INDUSTRIAL ENGINEERING: RESEARCH, M.S.

This is a named option within the Industrial Engineering M.S. (http://guide.wisc.edu/graduate/industrial-systems-engineering/industrial-engineering-ms/)

The Department of Industrial and Systems Engineering offers this Master of Science (M.S.) industrial engineering degree with a named option in Research. This degree program takes approximately two years to complete. This program has a significant research component, giving students valuable hands-on research experience with mentoring by faculty in the Department of Industrial and Systems Engineering.

The Department of Industrial and Systems Engineering focuses on four main research areas:

Operations Research, Optimization, and Analytics (https://engineering.wisc.edu/departments/industrial-systems-engineering/research/operations-research-optimization-and-analytics/)
Health Systems Engineering (https://engineering.wisc.edu/departments/industrial-systems-engineering/research/health-systems-engineering/)
Human Factors and Ergonomics (https://engineering.wisc.edu/departments/industrial-systems-engineering/research/human-factors-and-ergonomics/)
Advanced Manufacturing and Industrial AI (https://engineering.wisc.edu/departments/industrial-systems-engineering/research/advanced-manufacturing-and-production-systems/)

All students are mentored by the world-class faculty in the industrial and systems engineering department at UW–Madison. For a list of industrial and systems engineering faculty along with faculty research interests, please visit our faculty directory. (https://directory.engr.wisc.edu/ie/faculty/) For more information on research areas see our page on research in Industrial and Systems Engineering (https://engineering.wisc.edu/departments/industrial-systems-engineering/research/).

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	December 15

GRE (Graduate Record Examinations)	Required.
English Proficiency Test	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 (https://grad.wisc.edu/apply/requirements/#english-proficiency).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

NOTE: These admissions requirements are only relevant for the M.S. research program. You can find the admissions requirements for the Human Factors and Health Systems (http://guide.wisc.edu/graduate/industrial-systems-engineering/industrial-engineering-ms/industrial-engineering-human-factors-health-systems-engineering-ms/#admissionstext) and the Systems Engineering and Analytics (http://guide.wisc.edu/graduate/industrial-systems-engineering/industrial-engineering-ms/industrial-engineering-systems-engineering-analytics-ms/#admissionstext) programs on their respective pages.

The UW–Madison graduate program in industrial and systems engineering offers students extraordinary opportunities to pursue a course of study that is customized to the student's interests and ambitions, under the auspices of the foremost experts in their field, in one of the top-ranked industrial and systems engineering departments.

The flexible graduate curricula enables students to tailor their degree program to suit their particular needs and career objectives. Concentration areas in industrial and systems engineering includes: Decision Sciences and Operations Research, Health Systems Engineering, Human Factors and Ergonomics, Manufacturing, and Product Systems and Quality Engineering. Students also have opportunities to take graduate courses in any other departments at UW–Madison, which has a comprehensive set of top-ranked graduate and professional programs.

APPLICATION DEADLINES:

- **Fall**: Dec. 15th
- **Reentry applicants:** July 15 (fall); must consult with I SY E faculty advisor prior to reapplying
- Additional reentry information (https://grad.wisc.edu/admissions/previouslyenrolled/)

APPLICATION REQUIREMENTS

Application deadlines are strictly enforced and ALL application materials including transcripts, GRE and TOEFL scores MUST be included and submitted by the application deadline.

Please note our office does not provide feedback to applications as to their potential for admission—please review both the I SY E department and Graduate School requirements for admission, and if you feel you meet the necessary criteria for applying, please do so.

1. Applicants must first meet all of the requirements of the Graduate School (https://grad.wisc.edu/acadpolicy/?policy=enrollmentrequirements).

2. Applicants must also meet department specific requirements as outlined below:
   - Bachelor's degree or equivalent
   - Mathematical Statistics course (for example STAT 312)
   - Computer Programming course
   - Three introductory courses in Industrial Engineering, such as: I SY E 313, I SY E 315, I SY E 320, I SY E 323, I SY E/PSYCH 349, I SY E 415, I SY E 417
   - The Graduate Record Examination (GRE) is required for this master's program in I SY E. Please visit here (https://www.ets.org/gre/) for more information on taking the GRE exam. **Please note:** Applicants should plan to take their exam by **December 1** to allow scores to be sent and processed.

