

# INDUSTRIAL ENGINEERING: RESEARCH, MS

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

The Department of Industrial and Systems Engineering offers this Master of Science (MS) 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

### 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 1                                 |
| Spring Deadline | This program does not admit in the spring. |
| Summer Deadline | December 1                                 |

|                                    |   |
|------------------------------------|---|
| GRE (Graduate Record Examinations) | Required.   |
| 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: <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> . |
| Other Test(s) (e.g., GMAT, MCAT)   | n/a   |
| Letters of Recommendation Required | 3   |

**NOTE: These admissions requirements are only relevant for the MS-Industrial Engineering-Research named option.** 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/#admissiontext>) and the Systems Engineering and Analytics (<http://guide.wisc.edu/graduate/industrial-systems-engineering/industrial-engineering-ms/industrial-engineering-systems-engineering-analytics-ms/#admissiontext>) named options on their respective pages.

This program offers admitted applicants 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 enable admitted applicants 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. Admitted applicants 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 REQUIREMENTS

Application deadlines are strictly enforced and ALL application materials including transcripts, English proficiency 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 department and Graduate School requirements for admission, and if you feel you meet the necessary criteria for applying, please do so.

- Applicants must first meet all of the requirements of the Graduate School (<https://grad.wisc.edu/acadpolicy/?policy=enrollmentrequirements>).
- 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. 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. **English Proficiency Scores:** International degree-seeking applicants must prove English proficiency using the Graduate School's requirements (<https://grad.wisc.edu/apply/requirements/>). 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 program requires the GRE exam be taken by prospective students as part of the application. **Note 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 unofficial transcript with your application.** If admitted, official transcripts of all undergraduate and previous graduate work are required. Unofficial copies of transcripts will be accepted for review. Please do not send transcripts or any other application materials to the Graduate School or [gradadmission@engr.wisc.edu](mailto: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 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](mailto:iegradadmission@engr.wisc.edu).

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

**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 four credits during the fall and spring semesters and two credits during the summer. Private loans are also available. Learn more about UW (<https://financialaid.wisc.edu>)–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/>)

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), 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. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <a href="https://policy.wisc.edu/library/UW-1244">https://policy.wisc.edu/library/UW-1244</a> ( <a href="https://policy.wisc.edu/library/UW-1244/">https://policy.wisc.edu/library/UW-1244/</a> ). |
| Overall Graduate GPA Requirement        | 3.00 GPA required.<br>Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <a href="https://policy.wisc.edu/library/UW-1203">https://policy.wisc.edu/library/UW-1203</a> ( <a href="https://policy.wisc.edu/library/UW-1203/">https://policy.wisc.edu/library/UW-1203/</a> ).                                 |
| Other Grade Requirements                | 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.  |
| Assessments and Examinations            | None.  |
| Language Requirements                   | No language requirements.  |

## REQUIRED COURSES

| Code                            | Title                        | Credits   |
|---------------------------------|------------------------------|-----------|
| ISY E courses <sup>1</sup>      |                              | 18        |
| ISY E 790                       | Master's Research and Thesis | 3-6       |
| or ISY E 890                    | Pre-Dissertator's Research   |           |
| Electives with advisor approval |                              | 6-9       |
| <b>Total Credits</b>            |                              | <b>30</b> |

<sup>1</sup> ISY E 699 Advanced Independent Study may not be used to meet degree credit requirements. Students may count up to 3 credits of ISY E 702 Graduate Cooperative Education Program

<sup>2</sup> At most 3 credits of ISY 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 <sup>1</sup>

| Code                              | Title                             | Credits |
|-----------------------------------|-----------------------------------|---------|
| <b>Highly Recommended Courses</b> |                                   |         |
| ISY E 516                         | Introduction to Decision Analysis | 3       |
| ISY E/COMP SCI/ E C E 524         | Introduction to Optimization      | 3       |
| ISY E/COMP SCI/ MATH/STAT 525     | Linear Optimization               | 3       |
| ISY E 620                         | Simulation Modeling and Analysis  | 3       |
| ISY E 624                         | Stochastic Modeling Techniques    | 3       |

