Doctoral Program Handbook

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This document is available online at https://engineering.purdue.edu/ECE/Academics/Graduates/PHD/handbook



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1 Introduction

This handbook contains information about the PhD program offered by the School of Electrical and Computer Engineering (ECE) at Purdue. Included is information about the degree requirements, minimum academic standards, advisory committees, the plan of study, registration, examinations (Preliminary and Final), and the doctoral thesis.

The information in this handbook applies to both students who were admitted to the PhD program after having completed a Master's degree and to students admitted directly after their undergraduate program. When there is a difference in procedures, those students entering after having completed a Master's degree will be referred to herein as "PhD students with an MS"; students entering directly after their undergraduate program are referred to as "direct PhD students."

A strength of the academic component of the PhD program at Purdue is that each student creates his/her own plan of study (POS), a document that defines each student's academic program. The degree requirements, which have elements of depth and breadth, afford flexibility for developing a plan of study that best suits your needs and goals.

The information in this handbook is intended to assist you in setting up your plans of study and advisory committees. A Preliminary Plan of study has to be filed early in the program. Advice on this Preliminary Plan of study can be sought from members of the Academic Advisory Committee, a committee that is established by you for the sole purpose of helping you with the Preliminary Plan of study.

Further into the program, you would establish another advisory committee, the Doctoral Advisory Committee. Your Doctoral Advisory Committee, chaired by your Major Professor, will assist you in the preparation of your final plan of study, advise you in your thesis research, and conduct your Preliminary and Final Examinations.

1.1 Research Areas and Core Courses

A student in the PhD program must select one of the seven <u>ECE research areas</u> (https://engineering.purdue.edu/ECE/Research/Areas) listed in Table 1 as his or her primary area. The primary area encompasses the body of knowledge each student chooses for his or her professional expertise.

Table 1. ECE Research Areas

Research Area	Core Course
Automatic Control (AC)	ECE 60200, Lumped System Theory
Communications Networks and Signal and Image Processing (CS)	ECE 60000, Random Variables and Signals
Computer Engineering (CE)	ECE 60800, Computational Models and Methods
Fields and Optics (FO)	ECE 60400, Electromagnetic Field Theory
Microelectronics and Nanotechnology (MN)	ECE 60600, Solid State Devices I
Power and Energy Devices and Systems (PE)	ECE 61000, Energy Conversion
VLSI and Circuit Design (VC)	ECE 55900, MOS VLSI Design

Core courses: Table 1.1 also lists the core courses associated with each of the seven ECE areas.

Primary and related areas: Courses offered by a student's research area are primary-area courses. Courses offered by ECE research areas other than the student's primary area or qualified courses from other schools at Purdue are related-areas courses. Courses on a plan of study must be identified as primary-area or related-area courses.

1.2 Program Progress

All students begin their PhD studies with the status of "admitted to the PhD program." Admission to candidacy requires that the student demonstrate evidence of research ability on the Preliminary Examination.

Time to degree: If key program activities are completed in a timely fashion (see <u>Appendix A</u>), the time-to-degree for the PhD is expected to be 4 to 4.5 years for students entering with a Master's degree and 5 to 5.5 years for direct PhD students. As also noted in <u>Appendix A</u>, students whose programs extend beyond the cited times are subject to progress reviews and ultimately to an overall program time limit.

2 PhD Degree Requirements

2.1 Common Course Requirements

Unless specifically stated otherwise, all courses with the ECE prefix refer to the courses offered by the School of Electrical and Computer Engineering at West Lafayette.

Required Research-Course Registration

Consistent with the research emphasis in the PhD program, all PhD students are required to register for at least one credit hour of ECE 69200 (Introduction to Graduate Research) or ECE 69900 (PhD Thesis Research) in their first and second semesters in the PhD program.

In each subsequent semester, students must enroll in at least one credit hour of ECE 69900.

Mathematics and Related-Area Course Requirement

During a student's Master's **and** PhD programs (if entering the PhD program with an MS degree) or during the student's direct PhD program, a student must complete a minimum of 5 graduate-level courses (15 credit hours) outside the student's primary area. The group of courses is to consist of either:

- 3 math courses (9 credit hours) and 2 related-area courses (6 credit hours)
- 2 math courses (6 credit hours) and 3 related-area courses (9 credit hours)

Approved math courses are listed in Appendix B.

Course Requirements for PhD Students with an MS

For students who have already earned an MS, a minimum of 12 credit hours of non-thesis, graduate-level coursework (typically 3 courses) is required on the plan of study. Six credit hours (typically 2 courses) are to be ECE 60000 or higher-numbered, non-core courses.

The courses meeting this requirement can simultaneously be used to meet the previously described mathematics and related-area course requirement. ECE 69600 (Advanced Projects) and ECE 69700 (Directed Reading) are not to appear on the plan of study and cannot be used to fulfill this requirement.

2.2 Course and Credit-Hour Requirements for Direct PhD Students

The plan of study is to contain a minimum of 36 non-thesis credit hours, of which there must be at least two ECE core courses, two ECE 60000 or higher-numbered, non-core courses (6 credit hours), and three additional graduate-level ECE courses (9 credit hours). ECE 69600 (Advanced Projects) and ECE 69700 (Directed Reading) are not to appear on the plan of study and cannot be used to fulfill this requirement.

Undergraduate Credit Hours

Students in special situations, such as those changing or needing to get into a new discipline for their research who if they have to take a graduate level course in the new discipline would have

great difficulty, may be allowed to include one or two undergraduate courses in their plans of study. These courses must have a grade of B- or higher.

Students wanting or needing to refresh their knowledge of a subject which they have taken in their undergraduate studies should take the undergraduate course but not include it on their plans of study to satisfy the degree requirements.

With proper prior permission, a maximum of 6 credit hours of two advanced-level (30000- or 40000-level) undergraduate courses taken in the first calendar year of a direct PhD student's program are allowed on the plan of study.

- Students must request permission to include undergraduate courses on their PhD plan
 of study. They are required to provide a short written academic justification for the
 inclusion of the undergraduate courses.
- Undergraduate courses on the plan of study must be specifically approved by the student's advisory committee and the ECE Associate Head of Graduate and Professional Programs.
- Credit for undergraduate courses may not be transferred from another institution. The Graduate School requires that the course(s) be taken while the student is enrolled in the Graduate Program, and that the student must earn a grade of "B-" or better in these courses to fulfill graduation requirements.
- The computation of a student's GPA will include the grades earned in these undergraduate level courses.

Summary of Course Requirements: The table below summarizes the PhD course requirements.