Note: Depending on applicant background, applicants may be deficient in up to two prerequisite courses.

APPLICATION STEPS

1. **Fill out an** online application **(**https://grad.wisc.edu/apply/**) through the Graduate School website**. **(**https://grad.wisc.edu/admissions/faq/**)**
2. **List three recommenders and their contact information as part of the online application.** An email will be sent to the recommender, asking that they submit their letter online using the Graduate School's recommendation form. Applicants can log back into their online application to re-send the email request if the recommender loses the email. Letters of recommendation must be submitted electronically.
3. **Submit a** Statement of Purpose **(**https://grad.wisc.edu/prospective/prepare/statement/**) with your online application.** In this document, applicants should explain why they want to pursue further education in ISyE and discuss which UW faculty members they would be interested in doing research with during their graduate study.
4. **TOEFL Exam Information: Ask** ETS **(**https://www.ets.org/**) to submit your GRE and/or TOEFL scores to the UW–Madison Graduate School (Institution Number 1846)**. If you have your scores sent to UW–Madison, they will be available online to all departments to which you have applied. The institution code, therefore, is the only number needed. For more information please visit the Graduate School Requirements **(**https://grad.wisc.edu/admissions/requirements/**)** page. Please note: Exam information must be valid at start date of the semester that you are applying for (nonexpired).
5. GRE Exam Information: **(**https://www.ets.org/gre/**)** The IE graduate program requires the GRE exam be taken by prospective students as part of the application. N**ote there are no specific scoring guidelines for the exam** as the GRE is only one part of consideration for admission into the program. Please note: Exam information must be valid at start date of the semester that you are applying for (nonexpired).
6. **Electronically submit one copy of your official transcript with your application.** Official transcripts of all undergraduate and previous graduate work are required. Unofficial copies of transcripts will be accepted for review, but underline official copies are required for admitted students. Please do not send transcripts or any other application materials to the Graduate School or gradadmission@engr.wisc.edu.
7. **Upload your resume in your application**.
8. **Pay the Application Fee:** Submission must be accompanied by the one-time application fee. It is non-refundable and can be paid by credit card (Master Card or VISA) or debit/ATM. By state law, this fee can only be waived or deferred through the conditions outlined here by the Graduate School. (https://grad.wisc.edu/apply/fee-grant/)

NOTE: PLEASE DO NOT SEND MATERIALS/DOCUMENTS TO THE ISyE DEPARTMENT OR GRADUATE SCHOOL UNTIL YOU ARE RECOMMENDED FOR ADMISSIONS. ALL DOCUMENTS SHOULD BE UPLOADED WITH YOUR APPLICATION.

QUESTIONS?

Check out the Admissions FAQ (https://grad.wisc.edu/apply/) or contact us at iegradadmission@engr.wisc.edu.

NOTE: PLEASE DO NOT SEND MATERIALS/DOCUMENTS TO THE I SY E DEPARTMENT OR GRADUATE SCHOOL UNTIL YOU ARE RECOMMENDED FOR ADMISSIONS. ALL DOCUMENTS SHOULD BE UPLOADED WITH YOUR APPLICATION.
Check out the Admissions FAQ or contact us at iegradadmission@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
GRADUATE ASSISTANTSHIPS

For information specific to graduate assistantships within the Department of Industrial and Systems Engineering, please consult the department's graduate program handbook (https://engineering.wisc.edu/isye-grad-handbook/).

