



School of Engineering Education

# Graduate Programs Handbook

- PhD Degree in Engineering Education
- Online MS Degree in Engineering Education
- Graduate Certificate in Teaching and Learning in Engineering

**August 2023**

## Table of Contents

SECTION 1: INTRODUCTION.....	3
The Graduate Student Handbook .....	3
Graduate Committee, Graduate Program Support Staff, Faculty and Graduate Students .....	4
Our History .....	4
Our School’s Vision and Mission .....	6
Valued Behaviors and Goals.....	6
SECTION 2: GRADUATE COMPETENCIES IN ENGINEERING EDUCATION.....	9
Overarching Principle: Engage With and Act Upon Advancement of Justice, Equity, Diversity, and Inclusion (JEDI).....	9
Ten Engineering Education Graduate Competencies.....	9
Faculty Research Areas.....	12
Academic Performance, Grades, and Transcripts.....	13
SECTION 3: DOCTORAL DEGREE-SPECIFIC POLICIES (PhD).....	14
Timeline & Deadlines .....	14
Advisors and Dissertation Committees .....	14
Plan of Study (POS) and Requirements for the PhD Degree.....	18
Professional/Conference Travel.....	19
Research Labs, Workspaces, and Commons in Wang Hall .....	19
Reportable Outside Activities Guidelines.....	23
Vacation, Holiday, and Time Off Procedures .....	23
Research in Absentia.....	24
Change of Duty Station.....	24
SECTION 4: HYBRID PH.D. DEGREE-SPECIFIC POLICIES.....	26
Definition of the ENE Hybrid Ph.D. Program.....	26
Eligibility.....	26
Employment and Paying for Courses.....	26
Advising.....	27
Responsible Conduct of Research (RCR) .....	27
Coursework .....	27
Milestones.....	28
SECTION 5: ONLINE MASTER’S DEGREE-SPECIFIC POLICIES (MS ENE).....	30

Required Responsible Conduct of Research training – CITI.....	30
Advising and contacts .....	30
Annual Review .....	31
How to register for courses through Purdue Online .....	31
Online billing and tuition payment.....	32
Student Resources for Current Online Students .....	32
Part-time and Intermittent Study, Leave of Absence, and Withdrawal .....	33
Course requirements for the degree .....	33
Meeting ENE MS Requirements:.....	34
Entering the Plan of Study (POS) in myPurdue.....	35
Prepare a portfolio demonstrating six competencies (required).....	36
Milestones timeline and deadlines .....	36
SECTION 6: GRADUATE CERTIFICATE DEGREE-SPECIFIC POLICIES .....	37
Eligibility.....	37
Requirements for the Certificate .....	37
Applying for the Graduate Certificate.....	38
Questions about the Teaching and Learning in Engineering Certificate program .....	39
Enrolling in classes.....	39
Closing out the program .....	40
SECTION 7. TAXES AND HEALTH INSURANCE .....	41
TAXES.....	41
HEALTH INSURANCE .....	41
SALARY DIRECT DEPOSIT.....	44

## **SECTION 1: INTRODUCTION**

### **The Graduate Student Handbook**

The purpose of this handbook is to introduce graduate students in the School of Engineering Education to policies and procedures related to their experience within the department. The information in this handbook is summarized and subject to change. Please check the relevant websites for more detailed and up to date information on procedures.

The School of Engineering Education is subject to the policies of the College of Engineering and the Graduate School. Therefore, the policies laid out by those bodies supersede those of the School. Knowledge of the policies and procedures related to academics or research are the responsibility of the student.

This handbook allocates specific sections to each of the graduate degrees or certificates offered by the School of Engineering Education:

- (1) Ph.D. in Engineering Education,
- (2) Online Master's Degree in Engineering Education, and
- (3) Graduate Certificate in Teaching and Learning in Engineering.

Purdue's Ph.D. in Engineering Education is a residential, i.e., on-campus, degree. The School also offers a hybrid version of the Ph.D. which allows students to take up to 49% of their course credits online, making the degree more accessible to students who have work or family obligations elsewhere and cannot move to the West Lafayette campus for an extended period of time. It is important to note that all Ph.D. students are enrolled in the same residential program and must meet the same degree requirements, which are outlined in the first section of this handbook. Any special considerations for hybrid Ph.D. students are included as a subsection of the Ph.D. section of the handbook.

Purdue's master's degree in Engineering Education (MS ENE) is on-line. While there is an on-campus master's degree in Engineering Education, students may not enroll in that program as their primary degree objective. It is reserved for ENE Ph.D. students who change their degree objective and decide to leave the program with a master's degree or Ph.D. students in other Purdue engineering fields who want to earn a master's degree in ENE in parallel with their Ph.D. The 30-credit hour online MS ENE is completely online and is designed for students who do not plan to come to West Lafayette for any of their courses. If a student in the MS ENE program later decides to pursue a Ph.D. in Engineering Education, all of the courses taken in the MS ENE degree program will count toward the 90 hours required for the Ph.D.

The Teaching and Learning in Engineering Graduate Certificate is a 10-credit hour certificate program available both on campus and online. It is designed for students with a wide range of backgrounds and career goals including those who are or plan to be engineering faculty members and those who plan to teach engineering or other technical material in other settings. Courses taken as part of the certificate program can be counted toward the online MS ENE if a student chooses to pursue that degree later.

## Graduate Committee, Graduate Program Support Staff, Faculty and Graduate Students

- The **Graduate Committee** is composed of faculty and graduate students, and chaired by the Associate Head for Graduate Programs. This committee reviews and develop policies and new courses, supports recruitment efforts, and makes admission decisions.
- **Prof. Senay Purzer** is the Associate Head for Graduate Programs in ENE. As the inaugural Associate Head, she will provide leadership for our growing and diverse graduate programs. For questions and comments that cut across our Graduate Programs, please contact Dr. Purzer.
- **Prof. Audeen Fentiman** is the Director of the ENE Online Graduate Programs. Dr. Fentiman is the faculty advisor for the MS Online students and continue to lead the Teaching and Learning in Engineering graduate Certificate Program).
- **Tina Putz** is the Graduate Program Manager. Tina will focus on supporting our online graduate students She will be your day-to-day contact for any question you have about policies, procedures, program requirements, deadlines, and other logistical issues related to our online graduate programs (MS Online and the Online Teaching and Learning in Engineering Graduate Certificate Program.
- **Loretta McKinniss** is our Graduate Administrative Assistant. Loretta will focus on supporting our PhD students and PhD Recruitment efforts. She will be your day-to-day contact for any questions you may have about policies, procedures, program requirements, deadlines, and other logistical issues related to all our PhD students.
- Our **Faculty and Graduate Students**. Information can be found on the School of Engineering Education's official [directory](#).

### Our History

The formation of this academic unit was a bold step, a fundamental recognition that engineering education cannot remain static if society is to address pressing challenges – energy, water, biotechnology, health care, climate change, sustainable food production – all of which require the leadership, creativity, and problem-solving skills of engineers.

The School of Engineering Education gives structure to our eagerness to take on issues specific to engineering education: encouraging interest in and preparedness for entering engineering and the sciences, increasing diversity among those who do pursue those disciplines, and highlighting engineering's relevance to societal issues.

Transforming how engineering education happens means taking a research-based approach to our educational system, just as research is performed and applied in other disciplines. Research in engineering education will provide the principles upon which to build

innovative curricula that lead future engineering practice to meet the needs of the nation and the world. This new paradigm combines deep knowledge of engineering with deep knowledge of learning and pedagogy. These are the defining characteristics of the School of Engineering Education. Our graduate students are key to making a difference and a promising future.

Our school has experienced remarkable achievements and growth building on the strong foundations of Purdue’s first-year (freshman) engineering, which continue to be a prominent component of our School (See Table 1). We’ve pioneered the development of an emerging discipline and begun to reshape the practice of engineering education.

Table 1. Foundation ions of our School

1953	We grew out of the Department of Freshman Engineering, first founded in 1953.
1969	Multidisciplinary Engineering (MDE) and Interdisciplinary Engineering Studies (IDES) programs were founded in 1969.
2004	<ul style="list-style-type: none"> <li>▪ The Department of Engineering Education (currently the School of Engineering Education) was created in 2004, becoming the first such department in the United States.</li> <li>▪ The founding Head of the School is Professor Kamyar Haghighi (2004-2009)</li> </ul>
2006	The first PhD is granted in the field of engineering education.
2009	<ul style="list-style-type: none"> <li>▪ We formally became a School in 2009.</li> <li>▪ The School of Engineering Education thus includes the Graduate Program, the First-Year Engineering (FYE) Program, the Multidisciplinary Engineering, and Interdisciplinary Engineering Studies programs, and the INSPIRE Research Institute for Pre-College Engineering.</li> <li>▪ The Kamyar Haghighi Headship of Engineering Education is endowed.</li> <li>▪ The interim Head of the School is Professor David Radcliffe (2009-2010)</li> </ul>
2010	The Kamyar Haghighi Head of the School is Prof. David Radcliffe (2010-2016)
2016	The interim Head of the School is Prof. Audeen Fentiman (2016-2017)
2017	The Kamyar Haghighi Head of the School is Prof. Donna Riley (2017-2023)
2023	<ul style="list-style-type: none"> <li>▪ The interim School Head of the school, appointed in 2023, is Professor Edward Berger.</li> <li>▪ The inaugural Associate Head for Graduate Programs in ENE is Professor Senay Purzer.</li> </ul>

In addition, to our graduate programs, the School of Engineering Education encompasses the following:

- The **First-Year Engineering (FYE) program** is a common curricular experience which all entering engineering students must complete before they can move on to one of the other professional engineering schools in the College of Engineering. The school has

professional advising staff to serve the first-year students, and many of the faculty in ENE also teach courses in the first-year program.

- **Multidisciplinary Engineering (MDE)** is an ABET-accredited bachelor's degree program for students who want to practice engineering around a focused concentration by combining several academic disciplines. Students may design their own tracks or pursue existing tracks in Acoustical Engineering, Engineering Management, Humanitarian Engineering Lighting Engineering, Theatre Engineering, Visual Design Engineering, and more. **Interdisciplinary Engineering Studies (IDES)** is for students who want an education in engineering but are not seeking an accredited degree and do not plan to practice engineering, e.g., students who are preparing for further study in medicine or law.
- **INSPIRE Research Institute in Pre-college Engineering** is focused on engineering thinking and learning to engage all pre-college learners and impact educational systems, including via research, outreach/engagement, and other activities.

### **Our School's Vision and Mission**

The School of Engineering Education (ENE) **envisions** *a more inclusive, socially connected, and scholarly engineering education*. This implies that we radically rethink the boundaries of engineering and the purpose of engineering education. In pursuit of this vision, the **mission** of the School of Engineering Education is to *transform engineering education based on scholarship and research*.

