas and files of previous Departmental Qualifying Examinations.

9.2. Student Employment

Apart from the graduate student support mechanisms discussed earlier, opportunities for part-time employment opportunities arise within the University, and in the Baltimore/Washington area. Normally, opportunities known to the department are posted and/or communicated informally. A wise student will let his advisor and other faculty members know of his interests. The faculty believes these additional jobs can cut heavily into the time, energies, and concentration available for the Ph.D. program if not appropriately moderated. Therefore, students should discuss their plans with their advisors. In addition, the following regulations have been adopted:

- Full-time graduate students are permitted no more than 20 hours per week of additional employment.

- Full-time graduate students enjoying nominally full support by the University are permitted no more than eight (8) hours per week of additional employment.

The University Experiential Learning office offers opportunities for employment for many positions on the campus. They will help you determine your work eligibility. Their website is located at https://studentaffairs.jhu.edu/studentemployment/.

9.3. Library Facilities

The Milton S. Eisenhower Library makes available to the ECE Department several carrels (desks with lockers) each year. The assignment of carrels is made in August or September, and graduate students interested in obtaining a carrel should notify the Administrator. Students wo would like to reserve a locker or group study room in the library should visit https://www.library.jhu.edu/support/ or contact Sue Vazakas, the Librarian and Academic Liaison for the Electrical and Computer Engineering Department. She can be contacted by email at svazakas@jhu.edu or phone at 410-516-4153.
 The Library also purchases books and journals based on departmental requests. Student requests for books or journals should also be communicated to Sue Vazakas.

9.4. Computer Facilities

There are plenty of computing facilities and services available to the Johns Hopkins community. The Information Technology website at http://it.jhu.edu offers an overview of the IT Organization, its projects and services, support for applications and general questions, and news about emerging technologies and strategic imperatives, as well as e-mail, web, and file sharing services.

9.5. Information Technology

The Information Technology Department at Johns Hopkins provides email services through the Johns Hopkins Enterprise Mail (JHEM) server. A JHEM account can be activated once you have a J-Card. To activate your JHEM account, go to https://my.jh.edu/portal/web/jhupub and follow the instructions for first time logins.

9.6. Academic Computer Lab – Krieger Hall

The Krieger Computing Lab located in Krieger Hall is maintained by HITS. No account is required, just a student ID, for use of the 130 workstations which have basic office and imaging applications.

10. STUDENT DISABILITY SERVICES

The Office of Student Disability Services (SDS) assists full-time undergraduate and graduate students in the Krieger School of Arts and Sciences and the Whiting School of Engineering with disability concerns, in compliance with the provisions of the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. SDS assists the University community in understanding the effects of disabilities and in eliminating the physical, technical, attitudinal, and programmatic barriers that limit the range of opportunities for students with disabilities, as well as provides individuals with reasonable accommodations. The SDS maintains and protects the confidentiality of individual records as required by law. For additional information and to access the services of the SDS office, please see their website at

https://studentaffairs.jhu.edu/disabilities/ or contact them at 410-516-4720 or studentdisabilityservices@jhu.edu. You may also visit their office in Mason Hall, Suite 101.

11. GROUPS AND ACTIVITIES

11.1. *Institute of Electrical and Electronics Engineers, Inc. (IEEE)*

The Johns Hopkins University student chapter of the Institute of Electrical and Electronic Engineers strives to promote the career opportunities available and to raise awareness of new developments in the field among electrical and computer engineering students by fostering interaction among students, faculty, employers and professional engineers.

Graduate students are invited to join the student chapter of the IEEE. Applications are available in the ECE Department office.

11.2. *University and Department Graduate Student Representative*

Each year the graduate students elect a full-time Ph.D. student to serve as a departmental representative to the University's Graduate Representative Organization. The GRO, whose website is https://studentaffairs.jhu.edu/gro/, is an advocacy group for all graduate students. The GRO serves the student body as a liaison to the University's schools, administration, and dean's offices as well as hosts social activities and provides extensive information about life on campus and in and around Baltimore. Each department sends a graduate student representative to serve in the GRO, and an announcement is made each year as to who will represent the department. You are welcome to forward to the representative your questions and concerns, which will be presented at GRO meetings.

