2019-2020 School of MIME Graduate Student Handbook

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School of Mechanical, Industrial, and Manufacturing Engineering

WELCOME

Welcome to Oregon State University (OSU) and the School of Mechanical, Industrial, and Manufacturing Engineering (MIME). This handbook is intended to familiarize you with our School and answer some of the questions you might have as a new graduate student here at OSU. If, after reading the contents, you have unanswered questions, please feel free to ask for help. The staff, faculty, and fellow graduate students in the School are available and willing to help solve any issues as they arise. Additional information on deadlines, procedures, and requirements is provided by the current Oregon State University Graduate Catalog and as well as the Graduate School’s New Graduate Student Guide which may be obtained from the Graduate School: [http://oregonstate.edu/dept/grad_school/](http://oregonstate.edu/dept/grad_school/).

Graduate students in MIME are responsible for complying with the rules of the University, the Graduate School, the College of Engineering (COE), and the School of MIME. In some instances, the requirements of the School of MIME, or even for a particular program within the School, are more restrictive than those of the Graduate School are. In such cases, the requirements specified in this document will apply.

The MIME Graduate Student Services Team faculty hopes that your time at OSU will be rewarding, memorable, and fruitful.

**MIME Graduate Student Services Team**

- **Stephanie Grigar**, MIME Graduate Program Coordinator
- **Lynn Paul**, Head Advisor, MIME Graduate Programs
- **David Porter**, Professor of Industrial and Manufacturing Engineering and MIME Associate School Head for Graduate Programs
- **Nicole Thompson**, MIME Operations Manager

GRADUATE SCHOOL

What is the Graduate School?

- The Graduate School at OSU assures quality and consistent interpretation of Graduate Council policies related to graduate education across all programs. The OSU Catalog is the official source for information regarding OSU graduate education policy and procedures. It is the student's responsibility to refer to the catalog for this information.

- The Graduate School supports students throughout the academic lifecycle, from admissions to degree completion.

- The Graduate Schools offers an array of professional development opportunities specific to the success of graduate students. Topics covered in these offerings include research and ethics, teaching and facilitation, writing and communication, leadership and management, career skills, grad life and wellness.
# FACULTY, STAFF and RESOURCE CONTACTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Email</th>
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</tbody>
</table>

Link to a list if all MIME Research Faculty: [https://mime.oregonstate.edu/faculty-and-staff/research-faculty](https://mime.oregonstate.edu/faculty-and-staff/research-faculty)

Link to a list if all MIME Professional Faculty and Staff: [https://mime.oregonstate.edu/faculty-and-staff/staff](https://mime.oregonstate.edu/faculty-and-staff/staff)

Link to a list if all MIME Instructors: [https://mime.oregonstate.edu/faculty-and-staff/instructors](https://mime.oregonstate.edu/faculty-and-staff/instructors)

Link to a list if MIME’s Research Laboratories: [https://mime.oregonstate.edu/facilities/research-labs](https://mime.oregonstate.edu/facilities/research-labs)
GETTING SITUATED

The main office for the School of Mechanical, Industrial, and Manufacturing Engineering (MIME) is 204 Rogers Hall with our Graduate Student Services offices located in 221 Dearborn Hall. MIME Faculty, staff and instructor offices, research and teaching laboratories, and graduate student offices/desk spaces are located across a number of buildings. On the OSU main campus in Corvallis, our primary buildings are Rogers Hall, Dearborn Hall, Batcheller Hall, Covell Hall, and Graf Hall. At 1110 NE Circle Blvd., on HP’s campus in Corvallis, is OSU’s Advanced Technology and Manufacturing Institute (ATAMI), and in Bend, Oregon, on the OSU-Cascades campus, our faculty can be found in Tykeson Hall.

NEW GRADUATE STUDENT ORIENTATION

MIME holds new student orientation sessions in mid-September, prior to fall term classes each year. Orientation will draw attention to some of the major components of this manual and is required for all incoming students. Students who started their graduate programs during any term since the prior fall term are encouraged to attend the orientation.

OSU’s STUDENT CODE OF CONDUCT

All students must read and adhere to OSU’s Student Code of Conduct (https://studentlife.oregonstate.edu/studentconduct).

ONID ACCOUNTS

ONID is your OSU Network Identification (ID). Every student has an ONID account and must activate their ONID account to register for classes. To activate your ONID account, go to http://onid.oregonstate.edu and choose “Sign Up For ONID” in the upper-left hand column. ONID Email is the official communication link that the university uses to communicate with students. Your ONID username and password should be used to access email, online course materials, grades, and financial accounts and can be accessed through MyOSU.

The ONID Helpdocs website (http://oregonstate.edu/helpdocs/accounts/onid-osu-network-id) provides support documentation and video tutorials.

The OSU Computer Helpdesk, 541-737-3474, provides phone support for ONID.

OSU ID CARD

All OSU students may obtain a student identification card.

Corvallis campus students must visit the ID Center in Memorial Union, 103, after registering for classes at OSU. Photo identification is required (state issued driver’s license or ID, passport, or military ID). The OSU ID card is your official identification for using campus services, facilities (door access) and activities, and is valid as long as you are registered for classes. It is scanned at many locations to verify registration. Your OSU ID card is your meal card if you live in university housing.
**MyCard** is the online card office where students can submit a digital photo of themselves for their initial ID card, view their OSU ID card balance and past card transactions, add money to their OSU Orange Cash or Orange Rewards account, set up "Donors" (contributors other than themselves), and deactivate or reactivate their lost OSU ID card. OSU Card Cash and Orange Rewards are the campus debit accounts used with your ID card for copies at the library and purchasing food on campus. Card Cash and Orange Rewards are separate from your resident hall meal plan. You can add money to your OSU Card Cash or Orange Rewards at the ID Center or online at [http://mycard.oregonstate.edu](http://mycard.oregonstate.edu). See this website for more information on Orange Rewards, a discount debit plan.

**TUITION BILLS**

Students are sent an email to their ONID email account when their billing statement is ready to view, and they can then view their eBill statement online at [http://mybill.oregonstate.edu](http://mybill.oregonstate.edu). All billing for currently enrolled students is processed electronically through eBill on the fifth day of each month.

Unpaid balances as of the first day of the month following an eBill statement are considered past due, and they will be assessed interest at the rate of 1% per month (12% APR). Students are financially responsible for all courses for which they register. Students are responsible for paying fees by the deadline even if they do not receive a bill.

**BUILDING ACCESS**

**KEYS**

Graduate students may be granted the authority to carry building and lab keys. All requests for keys must be supported by an academic advisor, usually your major professor. Key forms may be picked up and completed forms should be returned to the MIME main office (Rogers 204) from MIME’s Operations Manager. Once your request has been processed, you’ll receive an e-mail informing you that you may pick up your key(s) at the Key Shop, at which time you must present your student ID. The Key Shop is located behind Kerr Administration Building, between McAlexander Fieldhouse and the Facilities Shops. It is open Monday - Friday, 1100 – 1500.

Key security is very important for everyone’s safety. It is imperative that any loss of keys are reported immediately to Nicole Thompson, MIME’s Operations Manager, in MIME’s main office (Rogers 204). Please exercise the utmost care in the use of your keys. Under no circumstances should you lend your keys to other students or visitors.

**AFTER-HOURS PASSES**

Campus Security patrols all buildings periodically outside of building open hours. Anyone without an [After Hours Pass](#) and valid photo ID will be required to leave the building. Office and laboratory doors and windows are to be kept closed and locked when not occupied. Security patrols will lock any open,
vacant rooms. Do not let anyone into the building after hours. Individuals who are authorized to be in the building after hours are issued appropriate access codes and/or keys as well as After-Hours Passes. Anyone abusing this system will have their After-Hours Pass revoked.

After-Hours Passes may be obtained from Nicole Thompson, MIME’s Operations Manager, from the MIME main office (Rogers 204). For the after-hours passes, your major advisor will need to send Nicole an email approving the pass and also letting me know for which building(s) they needed.