### **Valued Behaviors and Goals**

The **behaviors we value** and expect are:

- *being inclusive, collegial, and mutually supportive*
- *acting with integrity, courage and respect and building trust*
- *achieving professional and personal satisfaction*
- *being socially conscious in what we do and how we do it*
- *thinking strategically and striving for excellence*
- *being accountable*

Above all else, we seek to put **Students First** in all we do.

To achieve our mission, we have **four goals**:

1. **Empower our people:** Empower all members of the school (students; professional, administrative, and clerical staff; academic advisors; and faculty) to contribute to the success of our integrated, multifaceted mission and to be leaders, advocates, and change agents over their lifetime. Empowerment rests upon a shared understanding of the vision, mission, goals, priorities, and capabilities of the school within the national and global landscape of engineering education. We are a continuous platform for members of engineering education community to engage, inform, and influence each other.

2. **Set the pace (in innovative programs):** Offer a full suite of undergraduate and graduate programs that set the global standard in engineering education grounded in and contributing to cutting-edge scholarship and research. The transformation of engineering begins when we challenge the fundamental assumptions behind engineering education and strive to create engineering programs that:
  - Diversify engineering: Open engineering to a more diverse range of people by making their first experience of engineering (from Pre-College to 16) the most rewarding it can be.
  - Embed creativity, innovation, and social responsibility: Create an understanding of the essential nature of engineering as creative and as contributing to a better world.
  - Enrich the student experience: Determine what information, advice, preparation, pedagogies, and learning experiences attract, retain, and grow global engineers.
  
3. **Tackle the big research questions:** Create a world-renowned interdisciplinary research concentration at Purdue that addresses the big questions and challenges facing STEM education, with particular emphasis on engineering. Use our unique infrastructure and capability to be a pathfinder based on systematic research, policy development, and assessment. Reshape the research agenda by asking questions that challenge fundamental assumptions about engineering education across both the span of life and the different modes of participation in engineering. Influence the direction of and resource allocation for engineering education scholarship nationally and internationally.
  
4. **Grow the (broader engineering education research and innovation) Community:** Identify and build strategic global partnerships and collaborations to elevate our research capabilities and those of the wider engineering education community, while simultaneously facilitating the sharing of experiences across the global community of engineering education scholars.

Each of the four goals is accomplished progressively via a rolling set of initiatives. At the ENE Advance each May, we review current initiatives and initiate new ones as needed and set specific priorities and targets over three horizons: one year, three years and five years. Our vision, mission, and goals are sustained by a cohesive identity and sense of common purpose that empowers members of the school (graduate students; professional, administrative, and clerical staff; advisors; and faculty) to be leaders, advocates, and change agents over their lifetime. This is built upon a shared understanding of the vision, mission, goals, priorities, and capabilities of the school and of the national and global landscape of engineering education, constituting a continuous platform for members of the engineering education community to engage, inform, and influence each other.

**Empower Agents of Change.** Our vision, mission, and goals are sustained by a cohesive identity and sense of common purpose that empowers members of the school (graduate



students; professional, administrative, and clerical staff; advisors; and faculty) to be leaders, advocates, and change agents over their lifetime. This is built upon a shared understanding of the vision, mission, goals, priorities, and capabilities of the school and of the national and global landscape of engineering education, constituting a continuous platform for members of the engineering education community to engage, inform, and influence each other.

## SECTION 2: GRADUATE COMPETENCIES IN ENGINEERING EDUCATION

The aim of the listed graduate competencies is to help each student develop the ability to create and synthesize knowledge; think critically and reflectively; master written and oral communication skills; demonstrate engineering skills, engage in professional development; participate actively in professional field or engineering education; teach engineering, and apply their knowledge of instruction, curriculum design, and assessment of engineering science, problem-solving, and design appropriately. These competencies are simultaneously complemented by, and support achievement of, an overarching principle promoting student engagement in the advancement of justice, equity, diversity, and inclusion (JEDI) in engineering education. That is, the overarching principle impacts how students ought to conduct the activities listed under the other ten competencies. Activities which can be used to demonstrate that a student has achieved an acceptable level of competence are listed under each competency. Opportunities for developing materials to demonstrate competencies will occur in coursework and other settings. Competencies gained through prior education and/or experience can also be applied to the requirements, with appropriate documentation in the portfolio.

### **Overarching Principle: Engage with and Act Upon Advancement of Justice, Equity, Diversity, and Inclusion (JEDI)**

The graduate will consistently engage with JEDI considerations as a central, unavoidable, and necessary component of their professional work, and will seek out opportunities to advance social justice in their field(s) of activity through action towards JEDI-related initiatives and in counteraction to JEDI-related inequities. Students will demonstrate achievement of one or more of the following to satisfy this competency:

- Develop and implement strategies for teaching, research, and service that purposefully engage self and others in critical conversations pertaining to JEDI that include diverse perspectives
- Demonstrate in writing an understanding of JEDI concepts, issues, terminology, and theories (e.g., in dissertation, articles, blogs, and/or other written forums)
- Demonstrate self-reflection resulting in personal growth to improve understanding of self and others
- Serve on school, college, or university committees focused on JEDI or related initiatives, or actively participate in similarly focused initiatives of local, state, regional, or national organizations
- Identify and counteract JEDI-related injustices with appropriate evidence

### **Ten Engineering Education Graduate Competencies**

1. **Synthesize Knowledge** The graduate will read and synthesize educational literature, describe fundamental theories of human learning, and apply knowledge of human learning, diversity, and effective pedagogy to the solution of practical problems in his/her discipline. Students will demonstrate achievement of one or more of the following to satisfy this competency:
  - Write a critical literature review
  - Write a conference paper based on the standards of either a state, regional or national conference
  - Write a grant proposal based on published grant guidelines

- Write a journal article based on the publication guidelines for a national or comparable journal
  - Write a project report based on a research project
  - Design and implement an instructional development project
  - Actively participate in the design and implementation of a course or a workshop and write a critical report
- 2. Create Knowledge** The graduate will describe common research methods in his/her discipline, read and evaluate educational research, and apply research findings to the solution of practical problems in his/her discipline. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Conduct a mini-research project individually or collaboratively with peers or faculty
  - Conduct engineering education research
  - Develop instructional materials based on research findings and/or theory
- 3. Communicate Knowledge** The graduate will communicate effectively in both oral and written formats including the ability to communicate content from his/her discipline through the design and delivery of effective teaching/learning activities that integrate content and pedagogy, adapt instruction and support services to the needs of diverse learners, and appropriately assess learning outcomes. All of this is to be demonstrated using inclusive and non-biased language in both written and oral communication. Students will demonstrate achievement in an appropriate combination of activities from the following list to satisfy this competency.
- Present at one university, state, regional, or national meeting, class, or colloquium
  - Present the results of an independent study project at the Seminar in Engineering Education
  - Submit an article to an appropriate journal
  - Explain problem solutions (i.e., serve as a TA for an engineering course)
  - Develop instructional materials that communicate information to diverse end users
- 4. Think Critically and Reflectively** The graduate will develop a personal vision of inclusive educational practice, identify the relationship of his/her discipline to the broader field of education, and critically evaluate theory and practice. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Prepare a critical and reflective paper on scholarly topics in engineering education
  - Prepare a constructive critique of a current research theory in engineering education
  - Prepare a journal or reflective piece on one's growth in understanding of what it means to be a teacher (i.e., for an engineering or engineering education course)
  - Prepare a constructive critique on how to address equity and diversity issues in engineering education
  - Critique research design in engineering education
- 5. Apply Engineering Education Principles to the Solution of Instructional or Curricular Problems** The graduate will analyze engineering education problems and, when appropriate, design, develop, implement, and evaluate appropriate solutions to those problems. Students will demonstrate achievement of one or more of the following to satisfy this competency:
- Identify and analyze learning and performance problems in engineering

- Design and conduct an analysis of needs, learners, and context
  - Design plans and develop instructional interventions using appropriate strategies and technique
  - Based on appropriate analyses, plan and create a unit of engineering science, problem-solving or design instruction that specifically addresses JEDI concerns
  - Implement and evaluate an instructional intervention
  - Conduct a formative evaluation of existing instruction
  - Design and implement assessments of human learning
  - Develop an evaluation plan for a project based on stated goals and recognized standards
- 6. Demonstrate Engineering Skills** The graduate will have the capacity to function as an engineer in a traditional, non-education area. This should include, to the extent possible, the knowledge and use of technology and tools for engineering practice and engineering education. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Pass a qualifying examination in a traditional engineering discipline
  - Pass the Fundamentals of Engineering Examination
  - Successfully complete appropriate courses in engineering fundamentals and advanced engineering topics or focused on engineering problem-solving and design
- 7. Engage in Professional Development** The graduate will demonstrate the disposition for life-long learning and continuous professional development. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Participate in workshops and other professional development opportunities related to engineering education
  - Attend professional conferences related to engineering education
  - Take part in K-12 or higher education workshops
- 8. Participate Actively in Professional Community** The graduate will identify communities of practice within his/her discipline and participate within these communities. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Demonstrate an understanding of and adherence to the discipline's professional code of ethics (e.g., cite sources, obey copyright law, follow human subject research protocols)
  - Participate actively in state, regional or national professional organizations
  - Provide engineering related volunteer service to the community
  - Conduct professional development workshops in engineering education
  - Conduct K-12 or higher educational workshops
  - Publish a manuscript in a related journal
  - Participate actively in engineering outreach events
- 9. Explain and Critique Education Policy** The graduate will demonstrate knowledge of educational policy issues. Students will demonstrate achievement of one or more of the following to satisfy this competency.
- Serve on a department/school, college, or university committee
  - Attend local, regional, or national professional society meetings focused on education policy issues
  - Write a reflective critique on one or more education policy issues

- 10. Teach Engineering** The graduate will participate in a *mentored* teaching experience at the K-12 or higher level. The experience must be of *significant duration* and involve *actual teaching* of students. The experience must also include *formative and summative feedback* (e.g., by peers, students, and faculty) and self-reflection. In addition, students enrolled in the Ph.D. program will be expected to *develop and implement curricular materials* as part of this experience. Examples of such activity, that include student evaluation and observation by a faculty member, are:
- Teaching in a K-12 or higher education setting for a semester. Ph.D. students would develop and implement materials for this experience
  - Teaching in a K-12 or higher education setting that involves multiple days in the classroom. Ph.D. students would develop and implement materials for this experience
  - Develop and implement a workshop or short course
  - Develop and implement a distance learning module or course
  - Develop and implement an outreach activity based on engineering

### Faculty Research Areas

The research focus areas in engineering education research is vast as evident in the [EER taxonomy](#). While the taxonomy and the categories listed below provide a structure, there are often overlaps across categories and emerging new research areas.

