ELECTRICAL AND COMPUTER ENGINEERING: PROFESSIONAL, MS

This is a named option in the Electrical and Computer Engineering MS (http://guide.wisc.edu/graduate/electrical-computer-engineering/electrical-computer-engineering-ms/).

The Electrical and Computer Engineering Department (ECE) offers the Electrical and Computer Engineering MS-Professional named option program for students looking for an advanced entry into industrial electrical engineering.

It is designed to deepen the student's technical knowledge and sharpen their professional skills for a well-prepared entry into industry. The program provides a practical focus through a course-only curriculum, an accelerated and predictable 16-month completion time, and a professional development component. Well-prepared students and UW–Madison undergraduates may find it feasible to complete the program in 12 months.

The student, in consultation with an academic advisor, will choose courses that align well academically and target their career interests. When applying for the ECE MS-Professional program, students are required to choose an area of emphasis: Computer Engineering, Electromagnetic Fields and Waves, Solid State and Photonics, Energy and Power Systems, or a specified curriculum path of their own design. The coursework is customized based on the student's technical interests and is taught by faculty conducting cutting-edge research in their respective fields. The goal of the student's studies is to expand their knowledge in new technologies, design methods, and analysis techniques. The combined focus on technical skills and professional development will prepare graduates to assume leadership positions in industry.

The focus of the Professional program differs from the traditional research-based MS program. MS-Professional students do not conduct independent research and prepare a thesis, but rather have an accelerated course plan in a specialty area with a professional development component, either via an internship/co-op, an independent project, or through courses from Engineering Professional Development. If you are interested in research and advanced concept development, you are better served pursuing a research-based MS program or a PhD program. If you want to complete your degree **within 16 months** and enter the workforce, then the MS-Professional program is right for you.

MS-Professional students cannot be simultaneously enrolled in another graduate program at UW–Madison while completing this program.

After completing the program, students will earn a diploma stating "Master of Science in Electrical and Computer Engineering," and the transcript will include the indication "Named Option: Professional."

For more information on this specific degree plan, please visit the program website (https://advanceyourcareer.wisc.edu/degrees/electrical-engineering/).

ADMISSIONS

ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. *Applicants must meet the minimum requirements (https://grad.wisc.edu/apply/requirements/) of the Graduate School as well as the program(s).* Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply/).

Requirements	Detail
Fall Deadline	December 15
Spring Deadline	This program does not admit in the spring.
Summer Deadline	This program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required but may be considered if available.
English Proficiency Test	Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: https://policy.wisc.edu/library/UW-1241 (https://policy.wisc.edu/library/UW-1241/).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

DEADLINE

Please submit all your application materials before the fall deadline to ensure full review of your application. Applications submitted after the above deadline through March 15 will be considered if space is still available. To check if space is available, please email: ecegradadmission@engr.wisc.edu.

APPLICATION REQUIREMENTS

A submitted online application (https://grad.wisc.edu/apply/) is required, consisting of:

- Resume/CV.
- Statement of purpose detailing why the applicant wishes to pursue further education in Electrical and Computer Engineering. If the applicant's degree is in another discipline, it is recommended to discuss relevant coursework taken in your area of interest that will prepare you for graduate-level E C E (http://guide.wisc.edu/courses/e_c_e/) courses. See the suggested guidelines provided by the Graduate School (https://grad.wisc.edu/apply/prepare/).
- Most up to date unofficial transcript(s) from all previous higher education institutions, regardless of whether or not a degree was earned (official transcripts are requested of only recommended

applicants); international academic records must be in the original language accompanied by an official English translation.

- Test scores as detailed above.
- Three letters of recommendation are required from people who can accurately judge the applicant's academic and/or work performance. Letters of recommendation are submitted electronically to graduate programs through the online application. See the Graduate School for FAQs regarding letters of recommendation. Letters of recommendation are due by the deadline listed above.

Information about the application fee may be found in the Graduate School FAQs (https://grad.wisc.edu/apply/). Fee grants are available through the conditions outlined by the Graduate School (https://grad.wisc.edu/apply/fee-grant/).

