Electrical Engineering: Research, M.S.

This is a named option in the Electrical Engineering M.S. (http://www.engr.wisc.edu/department/electrical-computer-engineering/electrical-engineering-ms/#text)

The Electrical and Computer Engineering (ECE) Department offers the Electrical Engineering M.S.-Research named option program which emphasizes the enhancement of professional knowledge and research techniques.

The M.S.-Research program is intended for students who seek training in research and advanced concept development, and who want to pursue an in-depth research project with a faculty member. Students desiring the highest level of research training should apply to a Ph.D. program; often a M.S.-Research degree is earned along the way to a Ph.D. degree.

A distinguishing feature of the M.S.-Research program, in comparison to ECE's other master's degree programs, is the preparation of a thesis or a project report based on a research problem. The M.S.-Research program typically takes 24 months to complete.

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

For more information on this specific degree plan, please visit the ECE website (https://www.engr.wisc.edu/department/electrical-computer-engineering/academics/master-of-science-electrical-engineering/).

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://apply.grad.wisc.edu/apply/).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>The program does not admit in the spring.</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>This program does not admit in the summer.</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Required.*</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Letters of Recommendation Required

* Applicants who have earned, or will be earning before starting the program, a bachelor's degree from UW-Madison are exempt from submitting a GRE test score.

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

- Resume/CV;
- Statement of purpose; see the suggested guidelines provided by the Graduate School: https://grad.wisc.edu/apply/prepare (https://grad.wisc.edu/apply/prepare/);
- Must complete the supplemental application section that identifies their research interest area;
- 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;
- Payment of the one-time application fee of $75.00, plus the $6.00 international processing fee; this fee is non-refundable. It can be paid by credit card (MasterCard or Visa) or debit/ATM card;
- Test scores and three letters of recommendation as detailed above.

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 TOEFL/IELTS 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.

When an applicant submits an application, they are automatically also put in the pool to be considered for funding from the department. Funding decisions come directly from faculty members. However, funding is limited and never guaranteed. All admitted, incoming students should anticipate to fund themselves. Those selected for funding will be contacted separately and directly by E C E faculty.

Information for international students, including proof of funding and visa information, can be found on the Graduate School's website (https://grad.wisc.edu/international-students (https://grad.wisc.edu/international-students/)).

By Wisconsin state law, the application fee can only be waived or deferred under the conditions outlined by the Graduate School (https://grad.wisc.edu/apply/fee-grant (https://grad.wisc.edu/apply/fee-grant/)). The department welcomes applications from scientific, engineering, and mathematical disciplines other than E C E. Applicants with a bachelor’s degree may apply directly to the Ph.D. program.

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 ECE, you must complete a new online application, including all materials, for admission.

For applicants previously enrolled in ECE 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://apply.grad.wisc.edu (https://apply.grad.wisc.edu/)), including the personal information section, program and term selection, and supplementary application;
- upload a CV/resume in the application portal;
- upload a statement of purpose in the application portal;
- upload any new unofficial transcripts from previous higher education institutions, excluding UW-Madison; and
- submit 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 to the ECE Graduate Admissions Team (ecegradadmission@engr.wisc.edu) from the recommender.

If the reentry applicant is unable to upload any of the additional required materials, please email them to the ECE Graduate Admissions Team (ecegradadmission@engr.wisc.edu).

CURRENT GRADUATE STUDENT ADMISSIONS

Students currently enrolled as a graduate student at UW-Madison, whether in or other than ECE, wishing to apply to this degree program should contact the ECE Graduate Admissions Team (ecegradadmission@engr.wisc.edu) to inquire about the process and respective deadlines several months in advance of the anticipated enrollment term. Current students 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 ECE Graduate Admissions Team at ecegradadmission@engr.wisc.edu.

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 in the ECE M.S.-Research program are eligible for assistantships from ECE and other departments.