11.3. *Extracurricular Activities*

Many groups and organizations throughout the University provide ample opportunities for social times and fun. Check out these websites for information:

- Campus Life - https://www.jhu.edu/life
- Arts and Culture - https://www.jhu.edu/life/arts-culture
- Baltimore Area Convention and Visitors Association - http://baltimore.org
- Baltimore Office of Promotion and the Arts - http://promotionandarts.org

12. NOTICE OF NONDISCRIMINATION POLICY STATEMENT

The Johns Hopkins University admits students of any race, color, gender, religion, national or ethnic origin, age, disability, or veteran status to all of the rights, privileges, programs, benefits, and activities generally accorded or made available to students at the University. It does not discriminate on the basis of race, color, gender, religion, sexual orientation, national or ethnic origin, age, disability, or veteran status in any program or activity, including the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other University-administered programs. Accordingly, the university does not take into consideration personal factors that are irrelevant to the program involved.

Questions regarding access to programs following Title VI, Title IX and Section 504 should be referred to the Office of Institutional Equity for the University, responsible for the coordination of equal opportunity programs, Wyman Park Building, Suite 515, (410) 516-8075.

13. ELECTRICAL AND COMPUTER ENGINEERING PERSONNEL

13.1. Tenure and Tenure Track Faculty

Andreas G. Andreou, Professor and Interim-Chair
Muyinatu Bell, Assistant Professor
Rama Chellappa, Bloomberg Distinguished Professor
Najim Dehak, Associate Professor
Mounya Elhilali, Charles Renn Faculty Scholar and Professor
Ralph R. Etienne-Cummings, Professor
Amy C. Foster, Associate Professor
Mark A. Foster, Associate Professor and Director of Graduate Studies
John I. Goutsias, Professor
Hynek Hermansky, Julian S. Smith Professor
Pablo A. Iglesias, Edward J. Schaefer Professor
Jin U. Kang, Jacob Suter Jammer Professor
Sanjeev P. Khudanpur, Associate Professor
Jacob B. Khurgin, Professor
Enrique Mallada, Assistant Professor
Vishal Patel, Assistant Professor
Jerry L. Prince, William B. Kouwenhoven Professor
T. E. Schlesinger, Professor and Benjamin T. Rome Dean
Susanna Thon, Associate Professor and Director of Undergraduate Studies
Trac D. Tran, Professor
Archana Venkataraman, John C. Malone Assistant Professor
Howard L. Weinert, Professor
James West, Professor

Note that all tenure-track faculty members are eligible to supervise doctoral dissertations in the ECE doctoral program.

13.2 Research Faculty and Joint/Secondary Appointments

Paul A. Bottomley, Russell H. Morgan Professor, JHU SOM Radiology
Carlos Castillo, Associate Research Professor
A. Brinton Cooper III, Associate Research Professor
Noah I. Cowan, Associate Professor, Mechanical Engineering
Nicholas Durr, Assistant Professor, Biomedical Engineering
Mahyar Fazlyab, Assistant Research Professor
Eric C. Frey, Professor, JHU SOM Radiology
Israel Gannot, Associate Research Professor
Dennice F. Gayme, Associate Professor, Mechanical Engineering
Gregory D. Hager, Mandell Bellmore Professor, Computer Science
Xingde Li, Associate Professor, Biomedical Engineering
Michael I. Miller, Bessie Darling Professor and Director, Biomedical Engineering
Arvind Pathak, Associate Professor, JHU SOM Radiology
Philippe Pouliquen, Assistant Research Professor and Lecturer
Charbel Rizk, Associate Research Professor and Lecturer

Sri Sarma, Associate Professor, Biomedical Engineering
Webster Stayman, Assistant Professor, Biomedical Engineering
Nitish V. Thakor, Professor, Biomedical Engineering
Jesús Villalba, Assistant Research Professor
Raimond L. Winslow, Raj & Neera Sing, Professors, Biomedical Engineering