Table 2. Summary of Course Requirements

	PhD (with MS)	Direct PhD
Non-Thesis Course Requirement in PhD Program	 12 hours minimum, including: 6 credit hours numbered ≥ ECE 60000 (non-core courses) 6 credit hours of other graduate-level courses (The courses here can simultaneously meet the Math and Related-Area course requirement.) 	36 hrs (non-thesis) with 21 ECE non-thesis graduate-level credit hours consisting of: • 2 core courses • 6 credit hours ECE 60000 or above (non-core courses) • 9 other ECE graduate level credit hours
Required Core Courses	0	2
Required Math and Related-Area Courses	Either 9 credit hours Math and 6 credit hours Related-Area¹ courses, (or 6 credit hours Math and 9 credit hours Related-Area courses). This requirement can be partially or totally fulfilled with coursework taken previously in the Master's program.	Either 9 credit hours Math and 6 credit hours Related-Area ² courses (or 6 credit hours Math and 9 credit hours Related-Area courses).
Allowed ECE 69600/69700 Credit Hours	0	0
Allowed Undergraduate Credit Hours	0	6 hrs

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¹ Courses outside the primary area, including all non-ECE courses, ECE courses associated with a different ECE area, and courses dual-administered by the primary area and another ECE area may serve as related-area courses. ² Courses outside the primary area, including all non-ECE courses, ECE courses associated with a different ECE area, and courses dual-administered by the primary area and another ECE area may serve as related-area courses.

2.3 ECE Concentrations

Microelectronics and Advanced Semiconductors

A concentration in microelectronics and advanced semiconductors is also available to ECE graduate students.

Full details on the coursework required to earn the concentration is available on the webpage <u>Graduate Concentration in Microelectronics and Advanced Semiconductors</u> (https://engineering.purdue.edu/ECE/Academics/Graduates/MASTERS/microelectronics-and-semiconductors)

2.4 Other Requirements

Written English Requirement

All ECE graduate students must demonstrate acceptable proficiency in written English before graduating. Students will not be allowed to graduate until this requirement has been met. We strongly recommend that students fulfill the English requirement as early as possible (first semester) in their academic program. Methods that may be used to fulfill the English requirement are detailed in Appendix C.

Graduate Seminar Requirement

All ECE PhD students must satisfactorily complete one semester of <u>ECE 69400</u>, <u>Graduate Seminar</u>. This course carries no credit, but a grade of Satisfactory or Unsatisfactory is assigned at the end of the semester.

ECE 69400 should not be listed on the plan of study. Also, it is strongly recommended that students take ECE 69400 during their first year.

Responsible Conduct of Research Course Requirement

All ECE graduate students must satisfactorily complete the Responsible Conduct of Research course as instructed in the ECE online orientation. This is an online course offered through Collaborative Institutional Training Initiative (CITI) (https://about.citiprogram.org).

Examination Requirement

The two major examinations that must be passed during the course of a PhD program:

- **Preliminary Examination:** The purpose of the Preliminary Examination is to determine whether a student is adequately prepared to conceive and undertake a suitable research topic. The Preliminary Examination typically includes an oral presentation and a written thesis proposal.
- **Final Examination:** The purpose of the Final Examination or oral defense of the dissertation is to determine if the thesis research warrants granting the PhD degree. Doctoral research must be original and merit publication in the scholarly literature.

Registration Requirement

The residency requirement for a PhD degree is 90 hours of academic credit beyond the Bachelor's degree or 60 hours beyond the Master's degree. Academic credit includes:

- All course credit hours that appear on the plan of study (does not include ECE 69300, if applicable).
- Research ECE 69900 hours with grades of "S" that appear on the Purdue transcript.

At least 51% of the total credit hours used to satisfy degree requirements must be earned in residence on the Purdue campus where the degree is to be granted. Course credits obtained via online instruction are considered to have been obtained in residence on the campus from which the course offered.

3 Minimum Academic Standards

PhD students are subject to both ECE academic standards and University academic standards.

3.1 ECE Academic Standards

As a PhD student in ECE, you are expected to maintain the following standards throughout your academic program:

- Maintain a plan of study grade point average (GPA), based on your currently approved plan of study, of at least 3.3 out of 4.00 over the courses on your plan of study, with no grade less than C-.
- Earn grades of "Satisfactory" in thesis research credit hours.
- Satisfactorily complete <u>ECE 69400</u>, <u>Graduate Seminar</u> and meet the <u>written English</u>
 <u>proficiency requirement</u> (<u>Appendix C</u>) within the first two semesters of your academic
 program.
- Make continuous and significant progress each semester toward completion of your degree requirements.
- Complete all degree requirements and graduate within the deadlines described in Appendix A.

ECE academic probation: You will be placed on ECE academic probation if you complete any semester or summer session with a deficiency in of the above standards. Should you remain on ECE academic probation at the end of the succeeding semester or summer session, you may be prohibited from registering for further graduate study. Students concerned about their academic progress should schedule an appointment with the ECE Graduate Programs Director.

Plan of study GPA: The cumulative POS grade point average referred to above is calculated using the courses on the PhD plan of study, excluding courses taken as part of the Master's program. However, transfer courses and graduate-level courses taken while an undergraduate student are not included in the computation.

In the case of a deficiency in the cumulative POS grade point average, courses may be repeated. If a course is repeated, only the most recent grade received will be used in computing GPA.

Grades of D or F: University requirements state that no grade of D or F is allowed in a course on the plan of study. Any plan of study course in which a grade of D or F is received must be repeated and completed successfully; it cannot be dropped from the plan of study.

3.2 University Academic Standards

Academic Notice

A student at Purdue University shall be placed on academic notice if his/her fall or spring semester or cumulative GPA at the end of any fall or spring semester is less than a 2.0.

A student on academic notice shall be removed from that standing at the end of the first subsequent fall or spring semester in which he/she achieves semester and cumulative GPAs equal to or greater than 2.0.

Any grade change due to a reporting error will result in a recalculation of the GPA and determination of academic standing.

Academic standing will not be assessed in summer sessions.

Dropping of Students for Academic Deficiency

A student on academic notice shall be dropped from the University at the close of any fall or spring semester in which his/her semester and cumulative GPA is less than a 2.0.

Any grade change due to a reporting error will result in a recalculation of the GPA and determination of drop status.

Readmission

A graduate student who is academically dropped from the University for the first time is not eligible to enroll for at least one fall or spring semester. A graduate student who is academically dropped for the second time is not eligible to enroll for at least one year.

A graduate student dropped by this rule must apply for readmission to the School of Electrical and Computer Engineering or other Purdue graduate program to which they want to apply by submitting a new application. The normal application fee would apply. A fee is assessed for processing the readmission application (Board of Trustees Minutes, June 5-6, 1970). Readmission is not guaranteed, but any student who gains readmission is readmitted on notice and is subject to stipulations in effect as a condition of readmission.

4 Advisory Committees

4.1 Academic Advisory Committee

The role of your Academic Advisory Committee is to provide advice on your choice of courses on the preliminary plan of study. Your Academic Advisory Committee consists of the three West Lafayette campus Electrical and Computer Engineering faculty members who sign your preliminary plan of study.

A Major Professor need not be indicated on the Preliminary Plan of study. The Academic Advisory Committee serves until you have selected a Major Professor and Doctoral Advisory Committee. The two advisory committees need not be the same.

4.2 **Doctoral Advisory Committee**

The Doctoral Advisory Committee consists of at least four members. The primary duties of this committee are to assist in the preparation of your final plan of study, to advise you during the course of your thesis research, and to conduct your Preliminary and Final Examinations.