FINANCIAL ASSISTANCE

If you choose to attend UW–Madison and plan to pursue funding on your own, the following sites could be very helpful:

- Graduate School Funding Resources (https://grad.wisc.edu/studentfunding/prospective/)
- Graduate School Costs and Funding (https://grad.wisc.edu/studentfunding/currentstudents/)

ADDITIONAL RESOURCES
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 UW-Madison financial aid here. (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/)

<table>
<tr><td>Other Grade Requirements</td><td>Grades of C and D received by a candidate in any graduate course will not be counted as credit toward the degree. These grades will be counted in the graduate GPA.</td></tr>
<tr><td>Assessments and Examinations</td><td>None.</td></tr>
<tr><td>Language Requirements</td><td>No language requirements.</td></tr>
</table>

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	No

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	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)).
Overall Graduate GPA Requirement	3.00 GPA required. This program follows the Graduate School's GPA Requirement policy (https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/)).

REQUIRED COURSES

Code	Title	Credits
I SY E courses [1]		18
I SY E 790 or I SY E 890	Master's Research and Thesis Pre-Dissertator's Research	3-6
Electives with advisor approval		6-9
Total Credits		30

[1]

I SY E 699 Advanced Independent Study may not be used to meet degree credit requirements. Students may count up to 3 credits of I SY E 702 Graduate Cooperative Education Program

[2]

At most 3 credits of I SY E 702 Graduate Cooperative Education Program, may be applied to meet the credit requirements.

Students may choose to specialize in one of the below research areas. The program recommends working with your faculty advisors to answer any questions and to form a plan of study.

Operations Research, Optimization, and Analytics [1]
Highly Recommended Courses:

Code	Title	Credits
I SY E 516	Introduction to Decision Analysis	3
I SY E/COMP SCI/ E C E 524	Introduction to Optimization	3
I SY E/COMP SCI/ MATH/STAT 525	Linear Optimization	3
I SY E 620	Simulation Modeling and Analysis	3
I SY E 624	Stochastic Modeling Techniques	3

Other Suggested Courses:

Code	Title	Credits
I SY E 412	Fundamentals of Industrial Data Analytics	3
I SY E/COMP SCI/ MATH 425	Introduction to Combinatorial Optimization	3
I SY E/M E 512	Inspection, Quality Control and Reliability	3
I SY E 517	Decision Making in Health Care	3
I SY E 575	Introduction to Quality Engineering	3
I SY E 603	Special Topics in Engineering Analytics and Operations Research	1-3
I SY E 612	Information Sensing and Analysis for Manufacturing Processes	3
I SY E 604	Special Topics in Manufacturing and Supply Chain Management	1-3

Code	Title	Credits
I SY E/MATH/OTM/ STAT 632	Introduction to Stochastic Processes	3
I SY E 645	Engineering Models for Supply Chains	3

1

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

Health Systems Engineering [1]
Highly Recommended Courses:

Code	Title	Credits
I SY E 417	Health Systems Engineering	3
I SY E 517	Decision Making in Health Care	3
I SY E 606	Special Topics in Healthcare Systems Engineering	1–3
I SY E/ POP HLTH 703	Quality of Health Care: Evaluation and Assurance	1–3

Other Suggested Courses:

Code	Title	Credits
I SY E 412	Fundamentals of Industrial Data Analytics	3
I SY E 515	Engineering Management of Continuous Process Improvement	3
I SY E 516	Introduction to Decision Analysis	3
I SY E 575	Introduction to Quality Engineering	3
I SY E/ PHARMACY 608	Safety and Quality in the Medication Use System	3
I SY E 601	Special Topics in Industrial Engineering	1–3
I SY E 602	Special Topics in Human Factors [2]	3
I SY E 603	Special Topics in Engineering Analytics and Operations Research	1–3
I SY E 615	Production Systems Control	3
I SY E/B M I 617	Health Information Systems	3
I SY E 620	Simulation Modeling and Analysis	3
I SY E 624	Stochastic Modeling Techniques	3
I SY E/M E 643	Performance Analysis of Manufacturing Systems	3
I SY E/M H R 729	Behavioral Analysis of Management Decision Making	3
I SY E 555	Human Performance and Accident Causation	3
I SY E/ POP HLTH 875	Cost Effectiveness Analysis in Health and Healthcare	3
B M I/ COMP SCI 576	Introduction to Bioinformatics	3
B M I 773	Clinical Research Informatics	3
B M I/ COMP SCI 776	Advanced Bioinformatics	3
OTM 753	Healthcare Operations Management	3
ED PSYCH 711	Current Topics in Educational Psychology	1–3