RESEARCH ASSISTANTSHIPS (RA)

Students should contact professors in their area of interest. Professors decide whom they will appoint on their research grants.

TEACHING ASSISTANTSHIPS (TA) AND GRADER POSITIONS

Current graduate students may apply for teaching assistantships or hourly grader positions via the ECE TA/Grader Portal (https://apps.aims.wisc.edu/tagrader/default.aspx). If you are interested in applying for TA or grader position in a department other than ECE, please contact the respective department to ask about their own application process. Students currently holding a research assistant or fellowship position that are interested in teaching assistant positions should discuss options with their research advisor(s) before applying.

PROJECT ASSISTANTSHIPS (PA)

There are project assistant opportunities on campus for various purposes and departments and offices. Often announcements of openings are posted on TA/PA bulletin boards in Engineering Hall and on the ECE Center webpage (http://www.jobcenter.wisc.edu/). You may also contact individual faculty members to inquire about possible opportunities.

FELLOWSHIPS

Information concerning fellowships is sent to graduate students via email from the department, faculty, and/or the Graduate School.

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

<table>
<thead>
<tr>
<th>Mode of Instruction</th>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

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.
CURRICULAR REQUIREMENTS

**Requirements Detail**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>30</td>
</tr>
<tr>
<td>Minimum Residence Credit Requirement</td>
<td>16</td>
</tr>
<tr>
<td>Overall Graduate GPA Requirement</td>
<td>3.00 GPA required.</td>
</tr>
</tbody>
</table>

**Curricular Requirements**

- Students must complete either a thesis or project. Details about these two paths can be found below.
- The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.
- The ECE department requires 30 credits for an M.S. degree and does not accept 400-level or higher, and at least 15 must be in ECE Courses numbered 700 or higher. Only graduate courses, namely those courses listed or approved for listing in the Graduate School Bulletin, are applicable for graduate credit, with the exceptions that 300-level ECE courses and ECE 702 Graduate Cooperative Education Program are not acceptable. ECE 890 Pre-Dissertation's Research and ECE 990 Dissertator's Research are not applicable to the M.S. degree.

**Required Courses**

**Degree Credit Requirement:**

UW-Madison Graduate School policy states that the M.S. degree requires at least 30 credits of courses (300 level or above, no audits or pass/fail) completed as a graduate student at UW-Madison: [https://grad.wisc.edu/documents/minimum-graduate-degree-credit-requirement/](https://grad.wisc.edu/documents/minimum-graduate-degree-credit-requirement/).

The ECE department requires 30 credits for an M.S. degree and does not count ECE 300-level courses toward M.S. or Ph.D. requirements.

**Research Option MS Degree Plans**

There are two distinct plans of study, from which students must choose in order to fulfill the requirements for the research option ECE M.S. degree: Thesis and Project.

**Thesis Plan**

To fulfill the requirements of the Thesis Plan, the student must earn 30 graduate credits, attained with acceptable grades as defined on the Policies tab. Of these 30 credits, at least 15 must be in ECE Courses numbered 700 or higher. Only graduate courses, namely those courses listed or approved for listing in the Graduate School Bulletin, are applicable for graduate credit, with the exceptions that 300-level ECE courses and ECE 702 Graduate Cooperative Education Program are not acceptable. ECE 890 Pre-Dissertation's Research and ECE 990 Dissertator's Research are not applicable to the M.S. degree.

Of the 30 credits, a minimum of 3 and a maximum of 9 credits must be in ECE 790 Master's Research. These ECE 790 credits are applicable toward both the 15 ECE credit requirement and the 700-level requirement. The combined number of credits in ECE 790, ECE 699 Advanced Independent Study, and ECE 999 Advanced Independent Study applied toward the degree may not exceed 9.

At the conclusion of the research program, a thesis must be prepared. If the thesis is formally defended, then a thesis committee must consist of at least 3 members, 2 of whom must be graduate faculty or former graduate faculty up to one year after resignation or retirement. If there is no formal defense, the thesis only needs to be approved by the student's graduate faculty advisor.