Your Major Professor serves as chair of the Doctoral Advisory Committee. The selection of your Major Professor requires his/her consent and the approval of the ECE Associate Head of Graduate and Professional Programs. Your research interests, either in a general topic or a specific project, will guide your choice of Major Professor.

Your Major Professor may offer you financial support as a Research Assistant. In the event that you may want to change your Major Professor, please visit and discuss the planned change with the ECE Associate Head of Graduate and Professional Programs.

In most cases, the Major Professor and the student choose the Related Areas and the other members who will serve with the Major Professor on the Doctoral Advisory Committee. For the following rules and guidelines on the composition and make-up of your advisory committee, tenured-track, courtesy, and research professors with regular graduate faculty certification recommended by West Lafayette ECE are to be regarded as members of the West Lafayette ECE faculty:

- The chairperson and at least one other member must be West Lafayette ECE faculty members and should be members of the primary area that you have declared.
- If two advisors guide your research jointly, it may be advisable to have two co-chairs on your advisory committee rather than a single chair. At least one of the co-chairs must be a member of the West Lafayette ECE faculty and should be a member of the primary area that you have declared.
- A majority of your advisory committee must be composed of tenure-track West Lafayette campus faculty members.
- A special member, defined as a person without regular graduate faculty certification, may serve on your Doctoral Advisory Committee. An up-to-date list of faculty members with regular graduate faculty certification and their faculty identifiers is included in the

online plan of study program. Faculty members at Purdue, including regional campuses, would have regular graduate faculty certification. Faculty members from other universities, researchers from industry, and non-faculty research staff from Purdue have to be approved for special certification by the Graduate School for them to be members of the advisory committee. You may initiate a request for special certification in the ECE Graduate Office. A current and complete vita for the special member has to be submitted along with your request.

Incorporated as part of the final plan of study, membership of the Doctoral Advisory Committee is formally established when the final plan of study is filed and approved. (For plan of study information, see <u>Section 5</u>.) Membership of the Doctoral Advisory Committee, as agreed upon by the Major Professor and the student, is presented to the ECE Associate Head of Graduate and Professional Programs and the Dean of the Graduate School for their approval and formal appointment. The Dean may appoint additional members if it seems advisable.

Changes to the Doctoral Advisory Committee require submitting an electronic request to change your plan of study via myPurdue.

5 PhD Plans of Study

5.1 Preliminary Plan of Study

All PhD students must file a Preliminary Plan of study their first semester. Use the purple form available in the racks in the Graduate Office or this <u>electronic preliminary plan of study form.</u>
This helps to ensure a logical curriculum early in the program, sets a clear pathway toward completion of the student's degree, and helps the school plan and monitor the overall ECE graduate program. For this reason, registration for subsequent semesters is not permitted until the Preliminary Plan of study has been filed.

The plan must be appropriate to meet the needs of the student's chosen field as determined by the Academic Advisory Committee, and must be approved by the ECE Associate Head of Graduate and Professional Programs.

Suggested steps in preparing your plan of study are as follows:

- a) Review the following:
 - PhD coursework requirements in this handbook; also see <u>Subsection 5.4 or 5.5</u> if undergraduate, transfer, or excess course credit will be included on the plan of study.
 - <u>Course information that is available online</u> to determine which courses are of most interest to you and will enable you to meet your degree requirements.
 - <u>ECE faculty directory</u> (https://engineering.purdue.edu/ECE/People/Faculty) to learn the specific interest areas of faculty members and to determine suitable candidates for your major professor, the person who will chair your advisory committee, or faculty advisor.
- b) Consult with at least three ECE faculty members, representing at least two of the seven ECE graduate areas, to develop a plan of study. Use these meetings to help you decide on matters such as possible thesis topics, which courses to take, and who to select as the chair of your Academic Advisory Committee.
- c) Secure the agreement of an ECE faculty member to serve as the chair of your Academic Advisory Committee. Confer with him/her to obtain advice on your course selections, the make-up of your advisory committee, and ultimately his/her informal approval of the plan of study. Complete a draft version of the Preliminary PhD Plan of Study form for use in subsequent discussions. The chairperson of your Academic Advisory Committee could become your Major Professor, but needn't be so.
- d) Secure the agreement of two additional faculty members to serve on your advisory committee and get their informal approval of the plan of study. (Signatures are not required on the draft version of the Preliminary PhD Plan of Study form.) The choice of the two faculty members to serve on your Academic Advisory Committee must be approved by the committee chair.

e) Enter all required information on the final version of the Preliminary PhD Plan of Study form. Be sure to include all master's courses you have completed. The form may be filled out (neatly) by hand. After signing the form, obtain the signatures of your advisory committee members. Make a copy of the form for your records and submit the original to the ECE Graduate Office (MSEE 140).

5.2 Final Plan of Study

For those students who entered the PhD program with an MS degree, the final plan of study must be submitted before registering for the fourth semester in the program. For direct PhD students, the final plan of study must be submitted before registering for the sixth semester in the program.

Suggested steps in preparing your final plan of study are as follows:

- a) Review the following:
 - PhD coursework requirements in this handbook; also see <u>Subsection 5.4 or 5.5</u> if undergraduate, transfer, or excess course credit will be included on the plan of study.
 - <u>Course information that is available online</u> to determine which courses are of most interest to you and will enable you to meet your degree requirements.
 - <u>ECE faculty directory</u> (https://engineering.purdue.edu/ECE/People/Faculty) to learn the specific interest areas of faculty members and, if necessary, to determine suitable candidates for your major professor, the person who will chair your Doctoral Advisory Committee.
- b) Secure the agreement of an ECE faculty member to serve as your Major Professor and chair of your Doctoral Advisory Committee. Confer with your Major Professor to obtain advice on your course selections, the make-up of your Doctoral Advisory Committee, and ultimately his/her informal approval of the plan of study.
- c) Employ the online Electronic Plan of Study program (accessed through myPurdue) to compose a draft of your plan of study. Instructions are linked from the <u>ECE PhD Student Guide</u>. Ensure that you have included courses that satisfy all requirements, and do not include master's courses in the PhD course list. List the master's courses in the Comments text box. You should print a copy of your draft for use in discussions with members of your advisory committee.
- d) Noting requirements relative to the formation of the Doctoral Advisory Committee in <u>Subsection 4.2</u>, secure the agreement of three additional faculty members (or two faculty members and one special member) to serve on your advisory committee and their informal approval of the plan of study. The choice of the members to serve on your Doctoral Advisory Committee must be approved by your Major Professor.
- e) Returning to the online Plan of Study program, enter all changes that resulted from your discussions with members of your advisory committee. Submit the final version of the plan electronically. Your final plan of study will be automatically routed to the ECE

Graduate Office for initial screening before being sent to your advisory committee, the ECE Associate Head of Graduate and Professional Programs, and the Graduate School for their approvals. If your plan fails to gain any of the required approvals, the reason for the rejection will be explained in an e-mail message. You can then make any required changes and submit the revised plan for approval.

You may check on the status of the approval process at any stage. You will be sent an e-mail message when approval has been obtained from the Graduate School. The required approvals usually take several weeks.