Passes change color at the beginning of each academic year. You must obtain a new pass each year or risk being escorted from the buildings.

GRADUATE STUDENT OFFICES/DESKS

MIME graduate student offices/desks are located throughout buildings we occupy. Your research advisor assigns offices/desk space. Space is limited; therefore, not all students are guaranteed individual desk space nor a computer. Students on graduate research appointments will be given preference (PhD priority), with remaining students placed as space permits. Once placed, please do not change your desk space assignment without the approval of your major professor.

Please maintain a clean work environment and leave your desk cleaner than when you arrived each day, and keep common areas and shared equipment in graduate student offices clean (e.g., microwaves, refrigerators, whiteboards, study tables, etc.). The Fire Marshall requires the following:

1. All loose papers, books, documents, and combustible items must be removed from the desk space and locked in the provided locker and/or rolling tower when unoccupied. The desktop must be clear of all materials.
2. There will be no use of outside storage devices, such as cardboard boxes or other storage containers, in the graduate desk area.
3. Small appliances, such as mini fridges, coffee pots, microwaves, etc. are prohibited.
4. The tops of any lockers are to be clear of all materials, boxes, plants, etc.

MAILBOXES

Each graduate student has a mail folder located in Dearborn 221. U.S. mail delivered to OSU is sorted at the Printing and Mailing Center and distributed to the remainder of campus. Campus mail arrives once daily at approximately 0830. Please check your mailbox regularly.

UPS, FedEx, and other freight carriers deliver directly to Rogers 204 throughout the course of the day. If you receive a package, you will receive an email notification alerting you of its arrival. Office hours are 0730 – 1200 and 1300 – 1630, Monday-Friday. There is a sign-out clipboard in the main MIME office where you are required to sign for each package you pick up. List your name and date/time in the appropriate place next to the package identification.

Please be sure that all packages and correspondence are addressed properly. The correct address for all mailing or shipping to you at the School of MIME is the following:
TELEPHONES

An authorization code is required to make long distance telephone calls from university telephones. If you are expected to make such calls as part of your day-to-day research work, your major professor will give you a code. The authorization code is unique and is intended for use only by the person to whom it is assigned.

Authorization codes must be kept secure and not given to other people. Codes must not be used for personal calls or purposes other than those intended.

PHOTOCOPYING, OFFICE SUPPLIES, & SCANNER

Most research laboratories have copiers and scanners available for use by the students and researchers in that group; students should contact their major professor for information about how to access their group’s office equipment. The School provides copiers and document scanners, intended for research or teaching purposes only, in Rogers 224. Copies for class or official use must be approved by a faculty member, but generally, the class TA will make copies for class use.

Anyone desiring to make personal copies will need to use resources available on the main floor of the Valley Library or through their engineering computing account (T.E.A.C.H.).

COMPUTER USE

Computer labs are available in most engineering buildings. They require an engineering account to log in. These computers maintain software for word processing, spreadsheet, and Internet connectivity applications. Options are available for remotely accessing research and other database or modeling software.

School computers are supplied on most graduate student office desks to allow you to perform your research activities and course work, and they should not be used for games or other personal uses during normal business hours (0800 - 1700, Monday – Friday). After hours personal use, within reason (as described by University policy), is allowed as long as others do not need the computers for their research or class activities. Computer use supporting funded research takes priority over use for non-funded research or personal activities. If you are assigned a desk without a computer, please contact your research advisor about acquiring a computer.

Do not copy ANY software onto the School’s computer hard disks without approval from the Network
Administrator. Software licensing and disk space availability are two issues that must be considered. The installation of your own personal copies of software on the School’s machines without permission exposes the School to an unacceptable potential liability and therefore cannot be allowed. Please ask permission for the installation and use of your personal software if it is important to your research or course work. Also, please do not copy any software from the School’s computers without permission. This action, again, violates software licensing agreements.

All use of OSU computer systems must conform to the University’s Policy on Acceptable Use of University Computing Facilities, which is located at

http://oregonstate.edu/helpdocs/accounts/onid-osu-network-id/getting-started/acceptable-use-policy

OSU computer systems must not be used for any illegal activity, or for storage or distribution of copyrighted material (e.g., music, videos, e-books, etc.).

If you have any general questions about using University computers, please contact Jordan Jones in Johnson 112 (541-737-6516), or e-mail support@engr.orst.edu for assistance.

PARKING AND SHUTTLES

Except in the open or pay lots, all motor vehicles parked on campus from 0700 to 1700, Monday through Friday, must display a valid parking permit. On-street parking is available for up to 2 hours/day in the neighborhoods surrounding the OSU campus, and metered parking is available on Monroe St. (parking in these areas is enforced by Corvallis Police). All parking rules are enforced during posted hours, and citations will be given for unauthorized parking on or around campus.

For more information contact Parking Services at 541-737-2583, or visit their web site at

http://transportation.oregonstate.edu/parking.

The OSU campus and surrounding areas are served by buses operated by the Corvallis Public Transit System (http://www.corvallisoregon.gov/index.aspx?page=884). All bus service is free, and the buses generally run at 30-minute intervals during the working day from Monday-Saturday (no service on Sundays and some holidays). The “Night Owl” runs at night (typically 2100 to 0230) Thursday-Saturday.

OSU offers a free campus shuttle service, called the Beaver Bus, for the convenience of students, staff, and visitors. The OSU Beaver Bus will provides transport to people from outer parking areas to and around campus from 0700 to 1900 each school day. Live shuttle mobile apps tracking system.

OSU’s SMOKE-FREE POLICY

OSU’s Corvallis campus is smoke-free. This policy includes quads, parking lots, and all other foot space within the confines of campus. Please consult the map on the following webpage for the campus boundary: https://experience.oregonstate.edu/well-being/smoke-free-osu.
SPECIAL SERVICES AT OSU

CAMPUS RESOURCE GUIDE

The Graduate School hosts a webpage devoted to providing graduate students with links to many campus. For details, please visit http://gradschool.oregonstate.edu/graduate-student-success/graduate-student-resources.

STUDENT CLUBS

MIME graduate students have the opportunity to become involved with many student organizations registered through OSU’s Office of Student Leadership & Involvement. In the past, a group called Graduate Student Body of Mechanical, Industrial and Manufacturing Engineering (GSB), connected students to one another through social gatherings, service opportunities and professional networking. While this group is not currently active, if students desire to re-register the group, please contact Lynn Paul to discuss how we can support you in that effort.

DISABILITY ACCESS SERVICES (DAS)

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

COUNSELING & PSYCHOLOGICAL SERVICES (CAPS)

Contact: 541-737-2131. You can email from the link below.

Counseling and Psychological Services (CAPS) provides a variety of services to the OSU community to address the challenges and difficulties students face. These services are designed to help students understand themselves better, create and maintain satisfying relationships, improve their academic performance, and make healthy and satisfying career and life choices. http://counseling.oregonstate.edu/main/our-services

CAMPUS EMERGENCIES

Contact: Oregon State Police/Public Safety 541-737-7000 or dial 911

OSU is dedicated to providing a safe and secure learning and living environment for its community members. The Department of Public Safety provides resources, information, emergency phone numbers, and protocols for maintaining personal safety. Sign up for OSU Alerts to get timely messages delivered right to your phone or inbox regarding university closures and other emergency situations.
If someone’s behavior is placing anyone in immediate risk or if a serious or threatening incident occurs in the classroom, academic building or on campus, Public Safety must be contacted immediately.