- **Understanding and Assessing How People Learn** – The staple of engineering education research is characterizing how people learn key aspects of engineering education and designing curricula and pedagogy to improve learning outcomes. Purdue ENE has excelled in addressing how people learn in such topic areas as: reflection, self-regulation, design reasoning, conceptual learning of fundamental engineering science concepts, engineering ethics, global competencies, systems thinking, teamwork and collaboration, workforce development, identity and belonging.
- **Defining Frameworks, Developing Methods and Designing Data Infrastructure for Engineering Education Research and Innovation** – Purdue researchers lead the way in developing theoretical frameworks building on their years of expertise. Our faculty also make methodological contributions to research by defining and setting standards for quantitative, qualitative, and mixed-methods research methods, working with big as well as small data.
- **Improving Pre-College Engineering Education** – Under our School is the INSPIRE Institute for Pre-college Engineering with core and affiliate researchers leading the nation in studying engineering thinking and learning to engage all pre-college learners and impact educational systems. They integrate engineering with science, technology, mathematics and language arts in pre-college classrooms and curricula; characterize engineering thinking to support learning in pre-college settings; and promote the participation of underrepresented groups in engineering.
- **Change in Engineering Education (Research to Practice)** – Nearly all faculty in the department conduct research that effects change in Engineering Education in some way.

Several faculty formally study change mechanisms and seek to improve the extent and sustainability of change in engineering education by collaborating with faculty from other engineering schools, focusing on structural change at the department level, faculty reward systems, curricula, and the college-workforce transition. Purdue faculty also engages in collaborative projects with faculty from other engineering education research programs outside Purdue to define measures of Impact for Engineering Education Research.

- **Diversity, Inclusion, and Equity** – One of the intractable problems of engineering education has been the systematic exclusion of groups from STEM fields spurred by educational inequities based in race, class, gender, ability, sexual orientation, and other characteristics. Groundbreaking work at Purdue has reframed how we think about diversity, inclusion, and equity, creating new conceptualizations, methods and improved interventions across educational levels, disciplines, and employment sector.

### **Academic Performance, Grades, and Transcripts**

Only grades of B- or better would fulfill Plan of Study requirements.

- **Requesting a Transcript.** Transcript requests can be made under the academic tab in myPurdue. Transcripts can then be mailed to an address you provide or picked up in person at the Registrar's office in Stewart Center 176.
- **Resolving Transcript Errors/ Erroneous Grades/Incomplete Coursework.** Correcting a transcript error can be done by completing an Academic Record Change Form 350, which the Graduate Assistant will provide to fill out for you. In some instances, grade changes can instead be submitted by faculty via the myPurdue portal. The same processes can be used for grade completion. In the event a student fails to complete coursework, the instructor may establish a time interval for the student to resolve the incomplete coursework.
- **Incomplete Grades.** According to university policy, a student who receives a grade of I, PI, or SI in a course and who successfully completes his/her work in the time interval specified by the instructor, but no later than one calendar year after the I grade was given, will receive from the instructor whatever permanent grade his/her work would have deserved if it had been completed on time regardless of the student's enrollment status. Once the work is completed the instructor must request the grade change following the procedures via the myPurdue portal.

## SECTION 3: DOCTORAL DEGREE-SPECIFIC POLICIES (PhD)

### Timeline & Deadlines

Becoming familiar with deadlines and timelines is important for your timely progress

- <https://www.purdue.edu/gradschool/about/calendar>
- <https://engineering.purdue.edu/ENE/Academics/Graduate/PhD>

### Advisors and Dissertation Committees

**Advisor Matching Process.** To allow students to learn about research topics and faculty expertise areas, we use a semester-long explorer model. During this period students, engage in exploratory research projects, take foundational courses, and have ample opportunities to interact with faculty and other graduate students. Explore options for an advisor and advisory committee. Final matching with an advisor is typically done in November of your first semester.

**Dissertation Committees.** The members of committee are determined as the students' research areas start to become apparent. As this is the practice in the College of Engineering, the chair of a graduate student advisory committee (the major professor) must be a current ENE faculty member.

- The majority of your committee members must be graduate faculty in ENE. For example, if you have a three-member committee, at least two should be from ENE; if you have a five-member committee, at least three should be from ENE.
- Members of the committee need not be faculty with whom you have taken coursework; however, at least 51% of the committee members must have regular graduate faculty certification (e.g., graduate faculty in other Purdue programs).
- There are no restrictions on inviting external faculty or experts to be committee members provided all other restrictions are met. A special graduate faculty certification must be requested early, since the process may take time and requires approval by the School and College. Certification involves the committee member CV, description of expertise, and current contact information.
- There are no restrictions on the maximum number of faculty permitted on your committee. However:
  - Readiness Assessment Exam: A student must have a three-member advisory committee (e.g., a chair and two other members, or two co-chairs and two additional members) in place prior to the Readiness Assessment exam.
  - Preliminary Exam: The preliminary examining committee must consist of a minimum of three members of the graduate faculty, who need not be faculty members with whom the student has taken coursework. Although only three committee members are required, if the committee has four or more members, then be advised that a single member may withhold his or her signature of approval.

- Final Thesis Exam: Your committee must consist of a minimum of four members of the graduate faculty.

Changes to committee members and coursework can be made to the initial approved plan if needed. If there have been changes to courses or committee members after the Plan of Study has been submitted to the Graduate School, you must use a Request for Change to the Plan of Study (through myPurdue), which must be electronically approved by your major professor, the head of the graduate program.

**Advisee Relationship and Responsibilities** Every student/faculty advisor(s) relationship is unique. It is recommended that the student and doctoral advisor(s) openly discuss their expectations, responsibilities, and agree on consequences for action/inaction at the beginning of their relationship. It is also recommended that the student and doctoral advisor(s) arrange a regular meeting time at least biweekly to monitor the student's progress and provide mentoring. For more information on developing a good mentor/mentee relationship, students might examine [this brochure on mentoring](#) provided by the College.

Broadly speaking, doctoral advisor(s) are responsible for guiding their students as to which classes to take and monitoring their progress. This monitoring can be done by means of generating and revisiting a plan of study, use of the roadmap and requirement documents developed for the MS and PhD degree programs, the annual review process, and setting checkpoints for the portfolio.

The doctoral advisor(s) is also expected to review their student's preparedness to take the Readiness Assessment (RA) Exam, preliminary examination (proposal defense), and final defense, and to ensure these are taken in a timely manner. The doctoral advisor(s) is also expected to provide opportunities for the student to fulfill all the competency requirements of the department, i.e., to provide opportunities for mentored teaching, community leadership, authorship, research, and professional development. Finally, the doctoral advisor is required to keep documentation of the student's performance in developing their competencies.

A student's responsibilities include knowing and keeping track of all School, College, and University requirements for graduation, taking and succeeding in all required classes, and actively pursuing opportunities to fulfill graduate competencies. Most students are also research or teaching assistants. It is incumbent that the student completes all of the requirements associated with such positions, and to work collaboratively with their doctoral advisor(s) to fulfill the tasks requested of them suitably and on time. Students are also required to learn and maintain all standards of research and teaching laid out by the university and by law.

The student must realize that this is a graduate experience and therefore a large degree of independence and initiative is expected. A student must not wait for their doctoral



advisor(s) to suggest opportunities and depend on their doctoral advisor(s) to make sure their targets are met. The advisor(s)/advisee relationship is a collaborative one with the doctoral advisor(s) acting as a mentor rather than a disciplinarian.

### **Registration for Courses**

Per the [Graduate Student Employment Manual](#), domestic students (US Citizens or Permanent Residents) must be in degree-seeking status and must be registered for a minimum of 3 credit hours in the Fall and Spring semesters to stay in paid status. To meet visa requirements, international students must be enrolled in a minimum of 6 credit hours in the Fall and Spring semesters to hold a graduate assistantship (GTA/GRA) or a fellowship administered as an assistantship. International students with no assistantship, or with a fellowship not administered as an assistantship, must be enrolled in at least 8 credits in the Fall and Spring semesters.

During any academic session, an individual must be enrolled as a student in a residential, non-professional, graduate degree or teacher license program and be registered for at least three credit hours of graduate-level course and/or research work to qualify for a graduate staff appointment. Graduate staff on appointment during the summer are required to register for a minimum of three graduate credit hours during at least one of the summer modules. When appropriate, graduate staff may register for “Examination Only” or “Degree Only” in the students’ last semester.

**Deadlines.** Pay attention to deadlines. For example, dropping a class can be done using myPurdue up through the first week of classes. After the deadline the student will need to use the Scheduling Assistant.

**Registration for Core or Standard Courses.** To register for your courses, log into myPurdue ([mypurdue.purdue.edu](http://mypurdue.purdue.edu)) using your career account username and password, and under the academic tab select Add or Drop Courses and enter the correct term. Next, enter your pin and enter the desired CRNs (which can be found by clicking on class search using the Add/Drop courses feature). Some classes require the permission of an instructor to register (especially if you are trying to register for a course in another school). If you get the message that instructor permission is needed in myPurdue, this can be obtained by emailing the instructor. The [Scheduling Assistant](#) can be used for schedule changes such as to drop, add or modify your academic schedule.

**Registering for an Independent Study (ENE 590).** The designation for such an independent study is ENE 59000 and the course needs to be developed in discussion with the faculty who will develop the course. These courses require graduate chair’s review and hence ample time is needed before they can be listed in the course schedule. A student can undertake courses of independent study to develop depth in an area related to their research, or when a course they are interested in is not available. A student may undertake more than one independent study, up to a maximum of 6 credits of ENE 59000 toward their specific Plan of

Study requirements. Work undertaken in an independent study must be demonstrably different from a student's research work.

The instructor must complete and submit [The ENE 59000 course request contract](#) at least two weeks before classes begin for the semester. The ENE Graduate Chair will approve the form based on completeness and the following criteria

- The ENE 59000 course cannot replace a course or content of a course that already exists,
- The student agrees that the work is differentiated from thesis work (e.g., ENE 69900),
- The student agrees that the work is differentiated from the work they are paid for, and
- The student agrees to present on the work completed for their 59000 in the ENE research seminar or equivalent outlet, either in the term it occurred or in the following term.

All of the items above are addressed and must be completed in the contract template. 59000 contracts that are not approved are sent back for additional or clarifying information. Once approved, the 59000 contracts will be added to the student's file as an official record.

**Registering for Dissertation Research Credits (ENE 699).** All faculty teaching 699 research credits (which do not include a syllabus) are required to prepare written expectations for successful completing. A 699 expectations form is required for students to register for research credits (i.e., ENE 69900). Ideally this contract is developed in collaboration with the advisor and student. Note that research credit enrollments should:

- be related to a student's anticipated dissertation research topic,
- be distinct from other course enrollments, including ENE 59000 independent study credits, and
- be distinct from work tasks and responsibilities associated with a student's graduate research assistantship role.

### **Fees and Remissions**

- **Tuition Remission.** All students are charged tuition and fees every semester depending on their college and the classes for which they are registered. Payment plans are available for students. Students can access their account, pay fees, and sign up for payment plans through myPurdue under the financial tab. Graduate student staff receive tuition remissions every semester and summer they are employed. This remission allows the student to pay only a nominal fee each semester and reduced fees during the summer. Spouses of graduate staff are eligible for remission of the nonresident tuition fee. Fee remissions to graduate staff are not taxable income. However, remissions of non-resident tuition for spouses is taxable.
- **Fees.** Once you have registered for classes, your fees will be assessed and you will receive an e-mail confirmation. Please pay the fees by the due date to avoid cancellation

of your registration. Each student must confirm their enrollment and set up a payment plan before classes start. Late registration will incur additional fees. If you are having issues registering through the system, please contact the graduate administrative assistant.