Code	Title	Credits
NURSING 761	Health Program Planning, Evaluation, and Quality Improvement	3
POP HLTH/ SOC 797	Introduction to Epidemiology	3
POP HLTH 876	Measuring Health Outcomes	3
PSYCH 610	Design and Analysis of Psychological Experiments I	4
PSYCH 710	Design and Analysis of Psychological Experiments II	4
STAT/F&W ECOL/ HORT 571	Statistical Methods for Bioscience I	4
STAT/B M I 641	Statistical Methods for Clinical Trials	3

1

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

2

Topics vary for this course. Obtain advance approval from your faculty advisor.

Human Factors and Ergonomics [1]
Highly Recommended Courses:

Code	Title	Credits
I SY E/COMP SCI/ DS 518	Wearable Technology	3
I SY E/PSYCH 549	Human Factors Engineering	3
I SY E 552	Human Factors Engineering Design and Evaluation	3
I SY E 555	Human Performance and Accident Causation	3
I SY E 562	Human Factors of Data Science and Machine Learning	3
I SY E/B M E 564	Occupational Ergonomics and Biomechanics	3
I SY E 601	Special Topics in Industrial Engineering [2]	1–3
I SY E 602	Special Topics in Human Factors	3
I SY E/B M E 662	Design and Human Disability and Aging	3
I SY E 699	Advanced Independent Study	1–5
I SY E/PSYCH 854	Special Topics in Organization Design	1–3
I SY E/PSYCH 859	Special Topics in Human Factors Engineering	1–3
I SY E 961	Graduate Seminar in Industrial Engineering	1–3
CIV ENGR 679	Special Topics in Transportation and City Planning	3

Various courses count as "Tools and Methods." The HFE faculty group updates the list of "Tools and Methods" courses and advisors decide which set of courses are appropriate for each student. The following are categories of "Tools and Methods": Research Methods, Statistics,

Qualitative Research, Biomechanics Methods, and Psychology. Students can work with their faculty advisor for non-I SY E course work.

1

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

2

Topics vary for this course. Obtain advance approval from your faculty advisor.

Advanced Manufacturing and Industrial AI [1]
Highly Recommended Courses:

Code	Title	Credits
I SY E 412	Fundamentals of Industrial Data Analytics	3
I SY E 415	Introduction to Manufacturing Systems, Design and Analysis	3
I SY E/M E 510	Facilities Planning	3
I SY E/M E 512	Inspection, Quality Control and Reliability	3
I SY E 515	Engineering Management of Continuous Process Improvement	3
I SY E 575	Introduction to Quality Engineering	3
I SY E 601	Special Topics in Industrial Engineering [2]	1-3
I SY E 603	Special Topics in Engineering Analytics and Operations Research	1-3
I SY E 604	Special Topics in Manufacturing and Supply Chain Management	1-3
I SY E 605	Computer Integrated Manufacturing	3
I SY E 612	Information Sensing and Analysis for Manufacturing Processes	3
I SY E 615	Production Systems Control	3
I SY E/M E 641	Design and Analysis of Manufacturing Systems	3
I SY E/M E 643	Performance Analysis of Manufacturing Systems	3
I SY E 645	Engineering Models for Supply Chains	3
STAT/M E 424	Statistical Experimental Design	3

1

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

2

Topics vary for this course. Obtain advance approval from your faculty advisor.