| Code                           | Title   | Credits |
|--------------------------------|---|---------|
| <b>Other Suggested Courses</b> |   |         |
| ISY E 412                      | Fundamentals of Industrial Data Analytics                       | 3       |
| ISY E/COMP SCI/ MATH 425       | Introduction to Combinatorial Optimization                      | 3       |
| ISY E/M E 512                  | Inspection, Quality Control and Reliability                     | 3       |
| ISY E 517                      | Decision Making in Health Care                                  | 3       |
| ISY E 575                      | Introduction to Quality Engineering                             | 3       |
| ISY E 603                      | Special Topics in Engineering Analytics and Operations Research | 1-3     |
| ISY E 612                      | Information Sensing and Analysis for Manufacturing Processes    | 3       |
| ISY E 604                      | Special Topics in Manufacturing and Supply Chain Management     | 1-3     |
| ISY E/MATH/OTM/ STAT 632       | Introduction to Stochastic Processes                            | 3       |
| ISY E 645                      | Engineering Models for Supply Chains                            | 3       |

<sup>1</sup> 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 <sup>1</sup>

| Code                              | Title  | Credits |
|-----------------------------------|--|---------|
| <b>Highly Recommended Courses</b> |  |         |
| ISY E 417                         | Health Systems Engineering                       | 3       |
| ISY E 517                         | Decision Making in Health Care                   | 3       |
| ISY E 606                         | Special Topics in Healthcare Systems Engineering | 1-3     |
| ISY E/ POP HLTH 703               | Quality of Health Care: Evaluation and Assurance | 1-3     |

| Code                           | Title  | Credits |
|--------------------------------|--|---------|
| <b>Other Suggested Courses</b> |  |         |
| ISY E 412                      | Fundamentals of Industrial Data Analytics                | 3       |
| ISY E 515                      | Engineering Management of Continuous Process Improvement | 3       |

|                            |   |     |
|----------------------------|---|-----|
| ISYE 516                   | Introduction to Decision Analysis                               | 3   |
| ISYE 575                   | Introduction to Quality Engineering                             | 3   |
| ISYE/<br>PHARMACY 608      | Safety and Quality in the Medication Use System                 | 3   |
| ISYE 601                   | Special Topics in Industrial Engineering                        | 1-3 |
| ISYE 602                   | Special Topics in Human Factors <sup>2</sup>                    | 3   |
| ISYE 603                   | Special Topics in Engineering Analytics and Operations Research | 1-3 |
| ISYE 615                   | Production Systems Control                                      | 3   |
| ISYE/BMI 617               | Health Information Systems                                      | 3   |
| ISYE 620                   | Simulation Modeling and Analysis                                | 3   |
| ISYE 624                   | Stochastic Modeling Techniques                                  | 3   |
| ISYE/ME 643                | Performance Analysis of Manufacturing Systems                   | 3   |
| ISYE/MHR 729               | Behavioral Analysis of Management Decision Making               | 3   |
| ISYE 555                   | Human Performance and Accident Causation                        | 3   |
| ISYE/<br>POP HLTH 875      | Cost Effectiveness Analysis in Health and Healthcare            | 3   |
| BMI/<br>COMP SCI 576       | Introduction to Bioinformatics                                  | 3   |
| BMI 773                    | Clinical Research Informatics                                   | 3   |
| BMI/<br>COMP SCI 776       | Advanced Bioinformatics   | 3   |
| OTM 753                    | Healthcare Operations Management                                | 3   |
| ED PSYCH 711               | Current Topics in Educational Psychology                        | 1-3 |
| NURSING 761                | Health Program Planning, Evaluation, and Quality Improvement    | 3   |
| POP HLTH/<br>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/<br>HORT 571 | Statistical Methods for Bioscience I                            | 4   |
| STAT/BMI 641               | Statistical Methods for Clinical Trials                         | 3   |

<sup>1</sup> 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.

<sup>2</sup> Topics vary for this course. Obtain advance approval from your faculty advisor.

### Human Factors and Ergonomics <sup>1</sup>

| Code                              | Title                     | Credits |
|-----------------------------------|---------------------------|---------|
| <b>Highly Recommended Courses</b> |                           |         |
| ISYE/COMP SCI/<br>DS 518          | Wearable Technology       | 3       |
| ISYE/PSYCH 549                    | Human Factors Engineering | 3       |

|                |   |     |
|----------------|---|-----|
| ISYE 552       | Human Factors Engineering Design and Evaluation       | 3   |
| ISYE 555       | Human Performance and Accident Causation              | 3   |
| ISYE 562       | Human Factors of Data Science and Machine Learning    | 3   |
| ISYE/BME 564   | Occupational Ergonomics and Biomechanics              | 3   |
| ISYE 601       | Special Topics in Industrial Engineering <sup>2</sup> | 1-3 |
| ISYE 602       | Special Topics in Human Factors                       | 3   |
| ISYE/BME 662   | Design and Human Disability and Aging                 | 3   |
| ISYE 699       | Advanced Independent Study                            | 1-5 |
| ISYE/PSYCH 854 | Special Topics in Organization Design                 | 1-3 |
| ISYE/PSYCH 859 | Special Topics in Human Factors Engineering           | 1-3 |
| ISYE 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-ISYE course work.