### **Plan of Study (POS) and Requirements for the PhD Degree**

As a graduate student, you must submit a Plan of Study (POS) that lists the specific courses and any other requirements that you expect to complete toward your degree. The plan is initially approved by your Graduate Advisory/Dissertation Committee and later approved by the Head of the ENE graduate program and the Dean of the Graduate School.

The ENE doctoral degree requires 15 credits of foundation courses, 9 credits of secondary engineering expertise, 9 credits of research methods, 3 credits of a research methods specialization, and 6 credits of engineering education specialization. Additional information about the specific course requirements and Plan of Study is provided below..

**Engineering Education Foundations (15 credits).** The purpose of the Foundation requirements is to provide a bridge into this interdisciplinary program by integrating engineering and education concepts, providing breadth and depth of knowledge, and complementing a student’s area of specialization. The selection of Foundation courses was guided by the five research areas defined by the Engineering Education Research Colloquies (EERC): Engineering Epistemology, Engineering Learning Mechanisms, Engineering Learning Systems, Engineering Diversity and Inclusiveness, Engineering Assessment Methodologies.

*The current Foundation courses are:*

*ENE 50101 Foundations of Engineering Education (3 cr; Fall)*

*ENE 50200 History and Philosophy of Engineering Education (3 cr; Fall)*

*ENE 50400 Leadership, Policy and Change in STEM Education (3 cr; Spring)*

*ENE 50500 Theories of Development and Engineering Thinking (3 cr; Spring)*

*ENE 50600 Content, Pedagogy, and Assessment (3 cr; Fall, Spring)*

*ENE 69000 Seminar in Engineering Education (0 cr; Fall, Spring)*

**Secondary Engineering Expertise (9 credits)** Students are required to complete 9 credits of graduate-level engineering coursework outside of ENE to demonstrate a depth of understanding of engineering concepts. Prior graduate coursework in engineering, including credits from a prior master’s degree, can be used to meet or waive this requirement. Students are expected to complete a coherent sequence of engineering graduate courses (must be 500 or 600-level). Some flexibility may be afforded in allowing one course from outside the College to count toward this requirement (e.g., technical coursework offered by Purdue Polytechnic Institute), at the discretion of the graduate chair(s) and the student’s committee.

**Research Preparation (9 credits)** Students must complete 9 credits of coursework to establish a foundation in social science research, typically including introductory coursework in both quantitative and qualitative methods.

ENE 50300 Engineering Education Inquiry (3 cr.)  
Research methods elective I (3 cr.)  
Social science statistical methods (3 cr.)

**Research Methods Elective (minimum 3 credits hours)** A selection of courses is available for students to fulfill this requirement, many of which may be offered in the College of Education. EDPS 533 cannot be used to fulfill research methods elective requirements.

**Engineering Education Specialization (minimum 6 credits)** Specialization coursework typically covers one or more of the five EERC areas (see list under Engineering Education Foundations), must consist of 500- or 600-level courses, and is not restricted to ENE course offerings (i.e., students may take courses in other programs).

**Other Coursework** Some students take additional elective coursework beyond the requirements summarized here. Successful completion of such courses counts toward the overall credit requirements for the degree. Other classes may also be required by the student's advisory committee to fill identified gaps in coursework or expertise.

### **Professional/Conference Travel**

Advisor and supervisor approvals must be obtained in terms of time commitment and funding. Additional approvals are needed for all travel on university business, through a Travel Request in the Concur system (e.g., from individuals who will be funding travel, business office, etc.). Depending on the frequency and nature of travel involved, students may request to have certain expenses pre-paid (e.g., conference registration, hotel), seek reimbursement for expenses after their return, or apply for their own travel credit card. Students must follow all relevant [Purdue Travel Policies](#) when making travel arrangements.

While faculty research projects typically include travel funds to present research at academic conferences developed by the project, there are also other types grants that graduate students can apply. Theses grant enhances the academic development of our awarded students and augments the overall quality of research at Purdue University.

<https://purduegradstudents.com/pgsg-grant-deadlines/>

<https://www.purdue.edu/gradschool/fellowship/funding-resources-for-students>

### **Research Labs, Workspaces, and Commons in Wang Hall**

- **Research Labs.** Every student in the department has access to workspaces, typically in shared/communal areas for graduate students and/or in their advisor's laboratory space in Wang Hall or Armstrong Hall. Space assignments are decided considering each

student's research group, cohort year, and any other special circumstances. Furniture in Wang should not be removed from the room in which it resides.

- **Key Fobs and Lockers for Wang Hall.** ENE graduate students enrolled in the PhD program are assigned a key fob (there is a \$15 deposit for the fob) which opens the door to WANG 3500 (main door) and WANG 3531 (Quiet Zone). Once a student has been assigned to their advisor(s), access will be added to the individual fobs for the assigned research suites, as requested by the advisor(s). Your fob is provided to you for a defined period based on the nature and duration of employment linked to ENE. When this period ends, or if you finish your work association with ENE prior to that date, you must return your fob to Cindey Hays to have your deposit returned. Please email her at [isenberg@purdue.edu](mailto:isenberg@purdue.edu) to set up a time to return the fob. Immediately report any lost, missing, stolen, or damaged fobs to Cindey Hays, so she can get it deactivated. There is a \$15 fee for lost/damaged fobs. Do not lend your key fob to anyone else. If any damage or theft would happen due to someone else using your fob, you will be held accountable. It is important to let Cindey know ASAP if you encounter any issues with a lost or stolen fob. ENE graduate students in the school can be assigned a locker in Wang Hall. These lockers are in the commons area of suite 3500. Cindey Hays (ARMS 1321) will provide each graduate student with their assigned locker number and the combination to the locker.
- **Wang Commons and Kitchen Areas.** None of us, no matter our position or how busy we are, is exempt from cleaning up after ourselves. It is **not** acceptable to assume someone else will do it. Keep the dishes, sinks, microwaves, counter tops, and table tops clean and wipe up your spills. Return all dried dishes to the cabinets to keep the area neat and tidy.
- **WANG Conference Rooms.** Conference rooms are shared spaces, which means you must be mindful of other people's schedules and needs. In essence, good office etiquette comes down to showing respect for your colleagues and our office spaces. Sharing any space can cause tension and frustration, so please be aware of how your actions affect others. **If you reserved the conference room, it is your responsibility to leave the conference room cleaner than how you found it.** Restore tables and chairs back to their original positions, wipe down the tables, throw away food, pick up used Kleenex, etc. Restore all equipment in the room (e.g., Polycom microphone) back to its default arrangement. If you are using Wang 3501 conference room, please confirm with the administrative assistant at the front desk, you have left all equipment in place. You can [reserve an Engineering Education conference room](#) in WANG. To confirm that your reservation has been approved talk to the administrative assistant at the front desk in Wang.

#### **Mails, Printing, and Copying**

- **Mail.** Mailboxes are in Wang Hall around the corner from Commons Area. Each student has a mailbox, as do the major student organizations. Mail is placed in the mailbox upon

delivery. Students can use mailboxes to deliver documents to other students. **Please** do not have personal mail (for example personal letters or bills) delivered here; have them mailed to your home address instead. Mail can also be sent via campus mail. There are mailboxes available in which outgoing campus mail or US mail may be placed. There are also mail slots for campus and US mail located in the WANG Hall mail area (first floor). Do not forget to put stamps on all non-campus mail. International mail may be sent from BoilerCopyMaker in Purdue Memorial Union (PMU) Room 186. Stamps can also be purchased here.

- **Printing/Copying.** A copy machine and printer are provided for graduate student use in WANG (Mailbox area). These machines are for occasional small (under ~10 pages) print jobs related to research. If the machine runs out of paper or toner, please notify the administrative assistant in Wang. Please keep in mind these are community machines. Do not leave printed pages lying in the machines and clear all paper jams. DO NOT USE THESE MACHINES FOR LARGE PRINT JOBS OR PERSONAL/CLASS RELATED PRINTING. FOR THESE KINDS OF SITUATIONS, USE A PRINTER IN ONE OF THE ITAP LABS.
- **Poster Printing.** Our school has a large poster printer. Check with your advisor for the most recent procedures to print as the directions on how to request and use the poster printer are reviewed periodically.

### **Employment and Salary**

The initial salaries for graduate students are established by the School and the University depending on specific fellowships. In subsequent years, salaries are determined by the student's major advisor(s) according to the guidelines of the school, within the minimum limits set by Purdue University (determined annually), as well as student performance and available grant funds. More details on related policies and procedures can be found in the [Graduate Student Employment Manual](#).

Graduate students on assistantships are considered staff and typically hold half-time (50% full-time equivalent, FTE) appointments. This role has an expectation of 20 hours of service per week. These 20 hours should not involve any research directly related to the student's degree. In special circumstances, students may hold a reduced appointment (e.g., as low as quarter-time, or 25%), but this may reduce employment benefits (e.g., student health insurance subsidy). With special permission, domestic graduate students may have appointments above the half-time level, up to a limit of 40 hours/week, which is considered a 100% or 1.00 FTE (Full-Time Equivalent) appointment.

**Definitions.** In these policy documents **you** will see specific terms that maybe unfamiliar. For example, FTE means the full-time equivalent for a Graduate Student Staff member's appointment. All defined terms are capitalized through the policy. Additional defined terms may be found in the [central Policy Glossary](#).

### **Allowable FTE (full-time equivalent) and Combination of Appointments.**

Graduate staff members must hold either one appointment of at least 0.50 FTE or two appointments of 0.25 FTE or greater before they may hold a graduate staff appointment of less than 0.25 FTE.

Graduate Student Staff positions are divided into the following classifications: Graduate Research Assistant, Graduate Teaching Assistant, Graduate Administrative/Professional, and Graduate Lecturer.

- **Graduate Research Assistant.** A Graduate Research Assistant performs duties related to a research project or program under the guidance and direction of faculty members. Any Graduate Student Staff member who is assigned to perform research duties should have this classification, regardless of the funding source, and need not work for his/her own department.
- **Graduate Teaching Assistant.** The responsibilities of the Graduate Teaching Assistant could include any tasks related to the instruction of students. Graduate Teaching Assistants may have primary responsibility for a course, recitation section or laboratory section. A Graduate Teaching Assistant may serve as a tutor or provide assistance to a faculty member in instruction in a course through such tasks as grading papers, preparing hand-outs, placing materials on the Web or assisting in clinical assignments.
- **Graduate Administrative/Professional Staff.** Duties that are generally administrative and/or professional in nature are assigned to Graduate Administrative/Professional Staff. Graduate Student Staff members in this classification typically have responsibilities unrelated to the instruction of students in a course. While this Graduate Student Staff classification is often found in administrative offices, Graduate Administrative/Professional Staff are permitted in academic departments as well.
- **Graduate Lecturer.** The responsibilities of the Graduate Lecturer are similar to those of the Graduate Teaching Assistant but at a more senior level. Normally, Graduate Lecturers teach courses beyond the 10000-level. Appointment to this classification is made at the discretion of the department head or in a manner consistent with the governance of a particular academic unit when the following conditions have been met: The graduate student must have passed the preliminary examination and be a doctoral candidate; the graduate student is enrolled in 69900 for research credits and has completed all coursework on the plan of study; the graduate student has been a Graduate Teaching Assistant for at least four academic sessions prior to appointment as a Graduate Lecturer.