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
This program follows the Graduate School's policy for Satisfying Requirements with Prior Graduate Coursework from Other Institutions. (https://policy.wisc.edu/library/UW-1216/)

UW–Madison Undergraduate
Credits are not allowed for the graduate residence credit requirement, but students can transfer up to 6 credits numbered 300 or above toward the graduate degree credit requirement. The 50% graduate coursework requirement can only be met by courses numbered 700 or above. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

UW–Madison University Special
This program follows the Graduate School's policy for Transfer from UW–Madison University Special Student Career at UW–Madison. (https://policy.wisc.edu/library/UW-1216/)

PROBATION
This program follows the Graduate School's Probation policy. (https://policy.wisc.edu/library/UW-1217/)

ADVISOR / COMMITTEE
- Per Graduate School policy, (https://policy.wisc.edu/library/UW-1232/) every graduate student MUST have a faculty advisor. Graduate students should always seek advice from their advisor and other faculty in their interest area prior to enrolling for courses.
- If pursuing a thesis option, students should discuss forming a committee with their advisor, if needed. The Graduate School's Committees policy (https://policy.wisc.edu/library/UW-1201/) must be followed.

CREDITS PER TERM ALLOWED
Enrollment of 12 credits or less recommended. (Full time status considered 8-12 credits).

TIME LIMITS
This program follows the Graduate School's Time Limits policy. (https://policy.wisc.edu/library/UW-1221/)

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)

Grievance Procedures: Industrial and Systems Engineering

If a graduate student feels unfairly treated or aggrieved by faculty, staff, or another student, the University offers several avenues to resolve the grievance. Student's concerns about unfair treatment are best handled directly with the person responsible for the objectionable action. If the student is uncomfortable making direct contact with the individual(s) involved, they should contact the advisor or the person in charge of the unit where the action occurred (program or department chair, section chair, lab manager, etc). Many departments and schools/colleges have established specific procedures for handling such situations; check their web pages and published handbooks for information. If such procedures exist at the local level, these should be investigated first. For more information, see the College of Engineering Policies and Procedures (https://www.engr.wisc.edu/academics/student-services/academic-advising/policies-and-procedures/). The Assistant Dean for Graduate Affairs (engr-dean-graduateaffairs@engr.wisc.edu) provides overall leadership for graduate education in the College of Engineering (CoE), and is a point of contact for graduate students who have concerns about education, mentoring, research, or other difficulties.

Procedures for handling graduate student grievances against ISyE faculty, staff, or students:

1. The student is encouraged to speak first with the person toward whom the grievance is directed to see if a situation can be resolved at this level.

2. Should a satisfactory resolution not be achieved, the student should contact the Associate Chair for Graduate Affairs, to discuss the grievance. The Associate Chair will facilitate problem resolution through informal channels and facilitate any complaints or issues of

students. The first attempt is to help students informally address the grievance prior to any formal complaint. Students are also encouraged to talk with their faculty advisors regarding concerns or difficulties, if necessary. University resources for sexual harassment, discrimination, disability accommodations, and other related concerns can be found on the UW Office of Compliance website (https://compliance.wisc.edu/).

3. If the issue is not resolved to the student's satisfaction, the student can submit the grievance to the Grievance Advisor, which may be either the Associate Chair for Graduate Affairs or the Department Chair, as chosen by the student. The grievance should be submitted in writing, within 60 calendar days of the alleged unfair treatment.

4. On receipt of a written complaint, the Grievance Advisor will form a faculty committee that will review the complaint and gather further information as necessary from the filer of the complaint and other parties involved (including the party toward whom the complaint is directed).

5. The faculty committee will determine a decision regarding the grievance. The Grievance Advisor will report on the action taken by the committee in writing to both the student and the party toward whom the complaint was directed within 15 working days from the date the complaint was received.

6. At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal to the College of Engineering Assistant Dean for Graduate Affairs (engr-dean-graduateaffairs@engr.wisc.edu). Either party has 10 working days to file a written appeal to the School/College.

7. Documentation of the grievance will be stored for at least 7 years. Significant grievances that set a precedent will be stored indefinitely.

The Graduate School has procedures for students wishing to appeal a grievance decision made at the school/college level. These policies are described in the Graduate School Academic Policies and Procedures - Grievances & Appeals (https://grad.wisc.edu/documents/grievances-and-appeals/).