**OFFICE OF EQUAL OPPORTUNITY AND ACCESS (EOA)**

EOA, located on the third floor of Snell Hall, addresses concerns about bias, discrimination, discriminatory harassment, bullying, and retaliation. Additionally, EOA serves as the University's Title IX and Americans with Disabilities Act/Section 504 coordinating office, [http://eoa.oregonstate.edu](http://eoa.oregonstate.edu). OSU takes seriously the safety of all of our students, faculty and staff. All OSU employees must consult on disclosures of any form of sexual harassment, including sexual/dating/domestic violence and stalking. The following are options for direct reporting of sexual violence or other threats to your safety:

- **OSU Office of Equal Opportunity and Access (EOA)**
  - 541-737-3556
  - Accepts formal & informal reports of sexual violence & harassment, investigates, and assists with remedies for survivors

- **Oregon State Police (OSP)**
  - 541-737-7000 or 911
  - Responds to immediate safety concerns and criminal violations, including sexual and intimate partner violence, which may lead to criminal proceedings

- **Corvallis Police Department (CPD)**
  - 541-766-6924 or 911
  - Responds to immediate safety concerns and criminal violations to parties living off OSU campus, including sexual and intimate partner violence, which may lead to criminal proceedings
ACADEMICS

GENERAL INFORMATION

Oregon State University runs on a four-quarter academic year. Each quarter is eleven weeks long, the last week reserved for final exams. The academic year officially begins with the Summer Session, but, for the most part, summer is considered an “extra” term, academically. Most of the policies outlined in this handbook apply to the fall, winter and spring terms. If you are going to be here for coursework or research in the summer, it is your responsibility to find out what expectations are different. Furthermore, graduate students are expected to read the academic policies governing graduate students listed on the University website, which include, but are not limited to, the Graduate School section of the OSU Catalog, the Graduate School’s website. The information in this handbook addresses only a few topics within those policies.

MIME’s RESEARCH AREAS AND AREAS OF STUDY

School of MIME researchers have achieved global prominence in six signature areas – Advanced Manufacturing; Design; Production, Service and Human Systems; Next-Generation Materials; Renewable Energy and Energy Sustainability; and Robotics. Each of these have a research and curriculum area lead. For AY 2019-2020 the area leads are:

Advanced Manufacturing: Burak Sencer, Advanced Manufacturing Area Lead
Design: Bryony DuPont, Design Area Lead
Production, Service and Human Systems: Javier Calvo, Industrial Engineering Area Lead
Next-Generation Materials: Julie Tucker, Materials Science Program Director
Renewable Energy and Energy Sustainability: Brian Bay, Materials Mechanics Area Lead
Robotics: Geoff Hollinger, Robotics Program Director (also Dynamics & Controls Area Lead)

Our interdisciplinary approach allows us to attract and retain world-class faculty across the core disciplines of engineering, and promote further excellence in thinking and breakthrough research within our collaborative environment. It is a model that suits the needs and minds of our students as well – who also seek to solve global challenges and real-world problems. Students should feel free to contact their area lead for insight into research happening in their area of interest and study.

MIME’s GRADUATE COMPETENCIES

The School of MIME has identified eight competencies that we expect our graduate students to demonstrate by the conclusion of their tenure here at Oregon State University. We aim to train highly sought after engineering graduates whom demonstrate high levels of professional and technical abilities. Competencies are the knowledge, skills, and attributes that are required for successful job performance. In brief, our graduate competencies are:

A. **Discipline-specific skills and knowledge** (MEng, MS, PhD)
   Graduates will be able to apply skills and knowledge of their chosen field/s of study.
B. **Extra-disciplinary skills and knowledge integration** (MEng, MS, PhD)
Graduates will be able to integrate knowledge from their chosen field/s of study with broader fields of study (e.g., other engineering disciplines, mathematics, statistics, social sciences, etc.).

C. Communication skills (oral, written, professional) (MEng, MS, PhD)
Graduates will be able to communicate effectively. Graduates will be able to write and speak to diverse audiences in an organized and clear fashion about relevant areas of expertise, both disciplinary and inter/transdisciplinary. Graduates will be able to modify oral and written communications for specific audiences. Graduates will be able to utilize contemporary tools for communication, to support lectures, social media, and blogs.

D. Critical thinking skills (MEng, MS, PhD)
Graduates will be able to evaluate the quality, context, scale, and biases in information and to synthesize diverse kinds of information, in written and oral forms. Graduates will be able to discuss engineering and societal issues in real time, specifically as those issues relate to their chosen field/s of study.

E. Professional ethics (MEng)/Research and professional ethics (MS, PhD)
Graduates will have knowledge of processes and guidelines for assuring that research and engineering practice are conducted in socially, professionally acceptable, ethical, and legal ways, while minimizing and managing conflicts of interest.

F. Policy analysis/interpretation (MEng, MS, PhD)
Graduates will be able to analyze and interpret relevant laws, regulations, and governance processes pertaining to their chosen field/s of study.

G. Research skills (quantitative, qualitative) (MS, PhD)
Graduates will be able to create quantitative and qualitative summaries of data as evidence for conclusions and scientific inference. This can include skills and knowledge with statistical, mathematical, graphical, and process models sufficient to plan, implement, analyze, and interpret research.

H. Teaching (PhD only)
Graduates will have knowledge of contemporary and relevant STEM teaching methods, as well as experience in their application in classrooms, technical/professional environments, and online.

The graduate competencies are not course requirements. Rather, they can be acquired in a variety of ways including (but not limited to) life experiences, field experiences, extra-curricular activities, and independent study. Graduate students and their committees should incorporate into their discussions how a graduate student meets or will meet them.

ACADEMIC PERFORMANCE

A grade-point average of 3.00 (a B average) is required for all courses taken as a degree-seeking graduate student, and for courses included on the graduate degree program of study. Grades below C (2.00) cannot be used on a graduate program of study. A grade-point average of 3.00 is required before the preliminary, final oral, or written exams may be undertaken.

REGISTRATION

Students register for courses online at the Student Online Services site accessed via myOSU (myosu.oregonstate.edu). For convenience, students should have their proposed schedule (including
CRNs) prepared at the time of registration which begins during Sunday of Week 8 of the prior term. An ONID login/password are required for registration. Reminder: Students can sign up for an ONID account at onid.oregonstate.edu. (https://registrar.oregonstate.edu/getting-started)

FULL-TIME vs. PART-TIME ENROLLMENT

At Oregon State University, full-time status as a graduate student is defined as enrollment in nine (9) credits per term (fall, winter and spring), with a maximum load of 16 credits. However, full-time status (i.e., a minimum of 9 credits per term) may not be sufficient to qualify for purposes of veterans’ benefits, visa requirements, external fellowships, graduate assistantships, or federal financial aid. Students should check with their funding source to be sure they understand the minimum credits required for their benefit. International students should consult with OSU’s Office of International Services (OIS) for additional information about registration requirements specifically related to their student visa status.

MINIMUM REGISTRATION REQUIREMENTS

As part of the OSU Graduate School’s Continuous Enrollment policy, every student must register for a minimum of three (3) credits every fall, winter and spring term in which they are seeking a degree. This policy applies to every student, regardless of their location, who will be using university resources (e.g., facilities, equipment, and computing and library services, or faculty or staff time). If a student fails to maintain continuous enrollment, they become inactive and will have to re-apply to their graduate program. If a student is using university resources during summer session to engage in academic or research activities in support of their thesis or degree, they must also register for three credits during that time.

LEAVES OF ABSENCE

Students may request a leave of absence to be exempted from the continuous enrollment policy, if there is good reason to suspend their program of study; they have the support of their major professor, graduate program administrator and the Graduate School. Please see the OSU Catalog to learn more about LOA rules and restrictions (https://catalog.oregonstate.edu/college-departments/graduate-school/#policiestext).

SPECIAL NOTE TO STUDENTS ON GRADAUTE ASSISTANTSHIPS

As a condition of their academic appointments, graduate assistants are required to register for three (3) credits above the minimum full-time load (i.e., a minimum of 12 credits) each term of their appointment during the academic year (fall, winter, and spring). During summer session, a minimum registration of only three (3) credits is required for graduate assistants. Students are responsible for determining whether the minimum 3-credit summer registration fulfills their individual immigration, financial aid, tax liability or other specific needs. Audit registrations, course withdrawals, and enrollment in INTO OSU courses may not be used to satisfy enrollment requirements for graduate assistant salary/stipend, tuition remission, salary supplement or health insurance benefits.