<sup>1</sup> 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.

<sup>2</sup> Topics vary for this course. Obtain advance approval from your faculty advisor.

### Advanced Manufacturing and Industrial AI <sup>1</sup>

| Code                              | Title   | Credits |
|-----------------------------------|---|---------|
| <b>Highly Recommended Courses</b> |   |         |
| ISYE 412                          | Fundamentals of Industrial Data Analytics                       | 3       |
| ISYE 415                          | Introduction to Manufacturing Systems, Design and Analysis      | 3       |
| ISYE/ME 510                       | Facilities Planning   | 3       |
| ISYE/ME 512                       | Inspection, Quality Control and Reliability                     | 3       |
| ISYE 515                          | Engineering Management of Continuous Process Improvement        | 3       |
| ISYE 575                          | Introduction to Quality Engineering                             | 3       |
| ISYE 601                          | Special Topics in Industrial Engineering <sup>2</sup>           | 1-3     |
| ISYE 603                          | Special Topics in Engineering Analytics and Operations Research | 1-3     |
| ISYE 604                          | Special Topics in Manufacturing and Supply Chain Management     | 1-3     |
| ISYE 605                          | Computer Integrated Manufacturing                               | 3       |

|                |  |   |
|----------------|--|---|
| IS Y E 612     | Information Sensing and Analysis for Manufacturing Processes | 3 |
| IS Y E 615     | Production Systems Control                                   | 3 |
| IS Y E/M E 641 | Design and Analysis of Manufacturing Systems                 | 3 |
| IS Y E/M E 643 | Performance Analysis of Manufacturing Systems                | 3 |
| IS Y E 645     | Engineering Models for Supply Chains                         | 3 |
| STAT/M E 424   | Statistical Experimental Design                              | 3 |

<sup>1</sup> 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.

<sup>2</sup> Topics vary for this course. Obtain advance approval from your faculty advisor.

## 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

Credits are not allowed for the graduate residence credit requirement, but students can transfer up to 6 credits from another institution or numbered 300 or above from the undergraduate career completed at UW-Madison toward the graduate degree credit requirement. Transfer credits from other institutions must be equivalent to the rigor of UW-Madison courses numbered 300 and above. The 50% graduate coursework requirement can only be met by courses numbered 700 or above. 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

Refer to the Graduate School: Transfer Credits for Prior Coursework (<https://policy.wisc.edu/library/UW-1216/>) policy.

### PROBATION

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

### ADVISOR / COMMITTEE

Per the Graduate School: Advisor (<https://policy.wisc.edu/library/UW-1232/>) policy, 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. Refer to the Graduate School: Committees (Doctoral/Master's/MFA) (<https://policy.wisc.edu/library/UW-1201/>) policy.

### CREDITS PER TERM ALLOWED

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

### TIME LIMITS

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://employee disabilities.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/departamental 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](mailto: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](mailto:engr-dean-graduateaffairs@engr.wisc.edu)).

[graduateaffairs@engr.wisc.edu](mailto: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 MS program does not imply admittance to the PhD program. Students wishing to take the PhD qualifying exam must first be admitted to the PhD program.
- MS-Industrial and Systems Engineering, Research named option students wishing to continue to the PhD program must have their admission to the PhD program recommended by an Industrial and Systems Engineering faculty member with tenure home in the department 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](mailto:iegradadmission@engr.wisc.edu).

## 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.

### PROGRAM RESOURCES

**The Individual Development PI (<https://grad.wisc.edu/pd/idp/>)an (<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

**Phone:** (608) 263-1992

The UW Writing Center provides free 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 better, more confident writers.

## PEOPLE

## PEOPLE PROFESSORS

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

Doug Wiegmann  
Shiyu Zhou

## ASSOCIATE PROFESSORS

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## UNDERGRADUATE ADVISORS

Michele Crandell  
Missy Moreau

Jamie Uthphall

## GRADUATE PROGRAM COORDINATOR

Pam Peterson

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