5.3 Changing Your Plan of Study

It is recognized that as a student's program progresses there may arise conditions that make it desirable to change the plan of study. Indeed, such changes, when based upon sound academic reasons, are encouraged.

Generally speaking, minor changes to the *Preliminary Plan* of study, an internal ECE document, will not require filing a new Preliminary Plan. ECE Graduate Office personnel will indicate if a new Preliminary Plan of study is needed.

On the other hand, any change to the *final* plan of study, a Graduate School document, has to be submitted for approval. The online Plan of Study program (accessed through myPurdue) is used to submit a request to change the final plan of study. Since any change in the courses or advisory committee membership on the current plan of study will require the approval of your Doctoral Advisory Committee and the ECE Associate Head of Graduate and Professional Programs, you should first discuss the desired changes with your Doctoral Advisory Committee and provide a reason for each change. Relative to changes to the either the preliminary or final plan of study involving courses:

• A course may not be removed from the plan of study once a grade of "D" or lower has been received in the course.

If the ECE requirements for the PhD program are modified, there is no need for students to revise their previously approved plans of study to conform to the new rules. All approved plans of study remain valid. Students have the option to change their plan of study to conform to the new rules but are not required to do so.

5.4 Non-In-Program Course Credits for PhD Students with an MS

Transfer Credits

A maximum of six graduate-level credit hours earned at regional campuses of Purdue University or at an ABET-accredited university may be applied toward the PhD degree and entered on the PhD plan of study. However, courses used from a regional campus or transferred from another university may not be used to satisfy the core course requirement.

All courses transferred must be graduate-level courses, must not have been used to meet the requirements for another degree, and must have been completed with a grade of "B–" or better. Grades from transfer courses are not included in computing the grade point average.

Special Approval Requirements

Without exception, transfer course credits used on the PhD plan of study must be specially approved by your advisory committee and by the ECE Associate Head of Graduate and Professional Programs. Whether a course is acceptable or not will depend upon the content of the course and the level at which it is taught. The steps to follow in requesting approval to include such credits on the PhD plan of study are:

- a) Add the course to your plan of study.
- b) Show a copy of the catalog description of the course to your advisory committee members and bring the catalog description to the ECE Graduate Office.
- c) If you are transferring a course from another university, the ECE Graduate Office will also require an original transcript showing the grade earned and a statement from an official at the university where the course was taken certifying that the course was not used to fulfill requirements for any other degree.

5.5 Non-in-Program Course Credits for Direct PhD Students

Undergraduate Credits

As noted in <u>Subsection 2.3</u>, a maximum of 6 credit hours of advanced-level (30000- or 40000-level) undergraduate courses taken in the first calendar year of a student's program are allowed on the plan of study. Refer to <u>Subsection 2.3</u> for other restrictions applying to such credits.

Transfer Credits

A maximum of 6 graduate-level credit hours earned at regional campuses of Purdue University or at an ABET-accredited university may be applied toward the PhD degree and entered on the PhD plan of study. However, courses transferred from a regional campus or another university may not be used to satisfy the core course requirement.

All courses transferred:

- Must be graduate-level courses
- Must not have been used to meet the requirements for another degree
- Must have been completed with a grade of "B" or better

Grades from transfer courses are not included in computing the grade point average

Excess Course Credits

Up to 12 credit hours of graduate-level courses taken at the West Lafayette campus of Purdue before a student was admitted to the direct PhD program may be applied toward the PhD degree and entered on the PhD plan of study. Allowed courses include those taken:

- a) as excess undergraduate-degree credit;
- b) in non-degree status;

c) while seeking a degree in another Purdue department or school, if you subsequently request to transfer to ECE;

Special Approval Requirements

Without exception, all undergraduate, transfer, and excess course credits used on the PhD plan of study must be specially approved by your advisory committee and by the by the ECE Associate Head of Graduate and Professional Programs. The steps to follow in requesting approval to include such credits on the Master's plan of study are:

- a) Add the course to your plan of study.
- b) Provide the Graduate Office with a short written academic justification for including a 30000- or 40000-level course on the plan of study.
- c) If a transfer course or a non-ECE course taken at Purdue, show a copy of the catalog description of the course to your advisory committee members and bring the catalog description to the ECE Graduate Office.
- d) If you are transferring a course from another university, the ECE Graduate Office will also require an original transcript showing the grade earned and a statement from an official at the university where the course was taken certifying that the course was not used to fulfill requirements for any other degree.

6 Course Registration

6.1 First-Semester Registration

Incoming students must complete the online ECE orientation to obtain their registration PIN. General guidance on selecting courses is included in the orientation; students can also reach out to faculty members in their area to seek guidance on selecting courses.

Registration instructions: Detailed instruction on how to register are available in the PhD Student Guide website (https://engineering.purdue.edu/ECE/Academics/Graduates/PhD).

Also, as previously noted:

- All PhD students are required to register for at least one credit hour of ECE 69200 (Introduction to Graduate Research) or ECE 69900 (PhD Thesis Research) in their first semester in the PhD program.
- If justifiable, 6 hours of undergraduate credit taken in the first calendar year are allowed on the plan of study of direct PhD students.

Requirements: Graduation requirements include the satisfactory completion of one semester of <u>ECE 69400</u>, <u>Graduate Seminar</u> and demonstration of proficiency in written English. It is strongly recommended that you complete these during your first or second semester.

Confirming enrollment: Each semester, you must <u>confirm your enrollment in myPurdue</u>. If you do not confirm your enrollment, <u>your registration will be cancelled</u>, and you will need to register again. You might have to pay fees in advance of re-registering and may also be required to have signatures of instructors to re-enter your registration

6.2 Subsequent Semester Registrations

We encourage you to select your courses and to register as early as possible, since decisions to cancel low-enrollment courses may affect your course options.

Fall registration: Advanced registration for the Fall semester and Summer session begins around March 15 and ends respectively on the second Monday of Fall classes and the Friday before Summer session begins.

Spring registration: Registration for the Spring semester begins around October 15 and ends on the second Monday of Spring classes.

All current ECE graduate students must register and pay their tuition and fees during the registration period. Note that late registration incurs a substantial penalty fee.

If this is your second semester, you are again required to register for at least one credit hour of ECE 69200 (Introduction to Graduate Research) or ECE 69900 (PhD Thesis Research). (After your first year, at least one hour of ECE 69900 per semester is required.) After you have registered, check myPurdue to verify that your registration is correct. Report any errors to the ECE Graduate Office.

Exam-only and degree-only registration: Check with the ECE Graduate Office when registering for "Exam Only" or "Degree Only" to make certain that you qualify and have met all necessary requirements. You must have been registered for at least one credit hour of research in the previous semester. The deadline for "Exam Only" or "Degree Only" registration is one week before classes begin.

6.3 Academic Loads

To qualify for full-time student status in a Fall or Spring semester, you must satisfy one of the following criteria:

- Be registered for a minimum of 8 credit hours.
- Hold a research or teaching assistantship (1/4 time or greater) and be registered for at least 6 credit hours.