Graduate staff appointments may be a combination of any of the classifications described in DEFINITIONS OF GRADUATE STAFF EMPLOYMENT CLASSIFICATIONS section. [Terms and Conditions of Employment](#). It is possible to hold appointment beyond 0.50 FTE, to a maximum of .75 FTE may be made with approval from your advisor, your Associate Dean of Graduate Education (if applicable) and the ISS office (if applicable). Appointments more than .75 FTE require approval from your advisor, your Associate Dean of Graduate Education (if applicable), the Graduate School and the ISS Office (if applicable). At Purdue

West Lafayette, for prior approval, please complete this form located at the [Additional/Hourly Appointment Approval link](#).

### **Income Taxes**

All students are responsible for filing tax returns annually. Tax returns are due on or before April 15, unless otherwise specified. Federal and Indiana local and state taxes are withheld from salary payments for students with assistantships. More information about taxes can be found in the [Graduate Staff Employment Manual](#). (Additional information of taxes are included in Section 6).

### **Reportable Outside Activities Guidelines.**

The University recognizes that Reportable Outside Activities can in many circumstances offer important opportunities for Employees to expand their professional horizons, provide valuable public service, and transfer their skills and knowledge for the benefit of the community at large. Reportable Outside Activities, however, should be structured to avoid a Conflict of Commitment. The specific responsibilities and activities that constitute an appropriate and primary commitment to the University will vary among units and will depend on the nature of each Employee's responsibilities, but must be based on and consistent with this policy. To start the process, contact the employment office at [engemployment@purdue.edu](mailto:engemployment@purdue.edu).

Graduate student may not hold a 0.5 FTE appointment (TA RA GA) while pursuing paid reportable outside activities, including internships or Curricular Practical Training (CPT). Students holding a 0.25 FTE appointment, may pursue paid part time activities, including internships or CPT, up to a total of 20 hours per week. Reportable Outside Activities must be approved before the beginning of the semester in which the activities will occur and cannot begin after the 6th week of classes for Fall and Graduate Staff Employment Manual Updated January 19, 2023 Page | 19 Spring semesters, and must be in place prior to the beginning of each module requested for summer semester. [Reportable Outside Activities](#) are approved on a semester basis.

### **Vacation, Holiday, and Time Off Procedures**

There are two types of appointments: Fiscal Year (FY) is a 12-month appointment and Academic Year (AY) is a 9-month appointment.

**FY Appointment.** Graduate students on fiscal (12-month) appointments have all employee University Holidays and a maximum of twenty-two working days of vacation per fiscal year and (see the Graduate Student Employment Manual for more details). Graduate students must have approval from their advisor(s) and requested the time off in SuccessFactors.

Fiscal-year, Benefits-Eligible Graduate Student Staff receive paid leave for all official University holidays. They also receive paid vacation leave at the staff member's normal rate of pay. Vacation leave begins to accrue in accordance with the schedule below in direct



proportion to the staff member's FTE from the date of their employment up to a maximum of 176 hours per fiscal year for full-time staff.

- September and March: 8 hours for full-time staff
- All remaining months: 16 hours for full-time staff

Vacation credits in excess of the maximum are forfeited. Upon termination of employment with the University, the staff member's unused vacation leave is forfeited and will not be paid to the staff member, nor may the staff member's appointment be extended to cover any unused vacation.

**AY Appointment.** Students on academic (9-month) appointments are in vacation status and will have paid time off when classes are not in session for the following:

- Labor Day
- Fall/October Break
- Thanksgiving Break/Vacation
- The period beginning the day after grades are due for the fall semester and ending seven days prior to the day classes begin for the spring semester (Refer to the Graduate Staff Employment Manual section on Pay Schedules)
- Martin Luther King, Jr Day
- Spring Break/Vacation

### **Leave**

- Sick Leave: All Benefits-Eligible Graduate Student Staff are eligible for 10 working days of paid sick leave for employee illness within a 12-month period.
- Family Illness: All Benefits-Eligible Graduate Student Staff are eligible for three working days of paid leave per fiscal year for illness of Immediate Family.
- Parental Leave: As outlined in the policy on Paid Parental Leave (VI.E.3), as amended or superseded.
- Bereavement: 1-5 working days of paid bereavement leave for the death of an Immediate
- Other Leaves: Please see <https://www.purdue.edu/policies/human-resources/s3.html>

### **Research in Absentia**

A doctoral student may leave the university and continue their candidacy in absentia. A student who wishes to do this must obtain the approval of their advisor(s). Once approved the student must submit a Graduate Request for [Research in Absentia Form 12](#) to the graduate assistant for submission to the School Head and then Graduate School at least one month before the session when the student will be absent. To be eligible, students must have completed their coursework, passed the prelim exam, and established a plan for completing their research with suitable arrangements made for supervision.

### **Change of Duty Station**

A Change of Duty Station request is not needed if the graduate staff employee will not be in pay status. To request paid or unpaid leave, a graduate staff employee should use SuccessFactors. Graduate students who plan to work on research, register for 69800 or 69900 thesis credit, and who will be off campus greater than 22 days must submit a Graduate Request for [Off Campus Research Form 19](#) prior to each session away from campus, with the following exceptions: Students who will hold a TA/RA should submit a Change of Duty Station Request in addition to a Form 19 if they will be working off campus greater than 22 days. Students who are approved for Research in Absentia do not need to submit a Form 19.

## SECTION 4: HYBRID PH.D. DEGREE-SPECIFIC POLICIES

This section provides guidelines for ENE Hybrid Ph.D. students that are supplemental to the policies and procedures in the ENE Graduate Program Handbook.

- ENE Hybrid Ph.D. students must comply with all Purdue Graduate School policies and procedures.
- ENE Hybrid Ph.D. students must comply with all ENE Ph.D. Program policies and procedures as outlined in the ENE Graduate Program Handbook.

### Definition of the ENE Hybrid Ph.D. Program

- At least 51% of the credit hours taken at Purdue and counting toward the Ph.D. degree must be taken while registered in “on campus” course sections at Purdue West Lafayette.
- Most graded coursework will be taken online (with enrollment in either “on campus” or “online” sections, depending on the tuition source) while most research credits are expected to be taken while registered on campus.
- ENE Hybrid Ph.D. students are expected to spend enough time on campus to develop an appreciation for the ENE culture and a strong working relationship with their advisor. How much time a student spends on campus will be determined by the advisor in consultation with the student. It is recommended that a student spend most of at least one term (semester or summer) on campus during their time in the program, and make at least one visit to campus during each term they are registered for research credit hours on campus.

### Eligibility

- It is expected that hybrid PhD students will already hold an MS degree when they enter the program due to differences in credit requirements and time to degree for students who directly enter the PhD program with only a BS degree (90 credits needed for the PhD) versus those with an MS degree (60 credits needed),
- It is expected that hybrid PhD students will be US citizens or permanent residents, mainly due to likely difficulties with visa status for international students entering the program without a multi-year financial commitment from the School.

### Employment and Paying for Courses

Courses in which the student is registered online

- i. Students cannot be employed and cannot receive tuition remission when they are registered online.
- ii. Students registered online are responsible for paying the tuition.

(approximately \$4,000 per 3-credit hour course – see Purdue Engineering Online website for exact amount)

Courses in which the student is registered on campus

- Each incoming on-campus ENE Ph.D. student who does not have an advisor is offered one semester of employment as a research assistant (50%) receiving

Explorer funding while learning about the program and faculty members' research interests. ii. If an ENE Hybrid Ph.D. student who does not have an advisor chooses to register on campus and be in West Lafayette for the first semester, they will be employed as a research assistant (50%) and receive Explorer funding for that semester.

- If an ENE Hybrid Ph.D. student chooses to register on campus but take courses remotely during the first year, they will receive a 25% research assistantship and receive Explorer funding for fall and spring semester and the following summer. However, special arrangements must be made as outlined in this paragraph. The student must be registered on campus, submit a Change of Duty request in a timely manner and have it approved, and submit a Reportable Outside Commitment form in a timely manner and have it approved in order to be able to hold the assistantship while employed elsewhere.
- After the first year, ENE Hybrid Ph.D. students will be expected to pay for any credit hours they take online or on campus unless other arrangements are made with the advisor (e.g., continuation of assistantship funding).

### **Advising**

ENE Hybrid Ph.D. students will participate in the Explorer advisor matching process with other students in their cohort unless the student and an advisor have a mutual, written agreement to form an advisor/advisee relationship prior to the beginning of the student's first semester in the program.

### **Responsible Conduct of Research (RCR)**

ENE Hybrid Ph.D. students are expected to complete the same RCR training as all other ENE Ph.D. students.

### **Coursework**

1. ENE Hybrid Ph.D. students must meet the same coursework requirements as all other ENE Ph.D. students.
2. As for any ENE Ph.D. student, requests for course substitutions can be made to the Chair of the Graduate Committee with approval of the advisor. This may include waiving coursework requirements for courses taken at another institution and counted toward a previous MS degree, or for graduate coursework transferred to Purdue and counted toward the ENE PhD. According to Graduate School policies, at least one-third of the total credit hours used to satisfy PhD degree requirements must be earned while registered for doctoral study at Purdue.
3. There is no prescribed order in which students may take ENE Ph.D. courses, but there is a somewhat standard order. That order may not be possible for ENE Hybrid Ph.D. students who may choose to take only one course each semester since most ENE graduate level courses are offered only once a year. ENE Hybrid Ph.D. students should

discuss their plan of study (order of courses) with their advisor or the Graduate Committee Chair as early in the program as possible.

**Milestones**

- 1 It is preferred that ENE Hybrid Ph.D. students take the Readiness Exam, Preliminary Exam, and Final Defense in person unless other arrangements are made with the advisor, or circumstances (e.g., public health or other concerns) dictate otherwise.
- 2 Given the special scheduling challenges and constraints faced by many hybrid/remote PhD students who have full-time employment, their advisor(s) and committees may make reasonable adjustments to the Readiness Assessment (RA) guidelines, such as additional time to complete the written portion, scheduling the written portion so it overlaps with a holiday period, etc.

Example Schedule for Completing Hybrid Ph.D.