13.3 Department Staff

Nicole Aaron, Administrator
Colleen Amaral, Administrative Coordinator
Belinda Blinkoff, Senior Academic Program Coordinator
Wick Eisenberg, Communications Specialist
Laura Granite, Administrative Coordinator
Jabari Joyner, Budget Analyst
Tom Judy, Senior Grants & Contracts Specialist
Cora Mayenschein, Research Services Analyst
Sathappan Ramesh, Senior Laboratory Coordinator
Dana Walter-Shock, Senior Academic Program Coordinator

14. GRADUATE ADVISING RESOURCES

14.1 JHU Mentorship Commitments of Faculty Advisors and PhD students

JHU Mentorship Commitments of Faculty Advisors and PhD Students

This document outlines mentoring expectations of faculty advisors and of PhD students at Johns Hopkins University. These expectations should be discussed together.

Faculty advisors should commit to the following responsibilities:

Training:

- **The PhD advisor has the responsibility to mentor the PhD student.** This responsibility includes committing to the training of their PhD student, building on the PhD student's individual professional background and in support of their individual professional aspirations.

- **The PhD advisor has the responsibility to participate in ongoing and regular meetings with their advisees to discuss academic and research progress.** The advisor and student should agree on expected frequency of and preparation for meetings and use meetings to brainstorm ideas, troubleshoot challenges, and outline next steps. The advisor should identify a co-advisor/mentor should the primary advisor be unavailable for an extended period (sabbatical, leave, etc.).

- **The PhD advisor has the responsibility to participate in a formal annual meeting with the student to discuss academic progress and next steps in the academic program.** This responsibility includes helping to ensure that the document

summarizing this annual discussion is completed and submitted in accordance with program requirements.

- **The PhD advisor has the responsibility to encourage their advisees to reach out, as relevant, to additional co-advisors or informal mentors.**
- **The PhD advisor has the responsibility clarify the student's funding package and to clarify any work and/or teaching expectations associate with the package.**
- **The PhD advisor has the responsibility to contribute to a training environment that fosters independent, scholarly research, and professional growth.**

Research

- **The PhD advisor has the responsibility to provide guidance in scholarly research.** This responsibility includes helping to identify a workable research project and helping to set reasonable goals and timelines for research completion. The advisor should encourage the student to expand their skill sets and share ideas with others at Johns Hopkins and externally.
- **The PhD advisor has the responsibility to monitor research progress.** The advisor should encourage effective use of time. The advisor should meet regularly with the PhD student to hear updates on progress, results, and challenges in activities and research.

Professional development:

- **The PhD advisor has the responsibility to discuss career development with the PhD student, including in any number of sectors of interest to the student.** PhD advisors should assist in identifying resources to further the student's professional goals.

- **The PhD advisor has the responsibility to participate in a formal annual meeting with the PhD student to discuss professional development goals.** The advisor should help to ensure that the document summarizing this discussion is completed and submitted in accordance with program requirements.

- **The PhD advisor has the responsibility to nominate the student for relevant professional opportunities and try to connect their advisees to relevant professional contacts and networks.**

- **The PhD advisor has the responsibility to allow time outside of research for student engagement in professional development activities** including, for example, skill building workshops, professional conferences, additional research collaborations, or other informational sessions.

Respectful engagement and well-being:

- **The PhD advisor has the responsibility to treat their advisees, other students, and colleagues with respect at all times.**

- **The PhD advisor has the responsibility to commit to being available to meet with the PhD student**. The advisor and the student should agree on expected frequency of and preparation for meetings, and expected timeframe for responding to emails and for providing feedback on work products. The PhD advisor should give their full attention during meetings and should reach out to PhD students who are not making contact.

- **The PhD advisor has the responsibility to be supportive during both successful and discouraging periods of training**.

- **The PhD advisor has the responsibility to communicate in a respectful and constructive manner, including if the advisor has concerns that the PhD student is not meeting the expectations outlined in this document.** This responsibility includes using concrete and specific language when providing suggestions or critiquing work.