All international students must be full-time in order to maintain their visa status. International students registered for 6 credits and who hold an assistantship are considered "full-time" for visa purposes only. Direct questions to Purdue ISS (https://www.purdue.edu/IPPU/ISS/ISSOffice/contactinfo.html).

ECE teaching assistants (TAs) may register for a maximum of 9 credit hours of non-thesis coursework.

The registration requirement for a PhD degree is 90 hours of academic credit beyond the Bachelor's degree or 60 hours beyond the Master's degree. Students are encouraged to register for the appropriate allowable number of credit hours of courses and/or research each session to satisfy this requirement. Your major professor will help you to determine the proper number of research credit hours.

6.4 Dropping and Adding Courses

To drop or add a course, see the instructions on the <u>ECE PhD Student Guide</u> website (https://engineering.purdue.edu/ECE/Academics/Graduates/PHD). Subsequently, be sure to confirm that a dropped or added course have been officially recorded by checking your registration in myPurdue.

Dropped courses and grades:

- Full-semester courses dropped during the first two weeks of classes will not appear on your permanent record.
- Courses dropped after the first two weeks will be recorded as a "W" grade on your permanent record.

Explanation of W grades:

 A "W" simply records the fact that the student withdrew after the second week of the semester.

More information on Purdue grading systems is available here: <u>Grading Systems</u> (https://www.purdue.edu/registrar/faculty/grading/grading-systems.html).

Adding Courses

assistance.

Courses added during weeks 2 through 4 require the approval and signature of the instructor and personnel in the ECE Graduate Office.

Courses may be added during weeks 5 through 9, but only under extraordinary circumstances. Courses added after the fourth week require the approval and signature of the instructor and the ECE Associate Head of Graduate and Professional Programs, and the head of the department where the course is offered for non-ECE courses.

Short courses: Courses that run less than 16 weeks have different drop/add deadlines. See the <u>schedule</u> of drop/add dates for these courses (https://www.purdue.edu/registrar/calendars/index.html) or contact the ECE Graduate Office for

7 Examinations

7.1 Preliminary Examination

The Preliminary Examination is given to determine whether a student is adequately prepared to conceive and undertake a suitable research topic. Students may not schedule their Preliminary Examination until after they have submitted their final plan of study. The Preliminary Examination may include a written exam component, if the Doctoral Advisory Committee so requires, but normally it is an oral examination primarily associated with a written thesis proposal.

After the semester of the preliminary exam, a student must register for two semesters of research before the semester of final defense; for example, the preliminary exam completed in Spring 2020 and then the final exam can be scheduled Spring 2021 with research registration in summer and fall 2020.

Since one goal of the Preliminary Examination is to provide research direction and feedback, it should be taken early enough to allow the Doctoral Advisory Committee to make an effective contribution. The procedure to be followed in scheduling the Preliminary Examination is outlined in Appendix D. The written thesis proposal should be submitted to members of the Doctoral Advisory Committee at least two weeks before the examination.

During the Preliminary Examination, the student is typically expected to exhibit all of the following:

- A clear understanding of the research problem
- An awareness of pertinent background literature and current efforts in the research area of interest
- Some initial progress toward solving the research problem
- A plan to execute the remainder of the thesis research

If you pass the Preliminary Examination, the Doctoral Advisory Committee certifies that you have passed the examination by signing the "Report of the Preliminary Examining Committee" in the Graduate School web database. If you fail the Preliminary Examination, you may not retake the exam until the next semester.

Timing: To ensure timely academic progress, the Preliminary Examination is to be taken by PhD students with an MS after no more than six semesters in the PhD program and by direct PhD students after no more than eight semesters in the program. If this deadline is not met, students must request an extension of the deadline with the ECE Graduate Office before being able to register for the subsequent semester. The reason(s) for the delay in taking the Preliminary Examination, specific actions planned to remedy the situation, and a new proposed prelim semester date must be indicated on the form. The form must be signed by all members of the Doctoral Advisory Committee and by the ECE Associate Head of Graduate and Professional Programs. Delay requests may be for no more than one academic year.

7.2 PhD Thesis and Final Examination

The PhD thesis must be prepared according to a preset format and processed (revised, signatures obtained, bound, distributed) following specified procedures. Detailed information relative to the preparation and processing of the thesis is contained in <u>Appendix E</u>. Once the thesis is prepared and all other requirements have been completed, the student must present and defend his/her work in a Final Examination.

As noted previously, there must be at least two academic sessions (counting regular semesters and summer sessions for which the student is registered for PhD research) between the Preliminary Examination and the Final Examination.

The Final Examination Committee is typically the student's Doctoral Advisory Committee. However, the Dean of the Graduate School reserves the right to appoint additional committee members.

Schedule your Final Examination, as outlined in Appendix E, with your Major Professor, your advisory committee, and the ECE Graduate Office at least three weeks prior to the proposed date of the exam. If you are to receive the PhD degree during the session in which the examination is taken, the results of the examination must be received by the Graduate School before the posted deadline (approximately one week before the last day of classes in the session). Check the Graduate School website or in the ECE Graduate Office for the specific deadline. Those students who are registered for "Exam Only" must complete their Final Examination by the eighth week of classes (sixth week of a summer session).

After receiving your scheduling request, the ECE Graduate Office will seek approval from the Graduate School for your Doctoral Advisory Committee to conduct the Final Examination. Please be aware that late requests to schedule your Final Examination do not allow sufficient time to process your request and adequately publicize your examination date. Any requests to schedule a Final Examination less than three weeks in advance must be approved by the ECE Associate Head of Graduate and Professional Programs, and will be approved only in exceptional circumstances.

The time and location of the Final Examination will be posted to the entire ECE faculty, and posted on the ECE Graduate website. University regulations permit visitors to attend the Final Examination. Such visitors are permitted to ask questions of the candidate, after having been recognized by the Major Professor, but they may not be present while the Final Examination Committee deliberates on its decision.

The Major Professor must report the results of the Final Examination to the ECE Graduate Office within 24 hours after the examination has been taken. No more than one dissenting vote is acceptable in certifying the candidate to receive the PhD degree. If the examination is unsatisfactory, you may not retake the exam until the next semester.

8 Special Circumstances

8.1 Formal Review and Formal Review Examination

The ECE Associate Head of Graduate and Professional Programs is required to conduct a Formal Review of a PhD student's program when there are signs of less than satisfactory progress in completing the thesis research and dissertation. The most common indications of less than satisfactory progress are two consecutive grades of "U" in ECE 69900 and failure to complete all degree requirements by the specified time limit.

Students must take the Final Examination before the end of their sixth calendar year in the doctoral program (seventh year for direct PhD students) or within five calendar years after passing the Preliminary Examination, whichever comes first.

The Formal Review could include any or all of the following components:

- A written explanation by the student of the circumstances that have led to the academic problems and a proposed remedy;
- Interviews with the student, members of the Doctoral Advisory Committee, other faculty, students, or staff who have knowledge of the student's program;
- A Formal Review Examination conducted by the student's Doctoral Advisory Committee.