Fall Year 1 (remote)	Take ENE 50101 and ENE 690 Get an advisor Write a preliminary Plan of Study Begin to write a competencies portfolio (in ENE 50101)
Spring Year 1 (remote)	Take ENE 506 and ENE 690 With advisor, begin to form an advisory committee
Summer Year 1 (on campus*)	Take social science statistical course Take research methods course I
Fall Year 2 (remote)	Take ENE 503 Attend seminar (690) if possible Work with advisor to begin selecting dissertation research question
Spring Year 2 (remote)	Take ENE 505 Attend seminar (690) if possible Work with advisor to plan for Readiness Assessment (RA) Update competencies portfolio File draft Plan of Study
Summer Year 2 (on campus*)	Take Research Methods II Take ENE 590 in preparation for RA
Fall Year 3 (remote – mostly)	Take ENE 502 Take RA
Spring Year 3 (remote)	Take ENE 504 Begin work on dissertation proposal

Summer Year 3 (on campus*)	Take Preliminary Exam Take Engineering Education specialization course Take ENE 699 – detailed planning of dissertation research
Fall Year 4 (remote - mostly)	Take ENE 699 – conduct dissertation research Take Engineering Education specialization course
Spring Year 4 (remote – mostly)	Take ENE 699 – conduct dissertation research Take Secondary Engineering Expertise course, if required. Otherwise take more hours of 699.
Summer Year 4 (on campus*)	Take ENE 699 – conduct research and begin writing dissertation
Fall Year 5 (remote – mostly)	Take ENE 699 – wrap up research and continue writing dissertation Take Secondary Engineering Expertise course, if required. Otherwise, take more hours of ENE 699.
Spring Year 5 (remote – mostly)	Take ENE 699 – complete writing dissertation Take Secondary Engineering Expertise course, if required. Otherwise, take more hours of ENE 699
Summer Year 5 (on campus*)	Take ENE 699 Defend dissertation

\*A significant amount of time should be spent on campus, but the exact amount of time necessary will be determined by the advisor in consultation with the student, taking into consideration the student’s work and family requirements along with the need for immersion in the Engineering Education culture to promote professional growth.

## SECTION 5: ONLINE MASTER'S DEGREE-SPECIFIC POLICIES (MS ENE)

The purpose of this section is to introduce students to policies and procedures for the online Master of Science in Engineering Education (MS ENE). This program is designed for professional engineers, industry training professionals, university faculty members, graduate-level STEM students, and others who want to improve their understanding of research in engineering education and its applications, ultimately enhancing their ability to teach engineering or other related subjects without disrupting their careers or current studies. If a student decides to pursue a Ph.D. in Engineering Education, most courses taken in the online MS ENE program can be counted toward the Ph.D.

This online degree is non-thesis and requires 30 credit hours of coursework. A student earning a MS in Engineering Education online must meet the same requirements as student earning a MS degree on campus, including completing the CITI Responsible Conduct of Research training and preparing a portfolio demonstrating mastery of six of the 10 ENE graduate competencies. Courses are taught by the same faculty members as the on-campus courses. The online master's program is offered through [Purdue Graduate Engineering Online](#) which is consistently ranked among the top three programs by U.S. News & World Report.

### Required Responsible Conduct of Research training – CITI

- Purdue is committed to adherence to the principles of [Integrity in Research](#) as stated in the University Catalog (Graduate Student Responsibilities and Rights, Section IX-B) including truth, objectivity, fairness, honesty, and free inquiry. For example, cheating, plagiarism, or knowingly giving false information to the University is a violation of integrity. Please familiarize yourself with this section of the Graduate School Policies and Procedures Manual.
- Complete the basic RCR training course online in [CITI](#) within [120 days](#) as stated in the University Catalog under Integrity in Research (Graduate Students Responsibilities and Rights, Section IX-B) from the start of your graduate program. The two-hour discipline specific training is not required.
- Once you have completed your online training within CITI, your training records will be automatically downloaded so Purdue will know that you completed this requirement.

### Advising and contacts

#### Advisor/advisee relationship and roles

Incoming students will enter the online master's degree program with an assigned faculty advisor. The student, faculty advisor, and graduate program manager will work together to plan a program of study that best meets the student's needs while satisfying the requirements of the degree. The following three sections outline the roles of the advisee, faculty advisor, and graduate program manager.

- Advisee

Online students are ultimately responsible for the success of their education, including reading and responding to emails using their Purdue email and asking for guidance when needed. Online students must adhere to the Graduate School policies, procedures, and requirements, including deadlines, and familiarize themselves with those as stated in the University Catalog ([Graduate Student Responsibilities and Rights](#), Section IX).

- **Faculty Advisor**

Your faculty advisor is your main contact for academic matters including selecting courses in alignment with your plan of study, professional development opportunities, and career options. As a mentor, your faculty advisor will be available to discuss your career plans and resources to help you achieve your goals.

- **Graduate Program Manager**

The graduate program manager is your day to day contact for questions about the program [requirements](#) and to clarify the online MS policy and procedures as outlined in this handbook. For example, the graduate program manager will assist in completing your individual plan of study, registering for courses, and tracking your progress in the program. At the completion of your program, the graduate program manager will assist with registration for candidacy and graduation.

### **Annual Review**

The online MS ENE program does not require a formal annual review. However, please plan to meet your faculty advisor and graduate program manager at the start of your online MS ENE program. Thereafter, please plan to meet with the graduate program manager to discuss progress in the program at least once a semester and your faculty advisor at least once a year. Both are available throughout the program for assistance with questions and concerns.

### **How to register for courses through Purdue Online**

#### **myPurdue**

Students use myPurdue to connect with academics, student services and more. To access myPurdue, students will need to log in at [myPurdue.Purdue.edu](http://myPurdue.Purdue.edu) with your career account credentials which includes your career account alias which is the part of your email address before the @purdue.edu along with your password.

#### **Selecting courses**

Your faculty advisor will assist in selecting courses. Please review the list of courses in the sample plan of study. For additional information, please use the [course catalog](#) for course offerings.

#### **How to register**

Once students have selected their courses with the guidance of their faculty advisor, students register for courses using [Scheduling Assistant](#). Our graduate students all use 999999 for their PIN number each session. Your PIN number will not change. For



additional assistance please contact your graduate program manager or Purdue Online registration at [PurdueOnline@purdue.edu](mailto:PurdueOnline@purdue.edu).

#### Registration dates and academic calendar

Students register during open enrollment periods. Please note that calendars are subject to change without notice. In general, registration periods open as follows:

- Summer registration opens in January
- Fall registration opens in March and
- Spring registration opens in October

Check the [academic calendar](#) for specific enrollment dates. If you have questions or concerns, then please contact the graduate program manager.

#### Registration holds and how to remove them

Students need to complete the required steps in myPurdue to update emergency contact information and to affirm their Financial Responsibility to release the holds on their account. Students will not be allowed to register for classes until both holds are released.

- Instructions to remove [Emergency Contact](#) holds.
- Instructions to remove [Financial Responsibility](#) holds.

### **Online billing and tuition payment**

Tuition is due the first day of classes each semester. To pay online, log into myPurdue. Students can pay online using American Express, MasterCard, Discover and Visa (with a convenience fee added for credit card payments). To pay with no additional fees, see [payment options](#). Contact the Bursar's Office with billing questions as follows:

E-Mail: [askbursar@purdue.edu](mailto:askbursar@purdue.edu)

Phone: 765-494-7570

### **Student Resources for Current Online Students**

Please review the resources available to current online student from Purdue University Online at this [link](#).

#### Technology at Purdue

- Students unable to log in to Brightspace should contact the [Purdue IT Service Desk](#). Additional technical support can be found at [www.itap.purdue.edu/help](http://www.itap.purdue.edu/help) or at the following contact:
- E-mail: [itap@purdue.edu](mailto:itap@purdue.edu)
- Phone: 765-494-4000

#### Academic Requirements

The expectation is that graduate students will maintain a B average (3.0/4.0 GPA) or better to remain in "[good standing](#)" (General Academic Requirements & Grade Appeals, Section

VI-A). The Graduate School policy posted lists consequences for less than good standing, including probation and drop status.

Incomplete grades

- A grade of incomplete is given when an unavoidable situation or event causes an interruption in coursework. Faculty will set boundaries on the time allowed to submit work including deadlines with multiple benchmarks. The student and faculty should have ample time for review, feedback, and revisions. The Graduate School policy for incomplete grades as stated in the University Catalog under Incomplete Work (Academic Regulations, Grades and Grade Reports, Section B-4) limits the timeframe to complete coursework to remove the incomplete and replace it for a grade.

**Part-time and Intermittent Study, Leave of Absence, and Withdrawal**

Part-time and intermittent students as stated in the University Catalog (Registration of Graduate Students, Section V-A-2) who interrupt their registration should pay particular attention to the “Five-year Rule” (Admissions, Section III-C-9) that prohibits the use of out of date coursework on plans of study and invalidates outdated examinations.

Leave of absence from the program

If life events make it necessary for a student to request a temporary leave of absence, a student will send a formal request in writing to the graduate program manager. Students who do not register for classes for three or more consecutive academic sessions (including summer session) will be considered inactive, and in order to pursue their degree, they will be required by the Graduate School to apply for readmission as stated in the University Catalog under Admissions Policies and Procedures (Admissions, Section III-C-9).

Withdrawal from the program

The student will send a formal notification of voluntary withdrawal from the program to their faculty advisor and graduate program manager. Please note that a voluntary withdrawal does not require forms or paperwork at the Graduate School. The student’s eligibility to register here will automatically become inactive after a three-session (including summer session) lapse in graduate course registration.

**Course requirements for the degree**

Non-thesis MS ENE online curriculum consists of 30 credits including 15 credit hours of required ENE courses, 6 credits from the selective ENE course list, and 9 credits of electives. The table below summarizes the course requirements.