If depositing through Memorial Library, the thesis must: 1) conform to Graduate School and library formats; and 2) be filed with the Memorial Library where it is cataloged and stacked for future reference (if required by the master's thesis committee). If submitting to Minds@UW, an electronic copy must be sent to the ECE Graduate Student Services Coordinator, who will deposit it into Minds@UW, Department of Electrical and Computer Engineering Thesis Collection. The Minds@UW system will provide a permanent URL, safe long-term archiving and is indexed by Google, Google Scholar and other specialty academic search engines. The Minds@UW submission form can be found here: [https://www.engr.wisc.edu/department/electrical-computer-engineering/academics/ecce-graduate-student-handbooks/](https://www.engr.wisc.edu/department/electrical-computer-engineering/academics/ecce-graduate-student-handbooks/).

At the conclusion of the thesis, all grades of P (Progress) and I (Incomplete) in ECE 790 Master's Research are changed to either S (Satisfactory) or U (Unsatisfactory) by the advisor. In the final semester the student is required to check in at the ECE Graduate Student Services Office to apply for a degree warrant by the announced deadline.

**Project Plan**

The Project Plan consists of the same credit and course requirements as the Thesis Plan. Under this plan, the student must perform a research project in consultation with a faculty advisor. At the conclusion of the project, the report is prepared. The research project is generally more limited in scope than a thesis and typically is not awarded as many credits. The report need not conform to Graduate School and library formats, but it must be typewritten. The student's advisor must approve the report. No library or Minds@UW copy is required, but may be requested by the faculty. In the final semester, the student is required to check in at the ECE Graduate Student Services Office to apply for a degree warrant by the announced deadline.

**ECE 610 Seminar Requirement**

All on-campus ECE graduate students must register for ECE 610 Seminar in Electrical and Computer Engineering during their first Fall semester of graduate studies. MS-degree seeking students must take 1 credit of ECE 610 in the Fall semester of which they are entering the program. Students with a course conflict with ECE 610 can defer taking the seminar by one year provided their faculty advisor agrees.

The purpose of ECE 610 is to prepare students for success in graduate school and expose them to areas within ECE as well as related fields outside of ECE, such as biotechnology, physics, computer science, mathematics, or business. Electrical and Computer Engineering is very interdisciplinary in nature, and so it is important that students be aware of advanced research and development in areas other than their own.
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 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. For more information, see the ESL home page at https://esl.wisc.edu/international-students/placement/.

Based on ESLAT performance, specific ESL courses may be recommended. These courses must be taken and passed within 12 months of the ESLAT. Otherwise, the student will not be permitted to register during the third semester after entering the graduate program. Any ESL courses numbered 300 or above can be counted towards graduate degree requirements but not toward E C E course requirements. Completion of 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 ESLAT if:

- English is the exclusive language of instruction at the undergraduate institution; or
- they have earned a degree from a regionally accredited U.S. 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 ESL courses, in a U.S. college or university, or at an institution outside the U.S. where English is the exclusive language of instruction, not more than 5 years prior to the anticipated semester of enrollment.

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 Work from Other Institutions

With program approval, students are allowed to count graduate coursework from other institutions toward the minimum graduate degree credit requirement and the minimum graduate coursework (50%) requirement. No credits from other institutions can be counted toward the minimum graduate residence credit requirement. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

UW-Madison Undergraduate*

With program approval, up to 7 credits from UW-Madison numbered 400 or above can be counted toward the minimum graduate degree credit requirement, or E C E courses numbered 700 or above can be counted toward the minimum graduate coursework (50%) requirement. No credits can be counted toward the minimum graduate residence credit requirement. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