Applications must be entirely complete by the deadline, including test scores and letters of recommendation. Please note that it is highly advised to take the GRE and English proficiency tests well in advance of the application deadline in order to ensure time for receiving and processing of the scores. Please do not mail any paper copies of application materials, except IELTS scores. They will not be reviewed.

Information for international applicants, including proof of funding and visa information, can be found on the International Student Services (https://iss.wisc.edu/students/admissions/) website.

The department welcomes applications from scientific, engineering, and mathematical disciplines other than Electrical and Computer Engineering.

ENGLISH COMPETENCY FOR NON–NATIVE ENGLISH SPEAKERS

Effective written and oral communication is vital for a successful academic career. International students whose native language is not English will be required to take the English as a Second Language Assessment Test (ESLAT), offered by the English as a Second Language (ESL) Program.

The English as a Second Language Assessment Test (ESLAT) must be taken as soon as the student arrives at the university. The test is offered in the fall and spring during the week before the beginning of instruction. The English as a Second Language (ESL) home page (https://esl.wisc.edu/international-students/placement/) has more information.

Based on English as a Second Language Assessment Test (ESLAT) performance, specific English as a Second Language (ESL) courses may be recommended. These courses must be taken and passed within 12 months of the English as a Second Language Assessment Test (ESLAT). Otherwise, the student will not be permitted to register during the third semester after entering the graduate program. Any English as a Second Language (ESL) courses numbered 300 or above can be counted towards graduate degree requirements but not toward Electrical and Computer Engineering course requirements. Completion of English as a Second Language Assessment Test (ESLAT) and recommended courses is also a requirement for graduation of an international student whose native language is not English.

Students are exempt from taking the English as a Second Language Assessment Test (ESLAT) if:

- English is the exclusive language of instruction at the undergraduate institution; or
- they have earned a degree from a regionally accredited US college or university not more than 5 years prior to the anticipated semester of enrollment; or

- they have completed at least two full-time semesters of graded course work, exclusive of English as a Second Language (ESL) courses, in a U.S. college or university, or at an institution outside the US where English is the exclusive language of instruction, not more than five years prior to the anticipated semester of enrollment.

REENTRY ADMISSIONS

If you were previously enrolled as a graduate student at UW–Madison, but have had a break in enrollment for at least one fall or spring semester, you will need to apply to resume your studies.

For applicants previously enrolled in a graduate program other than Electrical and Computer Engineering, you must complete a new online application, including all materials, for admission.

For applicants previously enrolled in Electrical and Computer Engineering as a graduate student, you must complete a reentry application. Reentry applicants may apply for the fall term with a deadline of June 1.

In order to apply as a reentry applicant, you must:

- complete the online application (https://grad.wisc.edu/apply/), including the personal information section, program and term selection, and supplementary application;
- Provide the following documents to the Electrical and Computer Engineering Graduate Admissions Team (email located in contact information box)
  - CV/Resume
  - Statement of Purpose
  - Any new unofficial transcripts from previous higher education institutions
  - Three letters of recommendation if the break in enrollment equals or is greater than four semesters (fall, spring). Letters of recommendation should be emailed directly from the recommender

Current Graduate Student Admissions

Applicants currently enrolled as a graduate student at UW-Madison, whether in or other than Electrical and Computer Engineering, wishing to apply to this degree program should contact the Electrical and Computer Engineering Graduate Admissions Team (email located in contact information box) to inquire about the process and respective deadlines several months in advance of the anticipated enrollment term. Applicants currently enrolled may apply to change or add programs for any term (fall, spring, or summer).

QUESTIONS

Please review the frequently asked questions answered by the Graduate School here (https://grad.wisc.edu/apply/).

If you have any admissions questions, please do not hesitate to contact the Electrical and Computer Engineering Graduate Admissions Team (email located in contact information box).

FUNDING

FUNDING
GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School.

Be sure to check with your program for individual policies and restrictions related to funding.

PROGRAM RESOURCES

Students enrolled in this program are not eligible to receive tuition remission from graduate assistantship appointments at this institution.

Tuition Scholarships for Accelerated MS Programs

The Department of Electrical and Computer Engineering offers a limited number of scholarships for highly qualified students who are accepted to the department's accelerated MS programs. The scholarships are merit-based and awarded during the admission period.