OTHER

Continuing to the PhD Program

- Admission and successful completion of the M.S. program does not imply admittance to the ISyE PhD program. Students wishing to take the PhD qualifying exam must first be admitted to the PhD program.
- ISyE research-option M.S. students wishing to continue to the PhD program must have their admission to the PhD program recommended by an ISyE faculty member with tenure home in ISyE who is willing to serve as the student's PhD advisor. The admission of such students will then be evaluated by the associate chair for graduate affairs or admissions committee using the same evaluation process as for all PhD program applicants.
- To apply to the PhD program, log in to MyUW, click on Graduate Student Portal, and then click on Add/Change Programs. Select the information for the program for which you are applying.

For additional information, please contact iegradadmission@engr.wisc.edu.

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.

PROGRAM RESOURCES

THE INDIVIDUAL DEVELOPMENT PLAN (HTTPS://GRAD.WISC.EDU/PD/IDP/)

An Individual Development Plan helps with self-assessment, planning, and communication:

- An IDP can help you communicate your professional development and career planning needs and intentions to others including your mentor, which can lead to helpful advice and resources.
- You can use the IDP to make sure you and your mentor's expectations are clearly outlined and in agreement so that there are no big surprises, particularly at the end of your training.
- The current job market is challenging and research has shown that individuals who perform structured career planning achieve greater career success and satisfaction.

The onus to engage in the IDP process is on you – although your mentor, PI, or others may encourage and support you in doing so. The IDP itself remains private to you, and you choose which parts to share with which mentors. Through the IDP process, you may decide to identify various mentors to whom you can go for expertise and advice.

ENGINEERING CAREER SERVICES (HTTPS://ECS.WISC.EDU/)

Julie Rae, *Assistant Director for Graduate Student Career Services*

GRADUATE students in all Engineering programs

- Resumes & Cover Letters https://ecs.wisc.edu/students/resumes-and-cover-letters/
- Job Search Strategies
- Job Offers & Negotiation https://ecs.wisc.edu/students/offers-and-negotiation/
- CPT for Graduate Students https://ecs.wisc.edu/students/co-op-and-internship/
- Student appointments: Click Here (http://go.wisc.edu/ecs-grad-appt/) to schedule an appointment with ECS.

Employer Recruitment List for Industrial Engineering Students: https://ecs.wiscweb.wisc.edu/wp-content/uploads/sites/86/2017/03/IE-Employer-Recruitment-List-17-18.pdf

UW WRITING CENTER (HTTP://WRITING.WISC.EDU/)

Location: 6171 Helen C. White Hall

Tel: (608) 263-1992

The UW Writing Center provides free of charge face-to-face and online consultations that focus on a number of different writing scenarios (i.e. drafts of course papers, resumes, reports, application essays, cover letters, theses, etc). Writing Center instructors will not edit or proofread papers. Instead, their goal is to teach students to edit and proofread on their own in order to become a better, more confident writer.

PEOPLE

PROFESSORS

```
Laura Albert (Chair)
Oguzhan Alagoz
John D. Lee
Jeffrey Linderoth
Kaibo Liu
James Luedtke
Ranjana Mehta
Robert Radwin
Raj Veeramani
```

Doug Wiegmann
Shiyu Zhou

ASSOCIATE PROFESSORS

Alberto Del Pia

ASSISTANT PROFESSORS

```
Justin J. Boutilier
Tony McDonald
Carla Michini
Yonatan Mintz
Hantang Qin
Xin Wang
Qiaomin Xie
Gabriel Zayas-Caban
```

TEACHING PROFESSORS

Amanda Smith

TEACHING FACULTY

```
Hannah Silber
Sinan Tas
Tina Xu
Charlene Yauch
```

LECTURERS

Terry Mann

UNDERGRADUATE ADVISORS

```
Michele Crandell
Missy Moreau
```

GRADUATE PROGRAM COORDINATOR

Pam Peterson

See also Industrial and Systems Engineering Faculty Directory (http://directory.engr.wisc.edu/ie/faculty/).