The format of the Formal Review Examination is the same as that of the Preliminary Examination and includes a written proposal and an oral presentation. The purpose of the examination is to provide the student's Doctoral Advisory Committee with information needed to formulate a recommendation. Responding to two consecutive grades of "U" in ECE 69900, the committee might recommend, for example:

- Continuation of the student's program with specific changes designed to promote renewed research progress;
- Require terminating the student's doctoral program upon receipt of another grade of "U" in ECE 69900;
- Changing the student's project or transferring to a new Major Professor.

In cases where the time limit for taking the Final Examination is the cause of the review, the committee must recommend for or against a one-year program extension.

The ECE Associate Head of Graduate and Professional Programs, after considering all the available evidence, will inform the student, the Doctoral Advisory Committee, and the Graduate School of the decision for or against the student's continuation in the program.

8.2 Research in Absentia

Under circumstances often beyond their control, graduate students sometimes find it necessary to attempt completing their research in absentia. Experience has indicated that it is very difficult to complete research in absentia status, and it is seldom a recommended course of action. At

the very least, research in absentia should only be considered if a student appears to be within one year of completing his/her research.

Process: Permission for research in absentia status must be obtained from the Graduate School; please contact the ECE Graduate Office (MSEE 140) to initiate the process.

The Graduate School must receive the request at least one month prior to the beginning of the initial absentia session. Research in absentia is not permitted until after a student has completed all course work, passed the Preliminary Exam, and made substantial progress on the PhD thesis research. In addition to the Graduate School regulations governing research in absentia, as outlined in the Graduate School Policies and Procedures, the School of ECE requires that the official request form must be accompanied by a statement, approved by all members of the Doctoral Advisory Committee, clearly identifying the reason(s) for the request. All requests for research in absentia must also be approved by the ECE Associate Head of Graduate and Professional Programs.

When approved, permission to register for research in absentia will be valid for an initial period of one calendar year. A request for an extension beyond the approved year of research in absentia initiates a Formal Review by the ECE Associate Head of Graduate and Professional Programs. As part of the Formal Review, the student must submit a written progress report and a complete explanation of why the deadline for completion within one year was not met. In addition, the Doctoral Advisory Committee must be convened to conduct a Formal Review Examination. The committee will recommend a) a one-year extension of the research in absentia status, b) termination of the research in absentia status (requiring the student to return to Purdue), or c) termination of the student's doctoral program.

Students granted an extension of the one-year limit must submit a written progress report to their Doctoral Advisory Committee and to the ECE Graduate Office prior to all subsequent registrations for research in absentia. Additional requests for an extension of research in absentia status are subject to the same review procedures. A student must register for research in absentia every semester (summer sessions not included) from the initial approval until all requirements are completed.

It should be noted that if your research merely requires the use of facilities that are available elsewhere, but not available at Purdue, you should not apply for research in absentia. Rather, retain your Purdue University appointment, register as a regular student, and file a request for Research/Instructional/Engagement Leave or Change of Duty Station.

8.3 Re-Entry into the PhD Program

If a PhD student fails to register at the West Lafayette Campus for three or more consecutive academic sessions, he/she must submit a new application for re-entry into the doctoral program and obtain approval from the ECE Graduate Office and the Graduate School before any subsequent registration will be permitted. Registration for research in absentia, it should be noted, is considered to be registration at the West Lafayette Campus.

A student seeking to re-enter the PhD program is required to submit a new application as well as updated transcripts (if the applicant has pursued any academic studies in the interim). The

student may also be required to submit a personal statement and new letters of recommendation.

It is also a Graduate School rule that course credits earned by a student whose graduate study and/or professional activity has been inactive for five years or more cannot be used on a plan of study for an advanced degree. A plan of study approved prior to such a period of inactivity is deemed invalid. Likewise, a Preliminary Examination passed prior to such a period of inactivity must be repeated.

9 Petitions to the Graduate Committee

All graduate students have the right to petition for exceptions to any existing rule if they feel that the circumstances are sufficiently unusual to warrant special consideration.

The first step is to request an appointment with the ECE Associate Head of Graduate and Professional Programs to see if a resolution can be found at that level. If not, the student may file a petition with the ECE Graduate Committee. The petition is to be delivered in writing to the Chair of the Graduate Committee and is to contain the approval (or disapproval) of each member of the student's advisory committee or faculty advisor.

Appendix A: Key PhD Program Activities and Time Limits

First Semester Registration

- Complete the online orientation to obtain your registration PIN.
- Work with your major professor or a professor in your primary area to determine suitable courses.

During the First Semester

- Register for at least one credit hour of ECE 69200 or ECE 69900.
- Satisfy the <u>English proficiency requirement</u> and all other admission conditions (such as presentation of your official transcript and diploma to the Graduate School).
 - Note that the English proficiency requirements must be fulfilled before the end of your third semester.
- Select an academic advisory committee of three members.
- Submit a preliminary plan of study (prior to registration for the second semester).
 - All PhD preliminary plans of study must be submitted directly to the ECE Graduate Office. Use the purple form available in the racks in the Graduate Office or this electronic preliminary plan of study form.
- Satisfy the <u>ECE 69400 Graduate Seminar</u> requirement. If you do not satisfy this requirement in the first semester, do so in the earliest semester possible.

Before Registration for 4th (with MS) or 6th (direct PhD) Semester

• Submit your final electronic plan of study.

Before Completion of 6th (with MS) or 8th (direct PhD) Semester

Take the Preliminary Examination.

Two semesters before You Expect to Graduate

 Review your plan of study to verify that all degree requirements, including residency hours, are or will be met.

During Final Semester

- Declare candidacy by completing the candidate survey you receive by email.
- Schedule your <u>Final Examination</u>.

Allowable Time Limit for Completion of the PhD Degree

The time-limit policy of the School of Electrical and Computer Engineering provided below is to ensure timely academic progress. This policy applies to all students in the PhD program, including those on research in absentia.

Time limit: Students entering the PhD program with a Master's degree are to complete all degree requirements within six equivalent full-time years from the beginning of their first

semester registration. Those entering as direct PhD students have seven years to complete their degree requirements.

Only full semesters are counted toward the time limit. Summer sessions are not counted even if a student registers for one or more summer sessions. Most students will complete taking the preliminary and final examinations before a formal review is implemented. A student who is not in good standing with regard to the cited time limit will not be allowed to register for the following semester without the approval of the ECE Associate Head of Graduate and Professional Programs.

Extension requests: Students may request, in writing, an extension to the cited time limit. The first one-year extension beyond the cited time limit, an extension recommended by the student's doctoral advisory committee, may be granted by the ECE Associate Head of Graduate and Professional Programs without a formal review examination. Further extensions recommended by the student's doctoral advisory committee will only be granted after a formal review examination and the approval of the ECE Associate Head of Graduate and Professional Programs.

The diagram below summarizes key activities and time requirements.