- **The PhD advisor has the responsibility to take an interest in the student's well-being, to listen to any concerns, and to connect the student, as appropriate, with additional resources.**

Policies:

- **The PhD advisor has the responsibility to become familiar with and respect University, school, and program policies for PhD students.** The advisor will acknowledge all PhD student benefits and entitlements, including, as relevant, paid and unpaid leave.
- **The PhD advisor has the responsibility to discuss with the student relevant policies, commitments, and expectations related to funding, work, research assistantships, teaching assistantships, sick leave, or vacation.**

Responsible conduct:

- **The PhD advisor has the responsibility to become familiar with university and professional codes of responsible conduct for PhD students.** This responsibility includes reporting any possible violations as required to relevant parties, including to the relevant Dean's office and to the Office of Institutional Equity.
- **The PhD advisor has the responsibility to discuss and help clarify authorship or intellectual property issues and appropriately recognize the student's contributions to any collaborative work.**
- **The PhD advisor has the responsibility to model professional behavior in both interpersonal interactions and in scholarly integrity.**
- **The PhD advisor has the responsibility to complete Title IX Training regarding sexual misconduct and sexual harassment as required by the University. http://oie.jhu.edu/training/**

Continuous quality improvement as an advisor:

- **The PhD advisor has the responsibility to participate in mentor training and best practices discussions.** This responsibility includes striving to be a better mentor and to learn tips and practices that improve their work and skills as an advisor.
- **The PhD advisor has the responsibility to ask advisees for constructive feedback on mentoring.** This responsibility includes doing their best to respond professionally to these suggestions and consider whether or how best to incorporate them into their mentoring interactions.

PhD students should commit to the following responsibilities:

<u>Training:</u>

- **The PhD student has the primary responsibility for the successful completion of their degree.**
- **The PhD student has the responsibility to familiarize themselves with academic milestones and to strive to meet all milestones within the expected timeframe.**
- **The PhD student has the responsibility to meet regularly with the PhD advisor.** This responsibility includes providing the advisor with updates on the progress, outcomes, and challenges in coursework, research, and academic or professional activities. The advisor and the student should agree on expected frequency of and preparation for meetings, and will use meetings to brainstorm ideas, troubleshoot challenges, and outline expectations for work and timelines.
- **The PhD student has the responsibility to participate in a formal annual meeting with the advisor to discuss academic progress and next steps in the academic program.** The student should ensure that the document summarizing this discussion is completed and submitted in accordance with program requirements.
- **The PhD student has the responsibility to seek additional mentors to expand their training experience, as appropriate.**
- **The PhD student has the responsibility to understand their funding package and to clarify any work and/or teaching expectations in line with this funding.**

<u>Research:</u>

- **The PhD student has the responsibility to work with the advisor to develop a thesis/dissertation project.** This responsibility includes establishing a timeline for each phase of work and striving to meet established deadlines.
- **The PhD student has the responsibility to seek guidance from their advisor, while also aspiring increasingly for independence.**
- **The PhD student has the responsibility to engage in activities beyond their primary research responsibilities.** The student should attend and participate in any research-related meetings and seminars relevant to their training area.

Professional development:

- **The PhD student has the primary responsibility to identify their professional goals and to develop their career plan following completion of the PhD degree.** This responsibility includes familiarizing themselves with professional development opportunities within Johns Hopkins and externally. Students should identify specific activities to pursue that will advance their professional development and networking.

- **The PhD student has the responsibility to prepare a Professional Development Plan annually that outlines their research and career objectives.** This responsibility includes discussing this plan annually with the advisor. The student should ensure that the document summarizing this discussion is completed and submitted in accordance with program requirements.

Respectful engagement and well-being:

- **The PhD student has the responsibility to treat the advisor, other mentors, and colleagues with respect at all times.**

- **The PhD student has the responsibility to make themselves available, within reason, to meet with the advisor upon request.**

- **The PhD student has the responsibility to communicate in a respectful and constructive manner if they have concerns that the advisor is not meeting the expectations outlined in this document.**

- **The PhD student has the responsibility to be open to constructive criticism by the advisor, other mentors, and colleagues.**

- **The PhD student has the responsibility, as possible, for their well-being, should consider discussing any concerns with the advisor or other mentor(s), and should connect with available resources when needed.**

Policies:

- **The PhD student has the responsibility to familiarize themselves and comply with University, school, and program-specific policies and requirements for PhD students.**

- **The PhD student has the responsibility to discuss with the advisor relevant policies, commitments, and expectations related to funding, work, research assistantships, teaching assistantships, sick leave, or vacation.** As needed, the student will provide any documentation relevant to stated policies on leave and other requirements to the student's program, school, or the University.