TIME LIMIT

All work toward a master’s degree, including transferred credits, course work, thesis (if required), and all examinations, must be completed within seven years. All work toward a doctoral degree, including
transferred credits, course work, thesis (if required), and all examinations, must be completed within seven years. Time during which a student is on a leave of absence is included in the time limits.

**GRADUATE DEGREES AND MAJORS IN MIME**

The School of MIME offers graduate degrees in the four majors: Industrial Engineering, Materials Science, Mechanical Engineering and Robotics. We offer three different types of degrees: Master of Engineering (MEng), Master of Science (MS) and Doctorate of Philosophy (PhD). Our MEng degree is a coursework-only opportunity for students to pursue advanced study in the fields of industrial engineering or mechanical engineering. Our MS degree is a research master's degree requiring the completion of taught courses, as well as a research thesis or a project-in-lieu-of-thesis. Our PhD is a research degree requiring students to produce original research that expands the boundaries of knowledge. The minimum credits required for each of our degrees are:

**Table 1. Minimum credits required for all MIME degrees / majors**

<table>
<thead>
<tr>
<th>MIME Degrees / MIME Majors</th>
<th>MEng Degree (Coursework-only)</th>
<th>MS Degree (Project)</th>
<th>MS Degree (Thesis)</th>
<th>PhD Degree (Dissertation)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanical Engineering</strong></td>
<td>Coursework* ≥45 cr.</td>
<td>Coursework* ≥39 cr.</td>
<td>Coursework* ≥33 cr.</td>
<td>Coursework 45-72 cr. ME 603 Thesis 36-63 cr.</td>
</tr>
<tr>
<td></td>
<td>Total ≥45 cr.</td>
<td>ME 506 Projects ≤6 cr.</td>
<td>ME 503 Thesis ≤12 cr.</td>
<td>Total ≥108 cr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total ≥45 cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Industrial Engineering</strong></td>
<td>Coursework ≥45 cr.</td>
<td>Coursework ≥45 cr.</td>
<td>Coursework ≥33 cr.</td>
<td>Coursework 48-72 cr. IE 603 Thesis 36-60 cr.</td>
</tr>
<tr>
<td></td>
<td>Total ≥45 cr.</td>
<td>IE 506 Projects ≤6 cr.</td>
<td>IE 503 Thesis 12 cr.</td>
<td>Total ≥108 cr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total ≥51 cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Materials Science</strong></td>
<td>N/A</td>
<td>Coursework* ≥39 cr.</td>
<td>Coursework* ≥33 cr.</td>
<td>Coursework 45-72 cr. XXX x 603 Thesis 36-63 cr.</td>
</tr>
<tr>
<td></td>
<td>XXX x 506 Projects ≤6 cr.</td>
<td>XXX x 503 Thesis ≤12 cr.</td>
<td>XXX x 603 Thesis ≤12 cr.</td>
<td>Total ≥108 cr.</td>
</tr>
<tr>
<td></td>
<td>Total ≥45 cr.</td>
<td>Total ≥45 cr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Robotics</strong></td>
<td>N/A</td>
<td>Coursework* ≥39 cr.</td>
<td>Coursework* ≥33 cr.</td>
<td>Coursework 45-72 cr. ROB 603 Thesis 36-63 cr.</td>
</tr>
<tr>
<td></td>
<td>ROB 506 Projects ≤6 cr.</td>
<td>ROB 503 Thesis ≤12 cr.</td>
<td>ROB 603 Thesis ≤12 cr.</td>
<td>Total ≥108 cr.</td>
</tr>
<tr>
<td></td>
<td>Total ≥45 cr.</td>
<td>Total ≥45 cr.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* One to three XXX 507 Seminar or other “blanket” credits may be allowed to be included as part of a student’s master’s degree coursework credits, depending upon the student’s major and/or option. “Blanket” credits are those that have a zero (0) as the middle digit, but are not used for Capstone credits (e.g. Thesis).

* XXX represents the course designator from a materials science student’s home discipline (e.g. ME, WSE, ROB, ECE,...)
MIME’s COURSE OFFERINGS

In the OSU Catalog, School of MIME courses may be found under the following subject codes: AAE, IE, MATS, ME, MFGE, MIME and ROB. Other subject codes commonly used by MIME graduate students include CS, ENGR, GRAD, LEAD, PPOL, ST, etc. Students should become familiar with the OSU Catalog’s listing of programs and course around the university. Graduate degrees are very flexible. As long as all program and degree requirements are met, students have the freedom to take any graduate level course at the university and count it toward their program of study, with the approval of their major professor.

Courses numbered 500-699 are for masters or doctoral students. Courses numbered below 500 are for undergraduate students and may not be used toward graduate degree completion requirements.

The OSU Catalog’s Schedule of Classes is the official listing of all current and upcoming courses. Future term listings of classes are subject to change until registration begins for a future term. With the exception of OSU’s Summer Session, registration is always on Sunday of Week 8 of the prior term at 6:00 AM for master’s students and at 7:00 AM for doctoral students. For more registration information see https://registrar.oregonstate.edu/registration. The School of MIME has a tool for determining which of our courses are planned to be offered during which terms. It can be found at https://mime.oregonstate.edu/sites/mime.oregonstate.edu/files/documents/advising-grad/july_2019_mime_all_grad_course_numbers.xlsx.

COMMON REQUIREMENTS FOR ALL MIME DEGREES

MANDATORY ETHICAL RESEARCH TRAINING

OSU’s Graduate Council requires that all doctoral students “be able to conduct scholarly activities in an ethical manner” and all master’s students “be able to conduct scholarly or professional activities in an ethical manner,” but leaves the assessment of this requirement to be carried out at the program level. For School of MIME students, including Robotics and Materials Science students, the preferred avenue for meeting that requirement is the CITI “RCR for Engineers” course, although OSU’s GRAD 520 is also an acceptable option. Please see these detailed instructions about how to complete the correct training.

FILING A PROGRAM OF STUDY

Graduate degree programs at OSU are very flexible. In collaboration with your major professor or advisor, you will create your own program of study and document it on a Program of Study (POS) form. The program of study defines:

- The courses you plan on taking as a graduate student
- Who is on your graduate committee
- Whether your degree is thesis, project-in-lieu-of-thesis, or coursework-only
- If you are completing a minor and/or an option

The Program of Study form is a contract between the student, the School, and the University (Graduate
The Graduate School uses your Program of Study to determine your eligibility for exams and to complete the final audit of your coursework prior to awarding your degree. Prepared forms must be submitted, signed by the student’s entire committee, to MIME’s Graduate Program Coordinator to obtain the Associate Head for Graduate Programs’ signature and be forwarded in to the Graduate School for final approval. Please review the policies listed on the POS form.

For master’s students, a program of study must be filed with the Graduate School prior to completing 18 credits. For newly admitted doctoral students, a program of study must be submitted by the end of their fifth term. For students continuing on from a master's degree to a PhD, a doctoral program of study must be submitted within two terms of the completion of their master's degree.

OSU does not require graduate students in engineering to pursue a minor. However, if desired, a minor may be selected. The minor may be a recognized school minor, a recognized integrated minor, or a student-designed/committee-approved minor. Minors appear on your transcript but will not be listed on your diploma. Speak with your major professor for more details on minors.

When considering which courses to include in your program of study, be careful to ensure that no more than 50% of the credits are slash courses (the 5XX component of a 4XX/5XX course). To determine if a course is a slash course, examine the OSU Catalog for the term you took (or plan to take) the 5XX course. If there is a 4XX course with the same title during the same term, then this is a slash course. XXX 503 and XXX 506 are considered stand-alone graduate courses for purposes of these calculations.

**MAJOR PROFESSOR SELECTION**

To develop an MS or PhD graduate program of study, a student must first have a research advisor/mentor, commonly known as a major professor. Many students do not have this decided before they arrive. While all incoming MIME graduate students can contact their area lead as an interim advisor, it is the student's responsibility to select a major professor and assemble a committee as soon as possible. Discussions with prospective major professors should begin during a student’s first term of enrollment.