Students With an MS **Direct PhD Students** Year **Activity** Year **Activity** satisfied admission conditions satisfied admission conditions submitted Preliminary POS submitted Preliminary POS 1 1 submitted Final POS 3 3 satisfied English Proficiency Requirement satisfied English Proficiency Requirement 2 2 5 5 submitted Final POS taken Preliminary Exam 3 3 taken Preliminary Exam 4 9 9 1st Formal review on progress 5 5 2nd Formal review on progress Time Limit 1st Formal review on progress 2nd Formal review on progress 7 final formal review on progress --Time Limit must take Formal Review Exam final formal review on progress must take Formal Review Exam

Appendix B: Mathematics Requirement

The following courses have been approved for meeting the mathematics requirement.

Mathematics Courses

 Any 500- and 600-level math courses (MA), except seminar courses and teacher training courses

Statistics Courses

Any 500- and 600-level statistics courses (STAT), except seminar courses

Computer Science Courses

- CS 51400, Numerical Analysis
- CS 51500, Numerical Linear Algebra
- CS 52000, Computational Methods in Analysis
- CS 61400, Numerical Solution of Ordinary Differential Equations
- CS 61500, Numerical Solution of Partial Differential Equations

Physics Courses

- Phys 60000, Methods of Theoretical Physics I
- Phys 60100, Methods of Theoretical Physics II

Note: Faculty-initiated requests for changes or exceptions to the above will be considered by the Graduate Committee after approval by the appropriate area. Student-initiated requests must follow the same procedure, with the additional first step of approval by the student's major professor.

Appendix C: English Requirement

Any one of the following methods may be used to fulfill the English requirement:

- Score a four or higher on the GRE Writing Assessment.
- Score 22 or higher on the Writing section of the Internet-Based TOEFL (iBT).
- Score 6 or higher on the Writing section of the IELTS.
- Pass <u>ENGL 62100</u>, <u>Written Communication for International Graduate Students</u>, offered at Purdue University, with a grade of Pass ("P").
- Successfully completed a one-semester-long composition course equivalent to ENGL 62100 or ENGL 10600 or 10800 from an English-medium university with a grade of B or better.
 - The ECE Graduate Office may require you to provide a course description or additional information about the course.

Appendix D: Preliminary Examination

Purpose: The preliminary examination is given to determine whether a student is adequately prepared to conceive and undertake a suitable research topic.

Format: The preliminary examination may include a written exam component, if the doctoral advisory committee so requires, but normally it is an oral examination primarily associated with a written thesis proposal.

Before beginning to write your thesis, you are strongly advised to review the information on the Graduate School Thesis and Dissertation Office website.

During the preliminary examination, the student is typically expected to exhibit:

- A clear understanding of the research problem
- An awareness of pertinent background literature and current efforts in the research area of interest
- Some initial progress toward solving the research problem
- A plan to execute the remainder of the thesis research

Timing: Students may not schedule their preliminary examination until after they have submitted their final plan of study.

Students must complete the preliminary examination at least two academic sessions/semesters (counting summer sessions) for which they are registered before taking the Final Examination. Since one goal of the preliminary examination is to provide research direction and feedback, it should be taken early enough to allow the doctoral advisory committee to make an effective contribution.

To ensure timely academic progress, the preliminary examination is to be taken by PhD students with an MS after no more than six semesters in the PhD program and by direct PhD students after no more than eight semesters in the program.

Delays: If this deadline is not met, students must request an extension of the deadline. The delay request form is available from Elisheba VanWinkle (vanwinke@purdue.edu) in the ECE Graduate Office. The form must include:

- The reason(s) for the delay and specific actions planned to remedy the situation.
- A new proposed date for the preliminary exam, no more than one year past the deadline.
- Signatures of the major professor and all members of the doctoral advisory committee.
 - Once submitted back to the ECE Graduate Office, the form will be reviewed and approved by the ECE Associate Head for Graduate and Professional Programs.

A completed form is required each semester past the deadline or new proposed date before registration for the subsequent semester is allowed.

Exam results:

- **If you pass** the preliminary examination, the doctoral advisory committee certifies that you have passed the examination by signing the "Report of the Preliminary Examining Committee" (Form 10) through the Graduate School Web Database.
- **If you fail** the preliminary examination, at least one academic session (fall, spring, or summer) must elapse before a re-examination is permitted.

Scheduling the Preliminary Examination

Important! Complete Steps 1-3 at least 3 weeks before the preliminary examination date.

Step 1: Schedule your preliminary examination with your advisory committee members.

At least 3 weeks before the desired date of the preliminary examination, consult with all the members of your advisory committee to find a suitable date and time to hold the examination. Your examination should be held on the West Lafayette campus or may, with the approval of your doctoral advisory committee, be held virtually.

Step 2: Reserve a room for the preliminary examination.

Once you have established the date of your preliminary examination, reserve a room:

- 1. Go to the Resource Allocation Tool.
- 2. Enter the desired date and select a room.
- 3. Click View Calendar.
- 4. Scroll down to see the calendar.
- 5. After confirming the availability of the room, select **Request Reservation** in the left-hand navigation.
- 6. Select the room and enter a date and time; click **Continue**.
- 7. In the **Select an Administrator** list, select Elisheba Van Winkle.
- 8. Select a reason for the reservation (thesis defense) and then click **Request Reservation**.
 - You will receive an email confirmation.

If you are unable to reserve a room using the instructions above, send the request by email to Elisheba Van Winkle (vanwinke@purdue.edu).

On the day of the exam: If the room is locked, see an area secretary for a key. If the area secretary is not available, see the ECE Graduate Office (MSEE 140).

Step 3: Submit Form 8 in myPurdue to officially schedule the preliminary examination and submit an abstract.

Follow these steps to submit Form 8 and submit your abstract:

- 1. Log into myPurdue and go to the Plan of Study Generator under the Academics tab.
- 2. Complete and submit the Form 8.
 - This request requires approvals from the Graduate Office, the chair of your advisory committee, and the Graduate School.

3. Send an abstract (250 words or less) of the thesis research clearly defining the problem and its significance to Matt Golden (goldenm@purdue.edu).

Late requests: Please be aware that late requests to schedule your preliminary examination do not allow sufficient time to process your request and adequately publicize your examination date. Any requests to schedule a preliminary examination less than three weeks in advance must be approved by Matt Golden and will be approved only in exceptional circumstances.

Examination posting: The time and location of the preliminary examination will be posted on the <u>ECE Website</u>. University regulations permit visitors to attend the preliminary examination. Such visitors are permitted to ask questions of the candidate after having been recognized by the major professor, but they may not be present while the committee deliberates on its decision.

Step 4: Provide a copy of your thesis proposal to all committee members at least 2 weeks before the preliminary exam.

Results: The doctoral advisory committee will report the results of the preliminary examination through the Graduate School Web Database.

Appendix E: PhD Thesis and Final Examination

PhD students must follow the steps below for their final examination and to submit their thesis. The final examination is given after the thesis and all other requirements have been completed. The final examination covers primarily the thesis and related topics.

The main steps of this process are as follows; details are below.