**Meeting ENE MS Requirements:**

*All six required courses listed below will count towards the PhD in Engineering Education*

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
<b>Engineering Education Foundation (min. 15 credit hours)</b>		
ENE 50101	Foundations of Engineering Education	3
ENE 50200	History and Philosophy of Engineering Education	3
ENE 50300	Engineering Education Inquiry	3
ENE 50400 or ENE 50500	Leadership, Policy and Change in STEM Education Theories of Development in Engineering Thinking	3
ENE 50600	Content, Assessment, and Pedagogy	3
ENE 69000	Seminar in Engineering Education (Fall, Spring) (Must be taken twice)	0
<b>Elective for the Non-thesis Online (15 credits)</b>		
<p>For the non-thesis MS ENE, the student is required to take 15 additional credit hours of elective specialization comprised of appropriate graduate level coursework in ENE and/or other programs. The elective specialization must be coherent, thematic, and named accordingly, with approval by the student’s advisor. The elective courses fall into two groups – at least 6 credit hours to be selected from a specified group of ENE courses plus 9 additional credit hours which will be determined in consultation with (and require approval of) the advisor. Selection of those 9-credit hours will be based, in part, on the student’s previous degrees and future plans.</p>		
<b>At least 6 credit hours from the following list</b>		
ENE 50500	Theories of Development in Engineering Thinking	3
ENE 50400	Leadership, Policy and Change in STEM Education	3
ENE 68500	Engineering Education Methods	3
ENE 68700	Mentored Teaching	1
ENE 59500	Exploring Alternative Career Paths as an Engineering Educator	3
ENE 69500	Succeeding as an Engineering Professor	3
<b>Plus 9 additional credits as indicated below</b>		
<p>Students holding a bachelor’s but not a master’s degree in an engineering field must take 6 credit hours of a coherent sequence of graduate courses (500-600 level) in an engineering field other than engineering education plus 3 additional credit hours of electives with approval of the advisor.</p> <p>Students holding a master’s degree in engineering, in consultation with and the approval of the advisor, will select 9 credit hours of courses that best serve the student’s needs.</p> <p>Students planning to pursue a Ph.D. in Engineering Education following the master’s degree may want to consider the following courses that also meet the requirements of the Ph.D. program</p>		

Various	Research methods (qualitative analysis) from Engineering Education or other appropriate departments (e.g., EDCl 61500 and 61600)	3
Various	Research Methods (quantitative) from Engineering Education or another appropriate department (e.g., EDPS 55600 and 55700)	3
Various	Social science statistical methods (e.g., PSY 60000 or 61000)	3

### Entering the Plan of Study (POS) in myPurdue

- Students will enter their plan of study in myPurdue upon completion of 15 credits in the program. The graduate program manager will assist with and review a draft prior to submitting the plan of study for electronic signature approval. Please review the instructions to enter the plan of study. The non-thesis MS ENE utilizes the one-member advisory committee as stated under the University Catalog (Administering Graduate Degree Programs, Section VII-A-2a) flexibility option. The student’s faculty advisor is entered as the one-member advisory committee.
- In preparation for graduation, students should enter a [Change of Plan](#) request to update their plan of study as complete and final in anticipation of graduation. This should be done in the semester prior to graduation to allow for a final audit by the graduate program manager. Please note that the Graduate School Form 7 will not be used as our department has an approved [alternative graduation criteria](#) as stated in the University Catalog under Reporting the Results of Examinations (Administering Graduate Degree Programs, Section VII-F-2).
- Students need to be mindful of the time limitations for an approved plan of study. Course credits earned by a graduate student with inactive registration and/or professional activity for five years or more cannot be used on the plan of study for an advanced degree. The approved plan of study prior to the inactive period of five years is invalid as described in the “[Five-year Rule](#)” as stated under the University Catalog under readmissions (Admissions, Section III-C-9).
- Students follow the curriculum or degree requirements in effect at the time they enter the program. When a new or revised curriculum or degree requirement is adopted, the new requirements will not apply to the students currently enrolled. Current students may elect to use the new or revised curriculum or degree requirements for graduation on written request to the ENE Graduate Program Chair as noted in [Academic Programs](#) as stated in the University Catalog (Academic Regulations under Academic Programs, Section C-4, University Senate Document 09-6, April 19, 2010).
- When transferring credit, incoming students will supply their transcript and course syllabus to the Faculty Advisor for review. Courses taken within the last 5 years with a B- or better grade will be considered. Purdue engineering limits the number of transfer credits to 12 credits. However, your plan of study should not include course credits earned by a student whose graduate study and/or professional activity has been inactive for five or more years as stated [here](#). Courses with a grade of B- or better will be considered. The ENE Graduate Program Chair will have final approval.

### **Prepare a portfolio demonstrating six competencies (required)**

The [Engineering Education Graduate Competencies](#) consist of 10 principles developed to engage students and develop critical thinking skills. The online master's program requires students to complete six of the ten competencies organized into a portfolio. ENE 50101 will introduce students to the competencies and initiate their focus on this requirement. Their faculty advisor will provide guidance and feedback throughout the process. Formal faculty review and feedback will take place after 3 competencies are complete and after all 6 competencies of the portfolio are submitted. The expectation is that the student's final portfolio will be reviewed, feedback given, and revision done in the semester prior to their expected graduation from our program.

### **Milestones, timeline and deadlines**

- Students in consultation with their faculty advisor will select elective credit courses that reflect the student's previous degrees and future plans after completing **9 credits** in this program.
- Mid-point feedback for 3 of the 6 portfolio competencies is expected to occur after the student completes **12 credits**. Please submit 3 competencies for review to their faculty advisor for review, feedback, and revisions.
- With guidance from the graduate program manager, students will prepare and submit a plan of study in myPurdue listing coursework approved by their faculty advisor after completion of **15 credits** in this program. All online MS ENE students will select their faculty advisor as a committee of one in the Advisory Committee section. A draft can be entered in myPurdue at any time prior. However, guidance from their faculty advisor with course selection is recommended.
- Portfolio completed and submitted to their faculty advisor before the start of the semester prior to the semester that the student plans to graduate. This will allow time for faculty feedback and revisions to be completed prior to graduation.
- The Graduate School requires an approved plan of study prior to the start of their last semester. Since the electronic signature approval process can take several weeks, please update and finalize their plan of study including cores courses, selective courses, and electives no later than the middle of the semester prior to their last semester.
- A request to graduate (candidacy) is submitted to the graduate program manager no later than **two weeks** prior to the start of their last semester.

## SECTION 6: GRADUATE CERTIFICATE DEGREE-SPECIFIC POLICIES

The School offers a Graduate Certificate in Teaching and Learning in Engineering. The graduate certificate can serve students from many backgrounds and with many career objectives. It was originally designed for Ph.D. students in Engineering or other STEM fields who will be seeking faculty positions, or current STEM faculty, who want to enhance their teaching skills. The addition of an elective course specifically for people who want to be STEM educators but do not want tenure-track faculty positions makes the certificate valuable for those teaching, or seeking to teach, STEM subjects in other venues such as industry, science centers, or extension programs. The Teaching and Learning in Engineering certificate is an earned academic credential that can strengthen applications and enhance careers.

### Eligibility

This certificate can be completed by current graduate students already in a MS or Ph.D. program in engineering or other STEM field or those learners choosing to enroll only in the graduate certificate, either online or on campus. Applicants must have a bachelor's degree in an appropriate area (science, technology, engineering, mathematics) with a GPA of 3.0 or higher and meet one of the following requirements:

- Be enrolled in a graduate degree program in engineering or other STEM (engineering, science, mathematics, technology) field at an accredited university in the United States or equivalent institution in another country, or
- Be teaching Engineering or other STEM courses at an accredited post-secondary institution in the United States or equivalent institution in another country, or
- Hold a post-baccalaureate degree in Engineering or another STEM field with a GPA 3.0/4.0 or higher. Students holding a baccalaureate degree in a STEM field and having extensive experience in a technical position in industry, a government agency, or an academic institution will be considered on a case-by-case basis.

### Requirements for the Certificate

#### Course requirements and plan of study

The certificate consists of 10 credit hours and requires four core courses.

- ENE 50600 – Content Assessment and Pedagogy: An Integrated Engineering Design Approach (3 credit hours), teaches students how to develop a course from beginning to end and guides them through the process of developing a course in their field. This course is offered on campus in both spring and fall semesters. It is offered online only spring semester.
- ENE 68500 – Educational Methods in Engineering (3 credit hours), provides students with a variety of techniques for teaching courses that are both engaging and effective. This course is offered on campus in both spring and fall semester. It is offered online only fall semester.
- ENE 68700 – Mentored Teaching in Engineering (1 credit hour), enables students to deepen their understanding of teaching and learning through feedback and reflection as

students perform their regularly assigned teaching duties. The course is offered on campus both spring and fall semesters. It is offered online only spring semester.

- ENE 69500 – Succeeding as an Engineering Professor (3 credit hours), covers other skills valuable to faculty members such as writing proposals, selecting, and mentoring graduate students, and managing projects. This course is offered on campus both spring and fall semester. It is offered online only fall semester.

OR

ENE 59500 – Exploring Alternative Career Paths as an Engineering Educator (3 credit hours), gives potential STEM educators an opportunity to learn about careers in industry, informal education settings, government, K-12 programs, and non-tenure-track university positions as well as some common skills required in those positions. This course is offered on campus and online in spring semester only.

### **Applying for the Graduate Certificate**

i) Deadline to apply

There is rolling deadline for admission. Applications are reviewed as they come in.

ii) How to apply

Everyone must apply using the Graduate School's online application, including students currently enrolled at Purdue.

- Application Campus: Purdue West Lafayette
- Major: Engineering Education
- Degree Objective: Teaching and Learning in Engineering
- Course Delivery: Distance or Residential (a student currently enrolled at Purdue in a residential graduate program cannot select the online option – please contact the Graduate Program Manager for questions on course delivery options)

iii) Applicants – Currently enrolled in a Ph.D. program at Purdue West Lafayette

- Complete the online application form
- Submit a Statement of Purpose  
The statement of purpose is approximately 300-500 words explaining why the applicant would like to complete the ENE graduate certificate.
- Submit a Form 18 which is a Concurrent Graduate Program Request.
- Pay the application fee.

iv) Applicants – External; not currently Purdue Graduate Students

- Complete the entire graduate school application
- Submit
  - Statement of Purpose
  - Curriculum Vitae (CV) or Resume
  - Official Transcripts (international students need original language and English translation)
- English Proficiency Requirements TOEFL scores (international only). TOEFL cannot be more than two years old. English proficiency beyond the minimum requirements is strongly encouraged since this graduate

certificate program is reading and writing intensive. Minimum TOEFL scores required by the Graduate School are as follows:

- Writing 18
  - Speaking 18
  - Listening 14
  - Reading 19
  - Minimum Overall Required for Admission 80
- Pay the application fee.
  - Acceptance into the Teaching and Learning in Engineering Certificate program does NOT assure admission to the Graduate School of Purdue University to pursue an advanced degree. However, if an applicant is approved for a graduate degree program, then all credits taken prior to and during that session will be eligible for inclusion on a plan of study for a degree program, if appropriate for the degree objectives as stated in the University Catalog under Courses Taken in Non-Degree, Teacher License, or Graduate Certificate Status at Purdue University (Administering Graduate Degree Programs, Section VII-B-1-a-2).
- v) Minimum GPA/courses taken for a grade  
The expectation is that graduate students will maintain a B average (3.0/4.0 GPA) or better to remain in “good standing” as stated in the University Catalog under Grades and Index Requirements (General Academic Requirements & Grade Appeals, Section VI-A).
- vi) Maximum time allowed for completion  
The certificate can be completed in 3-4 semesters. Students need to be mindful of the time limitations for using coursework on their plan of study. Course credits earned by a graduate student with inactive registration and/or professional activity for five years or more cannot be used on the plan of study for an advanced degree as described in the “Five-year Rule” as stated in the University Catalog under readmission. (Admissions, Section III-C-9).

### **Questions about the Teaching and Learning in Engineering Certificate program**

Contact the Graduate Program Manager for questions about the program.