Eligibility Requirements
- Must enroll in one of the Department's two named options programs:

  - Electrical and Computer Engineering: Machine Learning and Signal Processing

  - Electrical and Computer Engineering: Professional

Scholarship Amounts
- The amount of the scholarship is indicated when the student is notified of the award.

Additional Information
- Students who meet the above criteria are automatically eligible for this scholarship. No formal application by the student is necessary.

- Students will be notified of scholarship award after acceptance to the program.

Federal Loans

Students who are U.S. citizens or permanent residents may be eligible to receive some level of funding through the federal direct loan program. These loans are available to qualified graduate students who are taking at least 4 credits during the fall and spring semesters, and 2 credits during summer. Private loans are also available. Learn more about financial aid at this website (https://financialaid.wisc.edu/).

International Student Services Funding and Scholarships

For information on International Student Funding and Scholarships, visit the ISS website (https://iss.wisc.edu/students/new-students/funding-scholarships/).

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS
MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	Yes

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	23 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	1. A grade of B or better in any course is acceptable. 2. A grade of BC in an E C E course is acceptable, provided the total cumulative GPA for E C E courses is greater than or equal to 3.00. 3. A grade of BC or C in a non-E C E course is acceptable only if approved by the Graduate Committee.
Assessments and Examinations	n/a
Language Requirements	Non-native speakers of English who enroll in the MS program must take the ESLAT test on arrival at the university and then take any recommended courses based on the exam results. In addition, if a student's advisor believes that his or her technical writing ability needs improvement, the student may be required to undertake remedial work.

REQUIRED COURSES

Code	Title	Credits
Mandatory Courses		
E C E 610	Seminar in Electrical and Computer Engineering	1
Elective Courses		
12 of the 30 credit hours must be taken within one curriculum path. Please see sample curriculum paths below. Students may take courses from combinations of different paths to create custom degrees that are well-aligned with their professional goals with advisor approval. [1]		
Other Course Requirements		
21 of the 30 credit hours must be taken in E C E. Approved graduate or undergraduate transfer credits in ECE courses may count toward the 21 E C E credits.		
No more than 9 credits can be taken outside of E C E.		
Special topics courses E C E 601 Special Topics in Electrical and Computer Engineering or E C E 901 Special Topics in Electrical and Computer Engineering may be used for up to 3 credits towards a curriculum path with advisor approval.		
No more than 3 independent study credits count toward the degree. This includes E C E 699 and E C E 999.		
No more than 3 credits of ESL courses count toward the degree.		
Thesis credits are not allowed (E C E 790 or E C E 890 or E C E 990).		

[1]   Please keep written communications (emails are acceptable) of approvals from your faculty advisor.

Computer Engineering Sample Curriculum Path

Code	Title	Credits
Embedded Systems		
Select 12 credits from the following:		
E C E 551	Digital System Design and Synthesis	3
E C E/ COMP SCI 552	Introduction to Computer Architecture	3
E C E 555	Digital Circuits and Components	3
E C E/ COMP SCI 750	Real-time Computing Systems	3
E C E 751	Embedded Computing Systems	3
E C E 753	Fault-Tolerant Computing	3
COMP SCI 537	Introduction to Operating Systems	4

Code	Title	Credits
Networking and Security		
Select 12 credits from the following:		
E C E 537	Communication Networks	3
E C E/ COMP SCI 707	Mobile and Wireless Networking	3
E C E 751	Embedded Computing Systems	3
E C E 753	Fault-Tolerant Computing	3
COMP SCI 537	Introduction to Operating Systems	4
COMP SCI 642	Introduction to Information Security	3

Code	Title	Credits
COMP SCI 763	Security and Privacy for Data Science	3

Code	Title	Credits
CAD for Digital Electronic Systems		
Select 12 credits from the following:		
E C E 551	Digital System Design and Synthesis	3
E C E 553	Testing and Testable Design of Digital Systems	3
E C E 555	Digital Circuits and Components	3
E C E 556	Design Automation of Digital Systems	3
E C E 751	Embedded Computing Systems	3
E C E/ COMP SCI 755	VLSI Systems Design	3
E C E/ COMP SCI 756	Computer-Aided Design for VLSI	3