- 1. Schedule the final examination with your advisory committee members.
- Reserve a room for the final examination.
- 3. Submit Form 8 in myPurdue to officially schedule the final examination at least 2-3 weeks before the exam date.
- 4. Schedule a thesis format appointment with the Thesis Office. This should be done when the Form 8 is submitted/approved OR a minimum of 2 weeks prior to depositing the final thesis.
- 5. Deliver a copy of the thesis to all committee members at least two weeks before the final examination.
- 6. Following your final examination, submit the Thesis Acceptance Form (Form 9) through myPurdue.
- 7. Deposit your thesis.

Step 1: Schedule your final examination with your advisory committee members.

Note: There must be at least two academic sessions/semesters (counting summer session) of research registration between the semester of the preliminary examination and the semester of the final examination. Contact Matt Golden (goldenm@purdue.edu) in the ECE Graduate Office for additional information.

At least 3 weeks before the desired date of the final examination, consult with your major professor and your doctoral advisory committee to find a suitable date and time to hold the examination. Your examination should be held in-person at the West Lafayette or Indianapolis location may, with the approval of your doctoral advisory committee, be held virtually.

Final examination committee members: The final examination committee is typically the student's doctoral advisory committee. However, the Dean of the Office of the Vice Provost for Graduate Students and Postdoctoral Scholars (<u>OGSPS</u>) reserves the right to appoint additional committee members.

Final examination timing:

- The final examination must be completed before the semester deadline (approximately one week before the last day of classes), but we strongly recommend you do not wait until this late date. See the deadlines here: Calendar of Events, Dates, and Deadlines.
- If you are registered for **Exam Only**, your final examination must be completed by the eighth week of classes in Fall or Spring or by the sixth week of summer session.

Step 2: Reserve a room for the final examination.

Once you have established the date of your final examination, reserve a room:

- 1. Go to the Resource Allocation Tool.
- 1. Enter the desired date and select a room.
- 2. Click View Calendar.
- 3. Scroll down to see the calendar.
- 4. After confirming the availability of the room, select **Request Reservation** in the left-hand navigation.
- 5. Select the room and enter a date and time; click **Continue**.
- 6. In the **Select an Administrator** list, select Elisheba Van Winkle.
- 7. Select a reason for the reservation (thesis defense) and then click **Request Reservation**.
 - You will receive an email confirmation.

If you are unable to reserve a room using the instructions above, send the request by email to Elisheba Van Winkle (vanwinke@purdue.edu).

On the day of the exam: If the room is locked, see an area secretary for a key. If the area secretary is not available, see the ECE Graduate Office (MSEE 140).

Step 3: Submit Form 8 in myPurdue to officially schedule the final examination and submit an abstract.

Follow these steps to submit Form 8 and submit your abstract:

- 1. Log into myPurdue and click **Graduate Plan of Study** on the **Graduate Students** card.
- 2. Complete and submit the Form 8.
 - This request requires approvals from the ECE Graduate Office, the chair of your advisory committee, and the <u>OGSPS</u>.
 - Complete this step at least 2-3 weeks before the exam date.
- 3. Send an abstract (250 words or less) of the thesis research clearly defining the problem and its significance to Matt Golden (goldenm@purdue.edu) in the ECE Graduate Office.

Late requests: Please be aware that late requests to schedule your final examination do not allow sufficient time to process your request and adequately publicize your examination date. Any requests to schedule a final examination less than three weeks in advance must be approved by Matt Golden and will be approved only in exceptional circumstances.

Final examination posting: The time and location of the final examination will be posted on the <u>ECE website</u>. University regulations permit visitors to attend the final examination. Such visitors are permitted to ask questions of the candidate after having been recognized by the major professor, but they may not be present while the committee deliberates on its decision.

Step 4: Schedule a thesis format appointment with the Thesis Office.

This should be done when the Form 8 is submitted/approved OR a minimum of 2 weeks prior to depositing the final thesis.

To help students better prepare for this final deposit deadline, all students planning to graduate with a doctoral or thesis-option master's degree will be asked to submit their dissertation or thesis file for a format consultation with the Thesis Office.

- Most thesis/dissertation files can be submitted for asynchronous review as an email attachment to thesishelp@purdue.edu or sent via FileLocker to Carla Coffey (cmcoffey@purdue.edu).
- Students working with export controlled content, however, will need to schedule an inperson format review rather than send files electronically. In-person consultations can be requested via email to thesishelp@purdue.edu.
 - For any in-person appointment, please bring your laptop.

This review is just to help make sure that the *thesis* or dissertation is in the correct format <u>prior</u> <u>to the defense</u> and for future publication. Content changes can still be made to this document at the student and department's discretion up until the final thesis submission deadline

Step 5: Deliver a copy of your thesis to all committee members at least two weeks before the exam.

Preparing your thesis: Before beginning to write your thesis, you are strongly advised to review the information on the <u>OGSPS Thesis and Dissertation Office website</u>.

Templates: You must use the LaTeX (recommended) or MS Word <u>templates</u> that the OGSPS provides.

Step 6: Following your final examination, submit the Thesis Acceptance Form (Form 9) through myPurdue.

Follow these steps to submit Form 9:

- 1. Log into myPurdue and click Graduate Plan of Study on the Graduate Students card.
- 2. Complete and submit for Form 9.

Results: The advisory committee will report the results of the final examination through the <u>OGSPS</u> Web Database. No more than one dissenting vote is acceptable in certifying the candidate to receive the PhD. If the final examination is unsatisfactory, at least one semester or summer session must elapse before the final examination is repeated.

Embargo and confidentiality: Be sure to discuss with your major professor whether your thesis should be confidential prior to submitting the request or if there will be a delay in the publication.

Your major professor will certify that they have used <u>iThenticate</u> software to check your thesis for plagiarism in the electronic Thesis Acceptance Form. They will also confirm confidentiality or **Embargo** (delayed publication of the thesis) if you have marked these.

Students should consider an embargo over confidentiality in all cases. An embargo is commonly used when applying for patents, pending publications, or when proprietary rights are involved.

Confidentiality should only be used with ITAR/Export controlled or confidential sponsored information is included in the thesis. Indefinite confidentiality can only be requested when there is contract information on file with Sponsored Program Services. All indefinite requests will be subject to approval by the SPS office. All confidentiality requests will also be reviewed by Thesis Office staff to ensure this program is being utilized properly.

Step 7: Deposit your thesis.

Follow the instructions on the <u>OGSPS</u> Thesis and Dissertation Office <u>Deposit Requirements</u> webpage to deposit your thesis.

For more detailed steps or questions about the on-line thesis deposit process, refer to the <u>OGSPS Thesis and Dissertation Office website</u> or <u>contact</u> staff in this office.

Thesis deposit time limit policy: Effective Fall 2020, students are required to deposit their theses and dissertations within three consecutive sessions of receiving a decision of PASS on their final examination (including the session in which the final examination was passed). The thesis or dissertation must be deposited no later than the end of the semester Deposit Deadline of the third consecutive session for full consideration of the sought degree. For example, a student who passes the final examination in a fall session has through the end of the semester Deposit Deadline of the following summer to deposit. To uphold the integrity of the defended research, if a student is unable to deposit their thesis or dissertation within three sessions, they must re-defend their research and deposit within the session they receive the decision of PASS on the second final examination to be conferred the degree.