*ABET-Accredited Undergraduate Credit from Other Institutions: With program approval, students may count up to seven credits of undergraduate coursework from a Bachelor of Science degree in Electrical Engineering, Computer Engineering, Electrical and Computer Engineering, Electrical Engineering and Computer Science, or Computer Science from an ABET-accredited program at other institutions (not UW–Madison) toward fulfillment of minimum degree requirements. Courses numbered 300 or above may be counted toward the minimum graduate degree credit requirement and courses numbered 700 or above may be counted toward the minimum graduate coursework (50%) requirement. No credits from other institutions can be counted toward the minimum graduate residence credit requirement. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

UW–Madison University Special

With program approval, students are allowed to count up to 9 credits of coursework numbered 400 or above taken as a UW–Madison University Special student toward the minimum graduate residence credit requirement, and the minimum graduate degree credit requirement. Courses numbered 700 or above taken as a UW–Madison Special student toward the minimum graduate coursework (50%) requirement. Coursework earned five or more years prior to admission is not allowed to satisfy requirements.

PROBATION

Students must be in good academic standing with the Graduate School, their program, and their advisor. The Graduate School regularly reviews the record of any student who received grades of BC, C, D, F, or I in graduate-level courses (300 or above), or grades of U in research and thesis. This review could result in academic probation with a hold on future enrollment, and the student may be suspended from graduate studies.

The Graduate School may also put students on probation for incompletes not cleared within one term. All incomplete grades must be resolved before a degree is granted.

The status of a student can be one of three options:

1. Good standing (progressing according to standards; any funding guarantee remains in place).
2. Probation (not progressing according to standards but permitted to enroll; loss of funding guarantee; specific plan with dates and deadlines in place in regard to removal of probationary status.
3. Unsatisfactory progress (not progressing according to standards; not permitted to enroll, dismissal, leave of absence or change of advisor or program).

A semester GPA below 3.0 will result in the student being placed on academic probation. If a semester GPA of 3.0 is not attained during the subsequent semester of full-time enrollment, the student may be dismissed from the program or allowed to continue for 1 additional semester based on advisor appeal to the Graduate School.
ADVISOR / COMMITTEE
New students must declare an advisor by the end of the second week of classes in the first semester.

CREDITS PER TERM ALLOWED
15 credits

TIME CONSTRAINTS
Master's degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

GRIEVANCES AND APPEALS
These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://dosu.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://dosu.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**

Funding is not guaranteed and applicants should be prepared to fund their degree. The department awards a small number of research assistantships, teaching assistantships, project assistantships, and fellowships each year. All applications are automatically considered for department funding.

**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**

**PROFESSORS**

Susan Hagness (Chair)
David T. Anderson
Nader Behdad
John Booske
Dan Botez
Azadeh Davoodi
John A. Gubner (Associate Chair for Operations)
William N. Hitchon
Yu Hen Hu
Thomas Jahns
Hongrui Jiang
Irena Knezevic
Bernard Lesieutre (Associate Chair for Undergraduate Studies)*
Mikko Lipasti
Zhenqiang Ma
Luke J. Mawst
Robert Nowak
Parameswaran Ramanathan
William A. Sethares
Daniel van der Weide
Barry Van Veen (Associate Chair for Graduate and Online Studies)
Giri Venkataramanan
Amy E. Wendt

**ASSOCIATE PROFESSORS**
Mikhail Kats
Daniel Ludois
Paul H. Milenkovic
Umit Ogras
Bulent Sarlioglu
Zongfu Yu

**ASSISTANT PROFESSORS**
Joseph Andrews
Kassem Fawaz
Dominic Gross
Younghyun Kim
Bhuvana Krishnaswamy
Kangwook Lee
Chu Ma
Matthew Malloy (adjunct)
Dimitris Papailiopoulos
Line Roald
Joshua San Miguel
Eric Severson
Andreas Velten
Ramya Korlakai Vinayak
Ying Wang

**FACULTY ASSOCIATES**
Mark C. Allie
Eduardo Arvelo
Steven Fredette
Eric Hoffman
Joe Krachey
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