Code	Title	Credits
Computer Architecture		
Select 12 credits from the following:		
E C E 551	Digital System Design and Synthesis	3
E C E/ COMP SCI 552	Introduction to Computer Architecture	3
E C E 553	Testing and Testable Design of Digital Systems	3
E C E/ COMP SCI 752	Advanced Computer Architecture I	3
E C E/ COMP SCI 755	VLSI Systems Design	3
E C E/ COMP SCI 757	Advanced Computer Architecture II	3
E C E/COMP SCI/ E M A/E P/M E 759	High Performance Computing for Applications in Engineering	3
COMP SCI 537	Introduction to Operating Systems	4
COMP SCI 758	Advanced Topics in Computer Architecture	3

E&M Fields and Waves Sample Curriculum Path

Code	Title	Credits
Select 12 credits from the following:		
E C E 447	Applied Communications Systems	3
E C E 545	Advanced Microwave Measurements for Communications	3
E C E 547	Advanced Communications Circuit Design	3
E C E 740	Electromagnetic Theory	3
E C E 742	Computational Methods in Electromagnetics	3
E C E 744	Theory of Microwave Circuits and Devices	3
E C E/PHYSICS 748	Linear Waves	3
E C E/N E/ PHYSICS 749	Coherent Generation and Particle Beams	3

Code	Title	Credits
E C E 841	Antennas	3
E C E/PHYSICS 848	Nonlinear Waves	3

Energy and Power Systems Sample Curriculum Path [1]

Code	Title	Credits
Electric Machines and Drives		
Select 12 credits from the following:		
E C E 411	Introduction to Electric Drive Systems	3
E C E 412	Power Electronic Circuits	3
E C E 427	Electric Power Systems	3
E C E 504	Electric Machine & Drive System Laboratory	2-3
E C E 511	Theory and Control of Synchronous Machines	3
E C E 711	Dynamics and Control of AC Drives	3
E C E 713	Electromagnetic Design of AC Machines	3

Code	Title	Credits
Power Electronics		
Select 12 credits from the following:		
E C E 411	Introduction to Electric Drive Systems	3
E C E 412	Power Electronic Circuits	3
E C E 427	Electric Power Systems	3
E C E 512	Power Electronics Laboratory	3
E C E 711	Dynamics and Control of AC Drives	3
E C E 712	Solid State Power Conversion	3
E C E 714	Utility Application of Power Electronics	3

Code	Title	Credits
Power Systems		
Select 12 credits from the following:		
E C E 411	Introduction to Electric Drive Systems	3
E C E 412	Power Electronic Circuits	3
E C E 427	Electric Power Systems	3
E C E 511	Theory and Control of Synchronous Machines	3
E C E/COMP SCI/ I SY E 524	Introduction to Optimization	3
E C E 714	Utility Application of Power Electronics	3
E C E 723	On-Line Control of Power Systems	3
E C E 731	Advanced Power System Analysis	3

[1]   The on-campus program, not the online MSEE Power Engineering program.

Solid State/Photonics Sample Curriculum Path

Code	Title	Credits
Semiconductor Device and Fabrication Technology		
Select 12 credits from the following:		
E C E 445	Semiconductor Physics and Devices	3

Code	Title	Credits
E C E/N E 528	Plasma Processing and Technology	3
E C E 542	Introduction to Microelectromechanical Systems	3
E C E 548	Integrated Circuit Design	3
E C E 549	Integrated Circuit Fabrication Laboratory	4
E C E 745	Solid State Electronics	3
E C E 845	Transport in Semiconductor Devices	3

Code	Title	Credits
Photonics Technology		
Select 12 credits from the following:		
E C E 434	Photonics	3
E C E 466	Electronics of Solids	3
E C E 536	Integrated Optics and Optoelectronics	3
E C E 740	Electromagnetic Theory	3
E C E 741	Semiconductor Diode Lasers and other Optoelectronic Devices	3
E C E 742	Computational Methods in Electromagnetics	3
E C E 747	Nanophotonics	3