The choice of a major professor should be given considerable thought, since you will have a close working relationship with this individual for the duration of your degree program, and close professional and personal contacts thereafter. You are expected to complete your degree program under your major professor’s supervision (unless exceptional circumstances prevent it). Your major professor will guide your research efforts to completion and oversee all aspects of your graduate studies. The student is also responsible for actively seeking information about individual research projects. Good sources of information are the professors themselves or their graduate students. Students are encouraged to make individual appointments with faculty with whom they are interested in working. **Be sure to discuss financial support needs and options with the potential faculty mentor when considering a proper fit and project.**

If no advisor is secured, the student may transfer to an MEng degree and complete their course of study without a guided project.

If either party terminates the student/advisee relationship, the student is expected to find a new major professor within one academic term. Failure to find a new advisor will result in the student being transferred to an MEng degree or leave the program. Students may be dismissed if the MEng transfer does not take place by the next term.
MEng students will be assigned a major professor by the MIME Head Advisor for MIME Graduate Programs during their first term in residence. All questions regarding the program and curriculum should be first directed to the MIME Head Advisor for MIME Graduate Programs.

ANNUAL EVALUATIONS OF STUDENT ACADEMIC PROGRESS

Annually, all graduate students in the School of Mechanical, Industrial, and Manufacturing Engineering (MIME) are evaluated with regard to satisfactory academic progress. For Industrial Engineering and Mechanical Engineering students pursuing research degrees (MS and PhD), this assessment process typically involves the preparation of two documents. A third document is required only in cases of unsatisfactory progress. These documents are:

1. **Academic Milestones Plan.** For students beginning their graduate work in the School of MIME, this document must be completed before the end of their first term. For continuing students, this document constitutes their plan for the next academic year, and it is due at end of the academic year.
2. **Graduate Student Academic Progress Report.** All students must complete this document (i.e., first year, continuing, and finishing) and it is due at end of the academic year.
3. **Performance Improvement Plan.** This document is necessary only following an unsatisfactory academic progress assessment.

MIME has prepared a guide for students to use in this effort. It can be found here:

*School of Mechanical, Industrial and Manufacturing Engineering*

*MS & PhD Graduate Degree Programs*

*Graduate Student Academic Progress Assessment Guide*

For Materials Science students and Robotics students the annual academic assessment process may be different from this. Please contact your major professor to determine how they will be evaluating your academic progress.

Often an MEng degree can be completed within the span of one academic year, but any MEng students registered for spring term of one year, and not finishing that term, will be sent a link to complete a self-evaluation of their progress.

FINAL EXAMINATION

As required by the Graduate School, master's degree students and doctoral degree students must pass certain examinations to be awarded a degree. The MS and PhD degrees require a final oral exam while the MEng degree uses an alternate summative assessment in lieu of a face-to-face exam. For more information about the MEng summative assessment, see the MEng Milestones section of this handbook.

Students must have a minimum GPA of 3.00 on both their Program and cumulative graduate transcript to schedule their final oral examination. All course work with a grade of I (Incomplete) appearing on the POS form must be completed prior to scheduling the final oral examination. Having arranged a date and time that works for your entire committee to convene for your final exam, you may contact Stephanie Grigar for help in finding an appropriate location for the event. Once you have the date, time, and location you are ready to schedule your final oral exam through the Graduate School. Scheduling must be at least two weeks in advance of the exam date to allow time for a final audit of your program of study. Please refer to the OSU Graduate Catalog for more details on this requirement.
Annually, all graduate students in the School of Mechanical, Industrial, and Manufacturing Engineering (MIME) are evaluated with regard to satisfactory academic progress. For Industrial Engineering and Mechanical Engineering students

SAFETY TRAINING

Environmental Health and Safety department has prepared a training module on laboratory safety for researchers. MIME is committed to a safe work environment. Researching MIME graduate students are required to watch, learn and reflect on the following training video: http://oregonstate.edu/ehs/training/lab_safety_training.

COURSEWORK REQUIREMENTS FOR SPECIFIC MAJORS WITHIN MIME

INDUSTRIAL ENGINEERING

All on-campus students majoring in Industrial Engineering must a complete six core courses:

IE 512: Information Systems Engineering (4 cr)
IE 521: Industrial Optimization I (3 cr) or IE 522: Industrial Optimization II (3 cr)
IE 545: Human Factors Engineering (4 cr)
IE 570: Management Systems Engineering (4 cr) or IE 571: Project Management in Engineering (3 cr)
IE 552: Design of Industrial Experiments (3 cr)
IE 563: Advanced Production Planning and Control (3 cr)

Beyond the core coursework, IE students may choose to declare a transcript-visible option. An option is one of several distinct variants of course aggregations within a major that focus on an area of study designed to provide a student with specialized knowledge, competence, and skills. Declaring a transcript-visible option is not required. Please see the webpage entitled “Credit Requirements for IE Graduate Degrees” to see up-to-date requirements for all IE graduate options.

MATERIALS SCIENCE

Students majoring in Materials Science must take two fundamental courses, select two of four from the core curriculum and at least one materials characterization course and one materials processing course. Specifically, courses must be chosen from those listed in Table 2.

Table 2. Required coursework for Materials Science majors

<table>
<thead>
<tr>
<th>Required Fundamental Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATS 570</td>
<td>STRUCTURE-PROPERTY RELATIONS IN MATERIALS</td>
</tr>
<tr>
<td>MATS 581</td>
<td>THERMODYNAMICS OF SOLIDS</td>
</tr>
</tbody>
</table>

Core Curriculum
Select 2 courses from the following:
<table>
<thead>
<tr>
<th>MATS 571</th>
<th>ELECTRONIC PROPERTIES OF MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATS 582</td>
<td>RATE PROCESSES IN MATERIALS</td>
</tr>
<tr>
<td>MATS 584</td>
<td>ADVANCED FRACTURE OF MATERIALS</td>
</tr>
<tr>
<td>MATS 588</td>
<td>COMPUTATIONAL METHODS IN MATERIALS SCIENCE</td>
</tr>
</tbody>
</table>

**Characterization Requirement**
Select at least 1 course from the following:

<table>
<thead>
<tr>
<th>CH 616</th>
<th>CRYSTALLOGRAPHY AND X-RAY DIFFRACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATS 555</td>
<td>EXPERIMENTAL TECHNIQUES IN MATERIAL SCIENCE</td>
</tr>
<tr>
<td>MATS 659</td>
<td>PRINCIPLES OF TRANSMISSION ELECTRON MICROSCOPY</td>
</tr>
<tr>
<td>OC 528</td>
<td>MICROPROBE ANALYSIS</td>
</tr>
</tbody>
</table>

**Processing Requirement**
Select at least 1 course from the following:

<table>
<thead>
<tr>
<th>CHE 611/ECE 611</th>
<th>ELECTRONIC MATERIALS PROCESSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 518</td>
<td>SEMICONDUCTOR PROCESSING</td>
</tr>
<tr>
<td>MATS 545</td>
<td>WELDING METALLURGY</td>
</tr>
<tr>
<td>MATS 578</td>
<td>THIN FILM MATERIALS CHARACTERIZATION AND PROPERTIES</td>
</tr>
<tr>
<td>WSE 535</td>
<td>POLYMER SYNTHESIS AND STRUCTURE</td>
</tr>
</tbody>
</table>

**MECHANICAL ENGINEERING**

Students majoring in Mechanical Engineering must choose to take a core of at least fifteen credits from one of five primary ME graduate options: (1) Advanced Manufacturing, (2) Design, (3) Materials Mechanics, (4) Dynamics & Controls, and (5) Thermal-Fluid Sciences. An option is one of several distinct variants of course aggregations within a major that focus on an area of study designed to provide a student with specialized knowledge, competence, and skills. Options are transcript-visible. An "interdisciplinary option" is also allowed as long as the student’s fifteen credits are taken from among the courses on one or more, but not necessarily all, of the five primary options. The interdisciplinary option is not transcript visible.