Responsible conduct:

- **The PhD student has the responsibility to conduct themselves in a responsible and ethical manner at all times.**
- **The PhD student has the responsibility to familiarize themselves with University codes of responsible conduct for PhD students**.
- **The PhD student has the responsibility to engage in responsible research conduct.** This responsibility includes completing the responsible conduct of research training requirements of their specific school and program, and any specific discipline training requirements (e.g., animal and human subject work). The student will maintain accurate and contemporaneous records of research activities in accordance with the norms of best practices in their own discipline. The student should discuss authorship and intellectual property issues with the advisor.
- **The PhD student has the responsibility to complete Title IX Training regarding sexual misconduct and sexual harassment as required by the University.**
  http://oie.jhu.edu/training/

GRADUATE STUDENT ANNUAL REVIEW FORM
2021 – 2022 ACADEMIC YEAR

Student Name: _____   **Year of Study:** Choose an item.

Advisor: _____   **Date:** _____

Milestones	Date Passed (Month, Year)	Semester Expected
Departmental Qualifying Exam		
Graduate Board Oral Exam		
Written Proposal		
Proposal Seminar		

Responsible Conduct of Research Completed? ☐ No ☐ Yes When? _____

Part 1 - to the student: This form is intended to summarize your accomplishments in the past year and indicate your plans for the coming year. Please complete, sign, and discuss this with your advisor. Continue on as many sheets as necessary.

COURSES COMPLETED IN THE PAST TWO SEMESTERS:

WERE YOU A TEACHING OR RESEARCH ASSISTANT? IF YES, HOW DO YOU THINK YOU PERFORMED IN THIS AREA?

PAPERS SUBMITTED OR PUBLISHED IN LAST YEAR:

CONFERENCE AND INTERNAL/INFORMAL PRESENTATIONS MADE DURING THE LAST YEAR:

RESEARCH ACCOMPLISHMENTS:

RESEARCH, ACADEMIC, AND OTHER GOALS IN THE COMING YEAR (advisor must agree):

ANY ANTICIPATED CHALLENGES OR OPPORTUNITIES FOR THE UPCOMING YEAR?

WHEN DO YOU EXPECT TO GRADUATE?

WHAT ARE YOUR LONG-TERM PROFESSIONAL GOALS?

YOUR COMMENTS:

ADVISOR'S COMMENTS:

I have reviewed this document with my advisor and I have seen her/his comments.

Student signature _____ Date _____

Advisor signature _____ Date _____

Student Name: _____   Year of Study: Choose an item.

Advisor: _____   Date: _____

Part 2 - to the advisor: This form is intended to guide a discussion with your student about their accomplishments, progress, and areas for improvement. This discussion is an opportunity to evaluate the student/advisor relationship and create a more effective research partnership. Below are several topics that should be covered in the discussion. Please think about these issues before meeting with the student. Space is provided for notes. **Both you and the student will sign this form.**

☐ **Research** (discuss as applicable: thesis topic, future publications, ability to conduct quality research, ability to think of and discuss new ideas, overall progress)
Comments:

☐ **Professionalism** (discuss as applicable: conduct, presentation skills, writing skills, communication skills, teamwork)
Comments:

☐ **Logistics** (discuss as applicable: graduation timeframe, future state of student funding, specific grant requirements, present funding, progress towards student's post-graduate goals)
Comments:

☐ **Educational Progress** (discuss as applicable: academic progress, progress towards DQE or GBO, teaching opportunities, TA opportunities)
Comments:

☐ **Other** (discuss as applicable) – Unaddressed student or advisor concerns
- _____
- _____

Student signature _____ Date _____
Advisor signature _____ Date _____