PROFESSIONAL DEVELOPMENT ACTIVITIES

Students are strongly encouraged to participate in one of the professional development activities below:

- With assistance from Engineering Career Services, obtain a summer internship and enroll in E C E 702 Graduate Cooperative Education Program.
- Enroll in the summer course INTEREGR 601 Topics in Interdisciplinary Engineering.
- Enroll in up to 3 credits of E C E 699 Advanced Independent Study and be co-supervised by an advisor working in industry (choice of industry advisor is subject to program approval).
- Complete at least two of the online "Foundations of Professional Development" courses. Each course is eight weeks and 1 credit:

Code	Title	Credits
E P D 605	Fundamentals of Technical Project Management	1
E P D 701	Writing for Professionals	1
E P D 702	Professional Presentations	1
E P D 704	Organizational Communication and Problem Solving	1
E P D 706	Change Management	1
E P D 708	Creating Breakthrough Innovations	1
E P D 712	Ethics for Professionals	1
E P D/GEN BUS/ MARKETNG 782	Marketing for Non-Marketing Professionals	1
E P D/GEN BUS/ M H R 783	Leading Teams	1
or E P D 606	Leading and Managing Technical Teams	
E P D/GEN BUS/ M H R 785	Effective Negotiation Strategies	1

OTHER POLICY

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

NAMED OPTION-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Credits Earned at Other Institutions
Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

Undergraduate Credits Earned at Other Institutions or UW–Madison
With program approval, UW-Madison courses numbered 400 or above may be transferred to fulfill the minimum credit requirement, or E C E (http://guide.wisc.edu/courses/e_c_e/) courses numbered 700 or above can be transferred to fulfill the minimum graduate coursework (50%) requirement. No credits can be applied to fulfill the minimum residence credit requirement. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

With program approval, credits from other institutions numbered 300 or above outside of E C E (http://guide.wisc.edu/courses/e_c_e/) or 400 level or above within E C E (http://guide.wisc.edu/courses/e_c_e/) can be transferred to fulfill the minimum credit requirement. Transfer credits from other institutions must be equivalent to the rigor of UW-Madison courses numbered 300 and above. Prior coursework transfers will be assessed on a case-by-case basis by the program. These credits cannot satisfy the 50% graduate coursework minimum nor the minimum residence credit requirement. To request evaluation of prior coursework, please contact the Graduate Student Services Coordinator. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

Credits Earned as a Professional Student at UW–Madison (Law, Medicine, Pharmacy, and Veterinary careers)
Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

Credits Earned as a University Special Student at UW–Madison
With program approval, students may transfer coursework numbered 400 or above, taken as a UW–Madison University Special student, toward the minimum credit requirement. Courses numbered 700 or above or are taken to meet the requirements of a capstone certificate and has the "Grad 50%" attribute may be applied toward the minimum graduate

coursework (50%) requirement. Coursework earned ten or more years prior to admission is not allowed to satisfy requirements.

(Up to 7 credits total of prior coursework can be used from the categories above.)

PROBATION

Refer to the Graduate School: Probation (https://policy.wisc.edu/library/UW-1217/) policy.

ADVISOR / COMMITTEE

A faculty advisor will be assigned in the student's curriculum area of interest. The faculty advisor assists with course selection and academic planning.

CREDITS PER TERM ALLOWED

15 credits

TIME LIMITS

Students are expected to complete the degree requirements and graduate within 3 academic semesters.

If students have been absent for five or more years, they must file a new Graduate School application for admission and submit it with a new application fee. Refer to the Graduate School: Time Limits (https://policy.wisc.edu/library/UW-1221/) policy.

GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https://hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https://facstaff.provost.wisc.edu/)
- Dean of Students Office (https://doso.students.wisc.edu/) (for all students to seek grievance assistance and support)
- Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (https://employeedisabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office of Student Conduct and Community Standards (https://conduct.students.wisc.edu/) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

ECE Grievance Procedures
Exceptions, Extensions, and Appeals

Petitions for exceptions to academic requirements are considered on an individual case-by-case basis and granted exceptions do not constitute a precedent. Deviations from established policies are strongly discouraged, but certain extenuating academic and personal circumstances may warrant exceptions. Petitions for course exceptions/substitutions, exceptions to the Satisfactory Progress Expectations (academic or conduct), or other policy exceptions shall be directed to the ECE Graduate Committee, and in some circumstances to the appropriate program coordinator. The following procedures apply to all petitions:

1. Student must first consult with their advisor(s).

2. Student is advised to also consult with the ECE Graduate Student Services Coordinator for additional advice.

3. Student and advisor(s) must both submit written documentation requesting and explaining the petition to the ECE Graduate Student Services Coordinator:

4. Identify the specific requirement/rule/expectation pertinent to the petition;

5. Explain the rationale for petition and why it should be granted;

6. Advisor(s) must support the petition.

The ECE Graduate Student Services Coordinator will forward the petition to the ECE Graduate Committee and appropriate program coordinator for adjudication. Student and advisor(s) will be notified of the ECE Graduate Committee's decision and the note will be placed in the student's file.

Please note that petitions for exceptions to clearly-defined program rules are rarely approved by the ECE Graduate Committee.

Progress Requirements

The ECE Graduate Committee may grant extensions to normal progress requirements in circumstances such as childbirth, adoption, significant responsibilities with respect to elder or dependent care obligations, disability or chronic illness, or circumstances beyond one's personal control. Petitions for extensions should provide evidence of plans and ability to return to conformance with program expectations and to acceptably complete the program. Extensions beyond one semester will be granted only in the event of highly extraordinary circumstances. Extensions will be recorded with a note of explanation placed in the student's file.

Students desiring confidentiality of their circumstances should consult with the Associate Chair for Graduate Studies.

Appeal of Previous Decisions

Appeals of ECE Graduate Committee decisions may be pursued regarding any academic issue, including exceptions to program requirements, progress requirements, AGS and Qualifying Exam decisions. Appeals will only be considered if the student provides new information that was not available to the ECE Graduate Committee at the time the original decision was made. Appeals must be submitted within one month of the date the student was notified of the ECE Graduate Committee action being appealed.

If the student believes their appeal was not appropriately handled or resolved by the ECE Department, the student may further appeal to the College of Engineering by contacting the Assistant Dean for Graduate Affairs. Such appeals must be submitted within one month of the date the student was notified of the ECE Graduate Committee denial.

Grievances

The ECE Department, College of Engineering, and University of Wisconsin offer multiple avenues to resolve unfair or inappropriate treatment by faculty, staff, or another student. This includes hostile and intimidating research group climate, authorship disputes, unreasonable expectations, and disrespectful behavior. The manner in which the grievance is handled depends on the nature of the issue and specific concerns of the aggrieved student. Graduate Assistants in TA, PA and/or RA appointments may utilize the Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/) (GAPP) grievance process to resolve employment-related issues. Examples of matters appropriate for the GAPP grievance process include allegations of excessive work hours, violations of sick days or vacation policies, or disputes regarding the assignment of duties.

In some cases the best approach is for the aggrieved student to discuss their concern directly with the person responsible for the objectionable action.

If the student is uncomfortable making direct contact with the other individual or desires a confidential consultation about their concern, they may contact the ECE Associate Chair for Graduate Studies, the ECE Grievance Advisor, or the College of Engineering Assistant Dean for Graduate Affairs. These individuals work to resolve the concern while being sensitive to student confidentiality.

Change of advisor

Students who believe they are in a research environment that fails to meet ECE and College of Engineering standards for climate and culture should contact the ECE Associate Chair for Graduate Studies, the ECE Grievance Advisor, or the College of Engineering Assistant Dean for Graduate Affairs for additional consultation. They will work with the student to explore alternate advising arrangements and ensure continuity of financial support should the student need to leave the research group. Note that immigration status is NOT tied to a specific research advisor.

Formal Written Complaint Process

Issues that are not resolved to the student's satisfaction may be pursued at the student's discretion by submitting a written complaint to the ECE Grievance Advisor. The steps described below are based on the Definition and Procedure section of the Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/) (GAPP) Grievance Procedure.