ME students also may pursue the coursework necessary to earn one of two transcript-visible, secondary options: (i) Renewable Energy or (ii) Engineering Management. Students are required to first choose an ME primary option (or the ME interdisciplinary option), then they will be allowed to declare a secondary option.

Pre-approved coursework for ME’s five primary options is listed in Table 3 and for ME’s two secondary options in Table 4.
### Table 3. Core coursework for MIME’s Mechanical Engineering five primary options

<table>
<thead>
<tr>
<th>Advanced Manufacturing Option Requirements</th>
<th>Design (ME Primary Option) Option Requirements</th>
<th>Materials Mechanics (ME Primary Option) Option Requirements</th>
<th>Dynamics and Controls (ME Primary Option) Option Requirements</th>
<th>Thermal-fluid Sciences (ME Primary Option) Option Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGE 507 Advanced Manufacturing Seminar</td>
<td>ME 507 Design Seminar</td>
<td>ME/MATS 507 Materials Science Seminar</td>
<td>ROB 507 Robotics Seminar</td>
<td>ME 507 TFS Seminar (not required for MEng students)</td>
</tr>
<tr>
<td>Choose one or more Materials course:</td>
<td>At least 15 credits from among the following courses:</td>
<td>The following courses:</td>
<td>The following courses:</td>
<td>The following courses:</td>
</tr>
<tr>
<td>MATS 570 Structure-Property Relationships in Materials</td>
<td>ME 511 Precision Machine Tool Design</td>
<td>MATS 570 Structure-Property Relationships in Materials</td>
<td>MATS 570 Structure-Property Relationships in Materials</td>
<td>MATS 570 Structure-Property Relationships in Materials</td>
</tr>
<tr>
<td>MATS 555 Experimental Techniques in Materials Science</td>
<td>ME 512 Design of Mechanisms</td>
<td>Materials</td>
<td>Materials</td>
<td>Materials</td>
</tr>
<tr>
<td>ME 580 Materials Selection</td>
<td>ME 515 Risk &amp; Reliability Analysis in Engineering Design</td>
<td>M 585 Fatigue of Materials</td>
<td>M 585 Fatigue of Materials</td>
<td>M 585 Fatigue of Materials</td>
</tr>
<tr>
<td>Choose one or more Systems course:</td>
<td>ME 516 Modeling and Analysis of Complex Systems</td>
<td>M 587 Dislocations, Deformation and Creep</td>
<td>M 587 Dislocations, Deformation and Creep</td>
<td>M 587 Dislocations, Deformation and Creep</td>
</tr>
<tr>
<td>IE 552 Design of Industrial Experiments</td>
<td>ME 517 Optimization in Design</td>
<td>Choose one Mechanical Behavior course:</td>
<td>Choose one Mechanical Behavior course:</td>
<td>Choose one Mechanical Behavior course:</td>
</tr>
<tr>
<td>ME 526 Numerical Methods for Engineering Analysis</td>
<td>ME 611 Modern Product Design</td>
<td>ME 583 Composite Materials</td>
<td>ME 521 Linear Elasticity</td>
<td>ME 521 Linear Elasticity</td>
</tr>
<tr>
<td>MFGE 599 ST/Sensor Design for Manufacturing</td>
<td>ME 613 Sustainable Product Design</td>
<td>MATS 584 Advanced Fracture of Materials</td>
<td>ME 523 Advanced Stress Analysis</td>
<td>ME 523 Advanced Stress Analysis</td>
</tr>
<tr>
<td>MFGE 536 Lean Manufacturing Systems Engineering</td>
<td>ME 617 Design Automation</td>
<td>M 587 Dislocations, Deformation and Creep</td>
<td>M 553 Structure and Mechanics Laboratory</td>
<td>M 553 Structure and Mechanics Laboratory</td>
</tr>
<tr>
<td>Choose one or more Processes course:</td>
<td>MFGE 536 Lean Manufacturing Systems Engineering</td>
<td>Additional courses from above as needed to have a minimum of 16 credits.</td>
<td>Additional courses from above as needed to have a minimum of 16 credits.</td>
<td>Additional courses from above as needed to have a minimum of 16 credits.</td>
</tr>
<tr>
<td>MFGE 531 Micro-manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFGE 538 Composites Manufacturing</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MFGE 551 Additive Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFGE 599 ST/Computational Modeling for Advanced Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional courses from above as needed to have a minimum of 16 credits.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Coursework for MIME’s Mechanical Engineering two secondary options

<table>
<thead>
<tr>
<th>Renewable Energy (ME Secondary Option)</th>
<th>Engineering Management (ME Secondary Option)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option Requirements</strong></td>
<td><strong>Option Requirements</strong></td>
</tr>
<tr>
<td><strong>Eight credits from the following courses:</strong></td>
<td><em><em>IE 582 Introduction to Management for Engineers and Scientists</em> or IE 570 Management Systems Engineering</em> or IE 571 Project Management in Engineering**</td>
</tr>
<tr>
<td>CE 630 Ocean Wave Mechanics I</td>
<td><em><em>IE 581 Operations Management</em> or IE 563 Advanced Production Planning and Control</em> or IE 583 Advanced Engineering Economics Analysis**</td>
</tr>
<tr>
<td>CE 639 Dynamics of Ocean Structures</td>
<td></td>
</tr>
<tr>
<td>CE 647 Ocean and Coastal Engineering Measurements</td>
<td></td>
</tr>
<tr>
<td>CHE 550 Conventional and Alternative Energy Systems</td>
<td></td>
</tr>
<tr>
<td>CHE 551 Solar Energy Technologies</td>
<td></td>
</tr>
<tr>
<td>ECE 530 Contemporary Energy Applications</td>
<td></td>
</tr>
<tr>
<td>ECE 532 Dynamics of Electromechanical Energy Conversion</td>
<td></td>
</tr>
<tr>
<td>ECE 533 Power Systems Analysis</td>
<td></td>
</tr>
<tr>
<td>ME 507 Seminar / Marine Forum</td>
<td></td>
</tr>
<tr>
<td>ME 543 Renewable Energy: Thermal Fluid Systems</td>
<td></td>
</tr>
<tr>
<td><strong>At least four credits from among the following courses:</strong></td>
<td><strong>Students may not take both IE 570 and IE 582 nor may they take both IE 563 and IE 581.</strong></td>
</tr>
<tr>
<td>PS 573 US Energy Policy</td>
<td></td>
</tr>
<tr>
<td>PS 578 Renewable Energy Policy</td>
<td></td>
</tr>
</tbody>
</table>

**ROBOTICS**

The intent of the Robotics core is to ensure each program of study both specializes in robotics, and contains sufficient breadth. To that end, the four-course core comprises one introductory course, one hands-on robotics course, one autonomy course, and one fundamental control/dynamics course:

**ROB 514:** Introduction to Robotics  
**ROB 521:** Research Robotics  
**ROB 537:** Learning-based Control or **ROB 534:** Sequential Decision Making in Robotics  
**ME 531:** Linear Multivariate Control Systems I or **ME 533:** Nonlinear Dynamic Analysis

**MILESTONES FOR SPECIFIC DEGREES WITHIN MIME**

**MASTER OF ENGINEERING**

All on campus MEng students must register for ENGR 599 ST/Portfolio Preparation) during their first term in the program and for ENGR 599 ST/Portfolio Completion) during their final term in the program. If a student changes from a research degree to an MEng degree, they may not be required to take the prep course, but they will be required to take the completion course. The portfolio produced by the student as part of the Portfolio Completion course will also serve, in lieu of a final oral examination, for assessment as to whether they have fulfilled MEng degree requirements.

Ecampus MEng students will learn of their program milestones through the Engineering Management gateway course, IE 582: Introduction to Management for Engineers and Scientists.