Tina Putz

[tputz@purdue.edu](mailto:tputz@purdue.edu)

(765) 496-3704

### **Enrolling in classes**

Students will need to log in at [myPurdue.Purdue.edu](https://myPurdue.Purdue.edu) with your career account credentials which includes your career account alias along with your password. Please register for courses using Scheduling Assistant. Our graduate students all use 999999 for their PIN number each session. Your PIN number will not change. Please note that the course CRN number will depend on the academic program in which the student is enrolled and the delivery mode for the course.



- If a student is registered in the online MS in ENE or the online certificate program, they must register for the EPE (online) section of the course.
- If a student is enrolled in a Ph.D. program at Purdue or a residential masters program at Purdue and will be taking the certificate course on campus, they must register for the LEC section of the course.
- However, students who are enrolled in a residential degree program (all Ph.D. programs at Purdue are residential) but planning to be away from campus and take an ENE course from a distance will register for the DIS section of the course. This section is distinct from both the on campus (LEC) and the online (EPE) sections.

Please note that selecting the wrong section (CRN number) will result in a registration error. For additional assistance please contact your graduate program manager.

### **Closing out the program**

A request to graduate (candidacy) with the Teaching and Learning Certificate in Engineering is submitted to the graduate program manager no later than two weeks prior to the start of the semester in which the student plans to receive the certificate at graduation.

## SECTION 7. TAXES AND HEALTH INSURANCE

### TAXES

**The SuccessFactors System.** The appointment of a new graduate staff member is processed through SuccessFactors [Onboarding](#). The graduate staff employee will receive an e-mail from Onboarding, which will contain instructions for entering his/her personal and self-identification information which is a requirement to complete the hiring process. After the appointment is active in the payroll system (ECP), the student can make any future changes to his/her personal and self-identification information in Employee Launchpad – SuccessFactors.

Students will have access to Employee Launchpad – SuccessFactors on or after the hire date. [Purdue Login](#) is the gateway to protected tools and services such as Brightspace, OnePurdue, MyPurdue. You will need [to setup](#) your Purdue Career Account to be able to access most services. If you have technology questions, contact the [Engineering Computer Network](#) to request [support](#). For additional help contact the [Purdue IT](#) customer service center at (765)494-4000) or email [it@purdue.edu](mailto:it@purdue.edu).

**Tax Compliance System- Glacier.** If you are an international student, you will receive an invitation email to access and complete your international tax information in the Glacier software. At the end of the account, please print, sign, and date all forms. Send all forms and copies of the required documents per the instructions in the account. GLACIER is a **secured web-based Nonresident Alien (NRA) tax compliance system** that foreign visitors can use to provide their immigration and tax data via the internet 24 hours a day. GLACIER helps determine tax residency, withholding rates, and income tax treaty eligibility. Questions regarding Glacier, contact [tax@purdue.edu](mailto:tax@purdue.edu).

### HEALTH INSURANCE

New Graduate Student Staff must enroll during the open enrollment period at the beginning of the Academic year or within 30 days of their start date or the university's premium contribution will be forfeited. [Information](#) on insurance waivers for international students can be found on the health insurance website.

Graduate Staff and Fellowship Medical Insurance Options (West Lafayette Campus Only)  
Those employed in a graduate staff position(s) which carries a minimum of 0.50 FTE/half time/20 hours per week or more or a graduate student with a fellowship administered as an assistantship on the West Lafayette campus are eligible for benefits, including the University-subsidized Graduate Staff Health Plan which is administered by [Academic HealthPlans](#) (AHP) in conjunction with United Healthcare Student Resources. Benefits eligible graduate staff members will be contacted by AHP via email with instructions on enrolling in medical insurance through AHP and in voluntary benefits through [Benefitfocus](#),

Purdue University's online enrollment tool for employees, once their employment has been entered (Note: A valid Social Security Number is required to be on file to gain access to the Benefitfocus enrollment portal). In the meantime, benefits information can be found on the [Graduate Staff Benefits website](#).

In the event you lose your eligibility for graduate staff benefits (e.g., separation, loss of qualifying FTE), your medical insurance will be canceled at the end of the month in which you were last eligible.

Eligible graduate staff members who enroll in the medical plan will arrange to pay for their premiums directly with AHP. Coverage is continuous, including the summer, if the graduate staff member is employed in an eligible position(s). More information on policies about maintaining graduate staff health insurance can be found in LEAVES OF ABSENCE. Those employed in a graduate staff position(s) which do not carry a minimum of 0.50 FTE/half time/20 hours per week or more are **not** eligible for participation in the University subsidized Graduate Staff medical insurance. These graduate staff should refer to the Purdue University Student Health Service (PUSH) [website](#) to view benefits for Domestic Students or for International Students based on their citizenship status.

Fellowship recipients who do not have an eligible graduate staff appointment as defined above are not eligible for participation in the University-subsidized Graduate Staff Health Plan. Fellows should go to the PUSH website to view benefits for Domestic Students or for International Students based on their citizenship status. These plans are designed to meet University guidelines for required insurance coverage for all international graduate staff. International students who wish to waive coverage and who are eligible to do so, must show proof of other eligible coverage.

**Purdue University Student Health (PUSH) Center (West Lafayette Campus Only)** Full-time registered Graduate Students receive no-charge office visits at PUSH for illness or injury. More information on this can be found on the [PUSH website](#). Some services at PUSH may require a copayment. Some PUSH services are charged on a fee-for-service basis. These include radiology and laboratory tests, minor procedures performed by healthcare providers, and medications and supplies used.

**Voluntary Benefits** Benefits-eligible graduate staff members, like other Purdue employees, can purchase optional insurance coverage and legal services through companies that have been vetted by the University. Although the University does not subsidize these programs, the University enables employees to receive group rates. For some benefits, the University allows premiums to be collected via Payroll deduction. Enrollment into dental and other voluntary benefits is handled through Benefitfocus, Purdue University's online enrollment tool for employees. Benefits-eligible graduate staff members will receive an email with instructions on enrolling in voluntary benefits through Benefitfocus once their employment has been entered and a valid SSN is on file. For more information, please visit the Graduate Staff Dental Insurance page for the summary of dental coverage available through Delta

Dental and the Voluntary Benefits page for other voluntary benefit options. Note for international students: You may not receive this email if your SSN isn't obtained and in the employment system within 30 days of hire. If you haven't gained access to Benefitfocus within 30 days of hire, please reach out to Human Resources at 765-494-2222 or [hr@purdue.edu](mailto:hr@purdue.edu).

**Changes to Benefits** You may only elect your medical plan and other benefits during the open enrollment period; however, you are permitted to make certain changes to your plans mid-plan year (August– July) with an appropriate Qualifying Life Event (QLE) and supporting documentation:

- Add/Enroll into a plan. QLE: Involuntary loss of coverage (e.g., aging of a parent's plan).
- Drop a plan. QLE: Gaining coverage under another plan, leaving the US.
- Add Dependents to an existing plan: QLE: Marriage, birth or adoption, arrival of family members to the US.
- Drop Dependents from an existing plan. QLE: Divorce, death departure of family members from the US.

You may not change from the graduate staff medical plan to the student medical plan or vice-versa in the middle of the plan year unless your eligibility or appointment changes. Required documentation includes proof of event and proof of dependent relationship. Examples: Proof of loss/gain of coverage, proof of arrival/departure of family members to the US, marriage certificate or divorce decree, birth/naturalization/adoption certificate, tax return for prior or current year (verifies dependent relationship to student). To make changes, you must complete a QLE form and submit it along with your corresponding documentation to AHP within 30 days of your QLE date (e.g., first day without coverage for a loss of coverage, date of birth for a newborn). If you do not complete this process within that time, you will not be permitted to make changes again until the next open enrollment without another QLE.

**RISK MANAGEMENT PROGRAMS** Graduate Staff employed 0.25 FTE or more and graduate students with fellowships administered as assistantships are eligible for benefits through the following Risk Management Programs.

- **Automobile Liability Insurance.** The University carries liability insurance on all University-owned trailers and self-propelled vehicles that are used on public thoroughfares. Authorized vehicle operators are protected against third-party claims for bodily injury or property damage while operating within the scope of their duties on behalf of the University. This insurance includes non-ownership liability coverage to protect the University when privately owned vehicles are driven on university business. This coverage also protects the personal liability of a person properly authorized to drive a private vehicle on university business and on behalf of the University. This coverage, however, is in excess over that carried by the owner of the private vehicle—and responds only if and when that coverage is exhausted. No coverage is provided by the University for Physical Damage to non-University

vehicles. The protection afforded individuals by the University’s automobile liability is contingent upon use of the vehicles in accordance with authority given by the University. Further details may be obtained from the Office of Risk Management.

- **Comprehensive General Liability Insurance.** Graduate staff, while acting in the course of and within the scope of their duties as assigned by the University, are covered by Comprehensive General Liability Insurance. The coverage provides protection against claims brought by third parties for occurrences that arise out of university activities and result in bodily injury, property damage, or personal injury to third parties. Further information is available by contacting the [Office of Risk Management](#).
- **Worker’s Compensation Benefits.** the Worker’s Compensation and Occupational Disease Act of Indiana provides coverage for university employees (including graduate staff) who are injured while performing duties assigned as an employee of the University. This applies to injuries on the premises of the University and while traveling on university business. Worker’s Compensation pays for approved medical expenses and for lost time, as stipulated by the Act. For more information, see the [Purdue Worker’s Compensation website](#).

**SALARY DIRECT DEPOSIT**

Purdue requires that all employees sign up for direct deposit of their salary. If you do not have a bank account set up and entered in the Employee Self-Service. Training for access to [SuccessFactors](#) is available. Payments are made biweekly, and [the payment schedule](#) for 2023-2024 is below as an example:

Pay Period	Pay Period Start Date	Pay Period End Date	Pay Date
18	8/14/2023	8/27/2023	9/6/2023
19	8/28/2023	9/10/2023	9/20/2023
20	9/11/2023	9/24/2023	10/4/2023
21	9/25/2023	10/8/2023	10/18/2023
22	10/9/2023	10/22/2023	11/1/2023
23	10/23/2023	11/5/2023	11/15/2023
24	11/6/2023	11/19/2023	11/29/2023
25	11/20/2023	12/3/2023	12/13/2023
26	12/4/2023	12/17/2023	12/27/2023
1 2024	12/18/2023	12/31/2023	1/10/2024
2	1/1/2024	1/14/2024	1/24/2024
3	1/15/2024	1/28/2024	2/27/2024
4	1/29/2024	2/11/2024	2/21/2024
5	2/12/2024	2/25/2024	3/6/2024
6	2/26/2024	3/10/2024	3/20/2024
7	3/11/2024	3/24/2024	4/3/2024

8	3/25/2024	4/7/2024	4/17/2024
9	4/8/2024	4/21/2024	5/1/2024
10	4/22/2024	5/5/2024	5/15/2024
11	5/6/2024	5/19/2024	5/29/2024
12	5/20/2024	6/2/2024	6/12/2024
13	6/3/2024	6/16/2024	6/26/2024
14	6/17/2024	6/30/2024	7/10/2024