Step One: The grievant must file a written statement with the ECE Grievance Advisor specifying the grievant's name, a clear and concise statement of the grievance and the issue(s) involved, the date(s) the incident or violation took place and the specific departmental, college, or university policies involved, and the relief sought. The grievance shall be signed and dated by the grievant(s) and representative (if any).

Within twenty (20) days of receipt of the written grievance, the ECE Grievance Advisor will meet with the grievant and their representative (if chosen) to hear the grievance and will return a written answer to the grievant and their representative (if chosen) no later than ten (10) days after this meeting. This answer will include a copy of the grievance procedure appeal process timeline, a list of resources and relevant contact information for future steps.

Step Two: If the decision in Step One is not accepted by the grievant, the grievant shall have 10 days from receipt of the answer in Step One to file

an appeal with the College of Engineering Assistant Dean for Graduate Affairs. The Assistant Dean for Graduate Affairs will meet with the grievant and their representative (if chosen) within twenty (20) days from receipt of the appeal of Step One and attempt to resolve the grievance. The Assistant Dean for Graduate Affairs will provide the grievant and their representative (if chosen) with a written response to the grievance no later than ten (10) days after this meeting.

Step Three: If the decision in Step Two is not accepted by the grievant, the grievant shall have 10 days from the receipt of the answer in Step Two to file an appeal with the Graduate School as described in Grievances and Appeals (https://grad.wisc.edu/documents/grievances-and-appeals/).

OTHER

Students are strongly discouraged to pursue positions as Project Assistants, Teaching Assistants or Research Assistants during their time in this program, as the rigor and accelerated nature of this program may not accommodate those work time commitments. Students in this program will not receive the tuition remission that is typically part of the compensation package for a graduate assistantship.

PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT
GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING RESOURCES

UW–Madison, the College of Engineering, and ECE have an abundance of professional development opportunities for students to take advantage of in order to better prepare themselves for internships and job positions during and following their education. First of all, the ECE Department strongly encourages students to utilize the Graduate School's professional development resources (https://grad.wisc.edu/professional-development/). Engineering Career Services (ECS) (http://ecs.wisc.edu) hosts multiple career fairs each semester where students can directly interact with prospective employers, schedule interviews, and find internships and full-time jobs. ECS also maintains job listings and hosts a variety of professional development workshops each semester. The ECE Department provides unique opportunities throughout the year for students to attend and participate in various lectures, workshops, and trainings. The ECE Graduate Student Association (GSA) organizes professional development opportunities for fellow students. Students are made aware of events and opportunities via email and other communications.

PEOPLE

PEOPLE
PROFESSORS

Susan Hagness (Chair)
Nader Behdad
Daniel Botez
Azadeh Davoodi (Associate Chair for Undergraduate Studies)
Kassem Fawaz (Associate Chair for Research)
John A. Gubner (Associate Chair for Operations)
Yu Hen Hu
Hongrui Jiang (Associate Chair for Graduate Studies)
Irena Knezevic
Bernard Lesieutre
Mikko Lipasti
Zhenqiang Ma
Luke J. Mawst
Robert Nowak
Parameswaran Ramanathan
Bulent Sarlioglu
William A. Sethares
Daniel van der Weide
Giri Venkataramanan
Amy E. Wendt
Zongfu Yu

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Daniel Ludois
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Dimitris Papailiopoulos
Line Roald
Andreas Velten

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Dominic Gross
Chirag Gupta
Tsung-Wei Huang
Robert Jacobberger
Akhilesh Jaiswal
Bhuvana Krishnaswamy
Kangwook Lee
Chu Ma
Pedro Morgado
Shubhra Pasayat
Jinia Roy
Joshua San Miguel
Manish Singh
Haihan Sun
Eric Tervo
Ramya Korlakai Vinayak
Ying Wang
Feng Ye
Lei Zhou

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Mark C. Allie
Eric Hoffman
Joe Krachey
Srdjan Milicic

TEACHING PROFESSOR

Eduardo Arvelo
Setareh Behroozi
Steven Fredette

Nathan Strachen

See also Electrical and Computer Engineering Faculty Directory (https://directory.engr.wisc.edu/ece/faculty/).