The milestones for the on campus MEng degrees in Industrial Engineering and Mechanical Engineering,
respectively, can be found online at https://mime.oregonstate.edu/academics/grad/ie/meng and https://mime.oregonstate.edu/academics/grad/me/meng. In brief, the milestones are summarized in Table 5.

Table 5. Milestones for MIME’s Master of Engineering degrees

<table>
<thead>
<tr>
<th>MEng MILESTONE</th>
<th>PROPOSED TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 599 ST/ Portfolio Prep(aration) course completed</td>
<td>End of your first term</td>
</tr>
<tr>
<td>Meet with the MIME Head Advisor for Graduate Programs</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Graduate committee identified</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Rough sketch made of proposed courses</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Ethical research training completed</td>
<td>Before Program of Study submission</td>
</tr>
<tr>
<td>Program of Study submitted to Dearborn 221C</td>
<td>Before completing 18 credits</td>
</tr>
<tr>
<td>Coursework completed</td>
<td>Before the end of your last term</td>
</tr>
<tr>
<td>Portfolio fully compiled</td>
<td>No later than Week 6 of your last term</td>
</tr>
<tr>
<td>Alternate Summative Assessment scheduled with the Grad School</td>
<td>No later than Week 6 of your last term</td>
</tr>
<tr>
<td>ENGR 599 ST/ Portfolio Comp(letion) course completed</td>
<td>Seven years or less from commencement of study</td>
</tr>
</tbody>
</table>

MASTER OF SCIENCE

The milestones for all MIME MS degrees are shown in Table 6. Online versions of these milestones for the Industrial Engineering and Mechanical Engineering programs, respectively, can be found online at https://mime.oregonstate.edu/academics/grad/ie/ms and https://mime.oregonstate.edu/academics/grad/me/msme. Online versions of these milestones for the Materials Science and Robotics programs are forthcoming. Until the time when they become available, feel free to use the ME or IE milestones tables linked above. Online milestones tables have active links for additional reference.

Table 6. Milestones for MIME’s Master of Engineering degrees

<table>
<thead>
<tr>
<th>MS MILESTONE</th>
<th>PROPOSED TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with the MIME Head Advisor for Graduate Programs (required for first year students)</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Major professor selected</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Rough sketch made of proposed courses</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Academic Milestones Plan submitted to MIME Graduate Coordinator</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Graduate committee established</td>
<td>Before the end of your second term</td>
</tr>
<tr>
<td>Ethical research training completed</td>
<td>Before Program of Study submission</td>
</tr>
<tr>
<td>Program of Study submitted to Dearborn 221C</td>
<td>Before completing 18 credits</td>
</tr>
</tbody>
</table>
DOCTORATE OF PHILOSOPHY

The PhD milestones for the Industrial Engineering major are slightly different from those for MIME’s other three majors. The IE PhD milestones are shown in Table 7 and are found online at https://mime.oregonstate.edu/academics/grad/ie/phd. The online milestones table has active links for additional reference.

Table 7. Milestones for MIME’s Doctorate of Philosophy degree in Industrial Engineering

<table>
<thead>
<tr>
<th>PhD MILESTONE (Industrial Engineering)</th>
<th>PROPOSED TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with the MIME Head Advisor for Graduate Programs (required for first year students)</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Major professor selected</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Rough sketch made of proposed courses</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Academic Milestones Plan submitted to MIME Graduate Coordinator</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Graduate committee established</td>
<td>Before the end of your second term</td>
</tr>
<tr>
<td>Ethical research training completed</td>
<td>Before Program of Study submission</td>
</tr>
<tr>
<td>Core coursework completed with ≥ 3.5 GPA and no single grade lower than B</td>
<td>Before combined PhD Program (POS) Meeting / Qualifying Exam</td>
</tr>
<tr>
<td>POS finalized</td>
<td>Before combined PhD Program (POS) Meeting / Qualifying Exam</td>
</tr>
<tr>
<td>Combined PhD Program (POS) Meeting / Qualifying Exam meeting convened and passed</td>
<td>Before the end of second year</td>
</tr>
<tr>
<td>All coursework completed</td>
<td>Before the end of your last term</td>
</tr>
<tr>
<td>Oral Preliminary Examination passed</td>
<td>At least six months after completing qualifying examination, and at least one full academic term before Final Oral Exam.</td>
</tr>
<tr>
<td>Doctoral research and dissertation write-up completed</td>
<td>Prior to Final Oral Exam</td>
</tr>
<tr>
<td>Final defense of thesis or project (Final Oral Exam) date and time arranged</td>
<td>At least one month before event</td>
</tr>
<tr>
<td>Final Oral Exam scheduled with the Grad School</td>
<td>No less than two weeks before event</td>
</tr>
<tr>
<td>Final Oral Exam passed</td>
<td>Nine years or less from commencement of study and no more than five years after completing preliminary examination.</td>
</tr>
</tbody>
</table>

The PhD milestones for all the other MIME majors (Materials Science, Mechanical Engineering and Robotics) are slightly different from those for IE major. The MATS, ME and ROB PhD milestones are shown in Table 8. The online version of these milestones for Mechanical Engineering are found online
at https://mime.oregonstate.edu/academics/grad/me/phd. Online versions of these milestones for the Materials Science and Robotics programs are forthcoming. Until the time when they become available, feel free to use the ME milestones table linked above. Online milestones tables have active links for additional reference.

Table 8. Milestones for MIME’s Doctorate of Philosophy degree in Mechanical Engineering*

<table>
<thead>
<tr>
<th>PhD MILESTONE (Mechanical Engineering*)</th>
<th>PROPOSED TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with the MIME Head Advisor for Graduate Programs</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>(required for first year students)</td>
<td></td>
</tr>
<tr>
<td>Major professor selected</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Rough sketch made of proposed courses</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Academic Milestones Plan submitted to MIME Graduate</td>
<td>Before the end of your first term</td>
</tr>
<tr>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>Graduate committee established</td>
<td>Before the end of your second term</td>
</tr>
<tr>
<td>Ethical research training completed</td>
<td>Before Program of Study submission</td>
</tr>
<tr>
<td>POS finalized</td>
<td>Before PhD Program (POS) Meeting</td>
</tr>
<tr>
<td>PhD Program (POS) Meeting convened and POS approved</td>
<td>Before the end of second year; prior to Qualifying Exam</td>
</tr>
<tr>
<td>Core coursework completed (check for major-specific GPA</td>
<td>Before Qualifying Exam</td>
</tr>
<tr>
<td>requirements)</td>
<td></td>
</tr>
<tr>
<td>Qualifying Exam passed</td>
<td>Varies by area (<a href="https://mime.oregonstate.edu/academics/grad/me/qual-exam">https://mime.oregonstate.edu/academics/grad/me/qual-exam</a>)</td>
</tr>
<tr>
<td>All coursework completed</td>
<td>Before the end of your last term</td>
</tr>
<tr>
<td>Oral Preliminary Examination passed</td>
<td>At least six months after completing Qualifying Examination, and at least one</td>
</tr>
<tr>
<td></td>
<td>full academic term before Final Oral Exam.</td>
</tr>
<tr>
<td>Doctoral research and dissertation write-up completed</td>
<td>Prior to Final Oral Exam</td>
</tr>
<tr>
<td>Final defense of thesis or project (Final Oral Exam) date</td>
<td>At least one month before event</td>
</tr>
<tr>
<td>and time arranged</td>
<td></td>
</tr>
<tr>
<td>Final Oral Exam scheduled with the Grad School</td>
<td>No less than two weeks before event</td>
</tr>
<tr>
<td>Final Oral Exam passed</td>
<td>Nine years or less from commencement of study and no more than five years after</td>
</tr>
<tr>
<td></td>
<td>completing preliminary examination.</td>
</tr>
</tbody>
</table>

* This milestones table is accurate for the major of Materials Science and Robotics as well.

**GRADUATE STUDENT EMPLOYEES (GRADUATE ASSISTANTS, etc.)**

**EMPLOYMENT/PAYROLL**

**NEW HIRES**

If a student is offered employment, as either an hourly worker (e.g., graders, lab workers, etc.) or a Graduate Assistant (GA), new hire paperwork must be completed to receive payment. Newly hired
students should report to Room 08 Hovland Hall (2700 SW Campus Way) to fill out new hire paperwork. Please remember to bring the following documents:

- Identification as outlined on I-9 form page 3 (only originals are accepted, no photocopies)
- Social Security card (or receipt from the Social Security Office)
- Voided check or savings account statement
- International students: passport, I-20 and I-94

All employees must have a social security number to work. International students can receive help in obtaining a social security number at the Hovland Hall office as well.

TIMESHEETS

Timesheets are found online at http://mytime.oregonstate.edu and are submitted on the 15th of each month. Hourly workers must clock in/out for each shift. Graduate Assistants, whether working as a research assistant or a teaching assistant (commonly called GRAs or GTAs), also have a timesheet. GA timesheets are for recording sick leave taken or time when filling in for another GA who is may be sick. If no sick leave or fill-in leave needs to be recorded, the timesheet should be left blank. Please confirm with the Operations Manager if you are unsure about submitting your timesheet.

PAYCHECKS

Payment is distributed on the last non-holiday business day of the month. Direct deposits are available and will take place on the same day. Paycheck stubs for direct deposit recipients are available via OSU’s Online Services portal. Paper payroll checks are distributed to the department via the daily mail delivery at approximately 0900. If you have opted for a paper check, please see Stephanie.

HEALTH INSURANCE

All graduate students are required to carry health insurance. Insurance for graduate assistants is provided by the university at a low premium cost to you as bargained by the graduate student union, the Coalition of Graduate Employees (CGE). University provided insurance may be waived as long as the student supplies documentation that the outside coverage is equal to or greater than the coverage provided by the University. For more information, enrollment forms, and premium rates, visit the Student Health Services website. Deadline for fall term signup is October 01.

For more information, please see http://studenthealth.oregonstate.edu/graduate-assistant. Other student health and wellness resources on campus include:

- OSU Student Health Services (http://studenthealth.oregonstate.edu/, 541-737-9355)
- OSU Counseling & Psychological Services (http://oregonstate.edu/counsel/, 541-737-2131)

GRADUATE ASSISTANTSHIPS

A graduate assistantship is an employment position at OSU. In exchange for service, an assistantship provides a monthly salary (stipend), tuition remission, and an institutional contribution toward mandatory fees and the graduate assistant-only health insurance premium. Graduate assistants are
required to carry out the duties assigned by their faculty supervisor to justify their stipend. Assistantships are 13-week long appointments that roughly align with the 11-week academic quarters of OSU. Consequently, assistantship duties start before the academic term each quarter, and students are expected to begin their work assignments when their appointment begins.

Additionally, students who hold multiple jobs on campus may not work more than a total of 20 hours per week (or 255 hours per term) in total for all positions held while enrolled in at least 3 credits (6 during summer). Maintaining a GPA of 3.00 or better is required for continued financial support.

Students planning to take a short break (5 days or less) or be away from work must request from their supervisor. The request should be in writing and well in advance of their plans.

**GRADUATE TEACHING ASSISTANT SPACE**

COE Graduate Assistants serving as teaching assistants (TA) who require space to conduct office hours can use shared by reserving the spaces using the tool SignUp Genius. It will be much quicker and smoother to sign up for a time slot if you set up a [SignUp Genius](https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall) account. SignUp Genius accounts are free, and do not take long to set up.

The shared spaces are located in Johnson, Covell and Dearborn Halls and are mixed-use spaces. In addition to TA office hours, the COE utilizes most of these rooms for tutoring, supplemental instruction, and other meetings within the College. Additionally, when not otherwise reserved, students often use them for study groups. Keeping that in mind, these locations can get quite busy. [Casey Patterson, COE’s Student Success Coordinator](mailto:caseypatterson@coe.osu.edu), manages the sign-up sheets and relies on TA’s to communicate any conflicts that they see. These spaces are largely considered study rooms, not offices, and so are not well suited to any sensitive conversations that may involve FERPA-protected information.

Since the rooms in three different buildings, there are three corresponding Sign-Ups:

Johnson Hall, Rooms 121, 123 and 125
[https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall](https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall)

Covell Hall, Room 140, Tables 1-4
[https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall2](https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall2)

Dearborn, Room 119
[https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall1](https://www.signupgenius.com/go/60B044FA5A72EA4FD0-fall1)

**Fall 2019 Sign-Ups will remain open until the end of Week 0 (September 27th).** All schedules will be finalized and posted at each room starting Monday, September 30th. Future term sign-ups should reuse the same links, but if that changes TAs may contact Casey directly.

**OTHER HELPFUL INFORMATION**

**PUBLISHING EXPECTATIONS**
Publication of MS and PhD level research findings in the peer-reviewed literature is vital to the success and reputation of the graduate programs in MIME. In most cases, this mechanism of dissemination is the most efficient and effective vehicle for communicating our work to relevant stakeholders, particularly other experts in the field. For faculty, publications are of critical importance for career advancement as evaluated through the promotion and tenure process. For students pursuing research and academic careers, publications serve a similar purpose. It is generally based on these widely available, peer-reviewed, manuscripts that the quality and impact of one’s research endeavors is assessed and potential for future success evaluated. Stated another way, simply completing a MS thesis or PhD dissertation is generally not sufficient for attainment of the career goals of students and faculty.

Issues surrounding the publication of peer-reviewed manuscripts and completion of MS theses and PhD dissertations are intimately intertwined. This fact is recognized by the Graduate School and facilitated by so-called “manuscript-based” theses where theses and dissertations can package several published and/or draft publications into a single document.

In the School of MIME, publication in peer-reviewed manuscripts is strongly encouraged by all research-based students, especially those pursuing a PhD. As outlined above, these expectations are believed to be in the best interests of students, faculty and the School. In general, publishing approximately three manuscripts based on a PhD dissertation and one manuscript based on MS research are viewed as reasonable targets. Specifics of these expectations, including guidelines and timelines, are matters to be arranged between students and their faculty advisors. An important mechanism for formalizing and assessing progress towards these aims is the annual evaluation of satisfactory academic progress (see page 16 or this link). This process provides a structure for faculty and students to set goals and expectations regarding publishing and to assess progress toward those goals on an annual basis. For context, faculty members are evaluated on a similar basis via annual evaluations with the School Head and through mid-tenure, tenure, and promotion processes at the College and University levels.

THESIS GUIDE

The Graduate School’s website has a complete guide to the University requirements associated with formatting your thesis or dissertation. Students are encouraged to review the site, listed below, before starting to write the thesis to ensure understanding of the formatting, procedures and deadlines.

https://gradschool.oregonstate.edu/progress/thesis-guide

Note that the Graduate School takes the formatting, content, and other requirements for the thesis (and especially the “pretext pages”) very seriously. Failure to adhere to these requirements strictly may result in your thesis being rejected by the Graduate School.

THESIS BINDING

The MIME has no requirement that you print or bind your thesis. Students wishing to bind a personal copy may do so through the private business:

Cyrano’s Phone: 541-752-0469
THESIS CREDIT REGISTRATION

Research graduate students are working toward completion of their thesis from the first day they arrive on campus. Even early on, every meeting you have with a potential major professor, every conversation you have with fellow graduate students about how they determined their thesis topic, every hour you spend reading previously published work are efforts toward your future thesis. An MEng student may be able to handle three or even four courses per term, since their primary purpose is to complete their required coursework, but a research student, even before they’ve decided on a major professor or thesis topic, needs to account for the time it takes to figure these things out. Therefore, it is appropriate that their registration reflects that effort. Registration in thesis credits (IE/ME/ROB 503/603) is typical as top-off credits each term once in-class course load has been decided each term.

Furthermore, once all required graduate courses on a student’s POS are completed, students typically register full time for thesis (XXX 503 or XXX 603) credits each term until they graduate, unless permission for a reduced course load has been requested and granted.