

Mechanical Engineering Graduate Student Orientation

January 20, 2023



Today's Orientation



- Greetings and Speakers
- Who We Are
- Important Info

Department of Mechanical Engineering

Who We Are and What We Do

Our people:

- 30 professors / senior lecturers
- 13 administrative and research staff
- 25 postdocs
- 250 graduate students
 - 113 MSE and 137 PhD
- 238 undergraduate students



Our goal:

- Provide you an outstanding education in a leading-edge research environment.

Department of Mechanical Engineering

Your Academic Program Staff

John Soos

Sr. Academic Program Coordinator



- Exam Scheduling
- Event Planning
- Teaching Assistant Hiring and Payroll
- Facilities Management
- E-mail List Management
- Records and Website Maintenance
- Graduation Certifications

Mike Bernard

Academic Program Manager



- Academic Advising
- Student Recruiting
- Graduate Application Management
- Student Payroll
- Course Scheduling
- Communications Oversight
- Statistical Reporting

Department of Mechanical Engineering

COVID-19 Information

Online resources

- For Grad Students - <https://covidinfo.jhu.edu/information-for-graduate-students/>
- Whiting School - <https://engineering.jhu.edu/covid-19/wse-homewood-graduate-student-covid-19-faq/>
- International Students - https://ois.jhu.edu/Immigration_and_Visas/Travel_Information/COVID-19_Immigration-Related_FAQs/

Reminders - Actions to Take

- Submit pre-admission health forms
- Take required introductory courses
- Read your advising manual
- Pay any tuition or fees due
- Submit payroll documents if getting paid
- Enroll for courses after discussing them with your faculty advisor

Visit the New Grad Student page at

<https://me.jhu.edu/education/graduate-studies/advising/for-new-graduate-students/>

Mechanical Engineering Graduate Student Association

- Your voice in Mechanical Engineering
- Advocates for issues and concerns
- Social events
- Athletic teams
- Dissertation Defense celebrations
- Visit <https://me.jhu.edu/mega/> for info and calendar

Milton S. Eisenhower Library

- On the Homewood Campus
- One of 9 Hopkins libraries
- We have our own librarian!



Resources

- Web – <https://library.jhu.edu>
- Librarian – Mr. Steve Stich – sstich@jhu.edu

Required Introductory Courses

EN.500.603 Graduate Orientation and Academic Ethics

- 20-minute online tutorial
- Students will be registered and notified when available.
- Must complete in first semester. Don't wait!

Responsible Conduct of Research

- AS.360.624 (quick - MSE) and AS.360.625 (longer PhD + some MSE)
- Anyone doing research must take course by their 4th semester.
- Offered all semesters and summer

Online Lab Safety + EN.500.601 Research Laboratory Safety

- 8 online modules required; in-person EN.500.601 class optional.
- Must take the 8 online modules before starting research

Opioid Awareness, Effort Reporting, American English Pronunciation (for TA work), and Title IX Anti-Harassment – visit <https://me.jhu.edu/education/graduate-studies/advising/for-new-graduate-students/>



MSE Degree Requirements

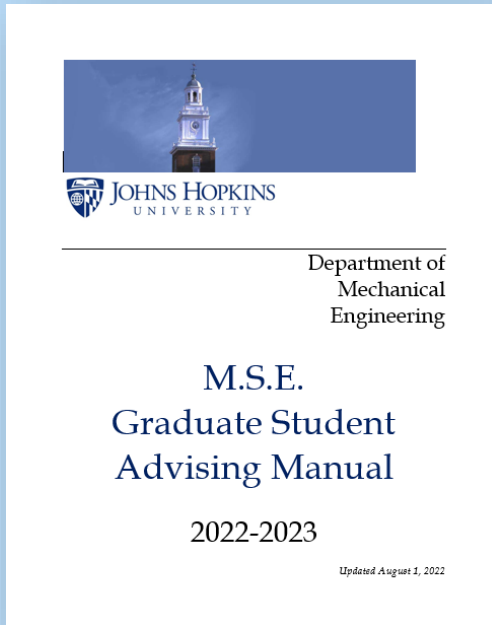
Section A – A set of advisor-approved courses

- 8 courses / 24 credits
 - 6 courses, 3 credits or more each plus...
 - Other courses totaling 6 credits – from Center for Leadership Education or other departments – 1.5-3 credits each
- 2 must be applied math, numerical analysis, or computational
- Almost half must be 530.xxx or 535.xxx Mechanical Engineering
- Up to 2 from Engineering for Professionals
- Up to 4 upper-undergrad level
- No independent research, graduate research, or special studies.

Section B – choose one

- 2 more courses / 6 credits - 530.823 MSE Graduate Research can be one
- Master's Essay – 6 credits either 530.822 MSE Essay – Co-Op or 530.823 MSE Graduate Research

MSE Degree “Things to Know”



Check your Advising Manual for...

- **Sec. 3.5** – selecting courses
- **Sec. 3.6** – suggested courses
- **Sec. 3.7** – registration and credits
- **Sec. 3.8** – EP courses, accepted grades, double-counting between degrees
- **Sec. 3.11** – Academic Performance
- **Sec. 3.12** – Switching to the Ph.D. program

PhD Degree Requirements

Mechanical Engineering

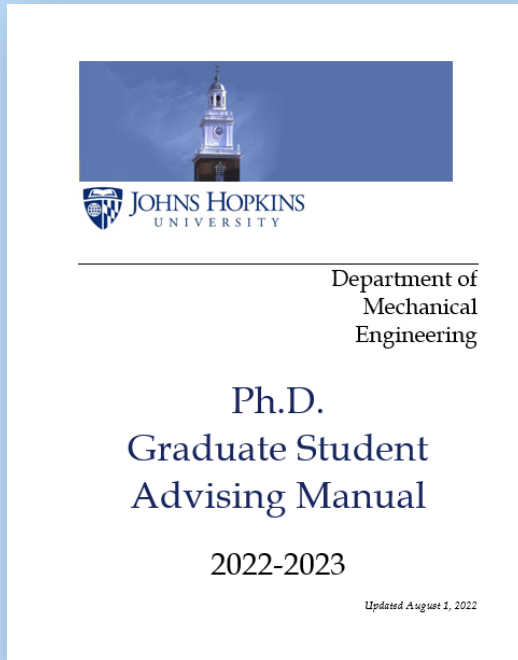
- Pass the Departmental Qualifier Exam (DQE)
- Teaching Assistant – 2 courses
- Register for and pass EN.530.801 Graduate Research - every semester
- Register for and pass EN.530.803 MechE Graduate Seminar – first three years
- Maintain academic and research performance

University

- 2 semesters of “full-time” residency
- Pass the Graduate Board Oral (GBO) exam
- Submit and defend dissertation



Things to Know



Check your Advising Manual for...

- **Sec. 2.6** – Course Frequency
- **Sec. 3** – Requirements and Performance
- **Sec. 3-5** – DQE, GBO, Dissertation Defense
- **Sec. 9** – Annual Evaluations, Seminars, Ethics
- **Sec. 12** – Financial Aid and Teaching Assistants
- **Sec. 14** – Purchasing and Reimbursements
- **Sec. 15** – Payroll
- **Sec. 16.1** – Lab Safety

More Things to Know - PhD Policies

Check Section 8 of the PhD Advising Manual for Policy Links...

- Time Off and Vacation
- Mentoring Commitments for Students and Advisors
- Graduate Residency and Registration
- Academic Policies
- Rights and Responsibilities
- Probation and Dismissal



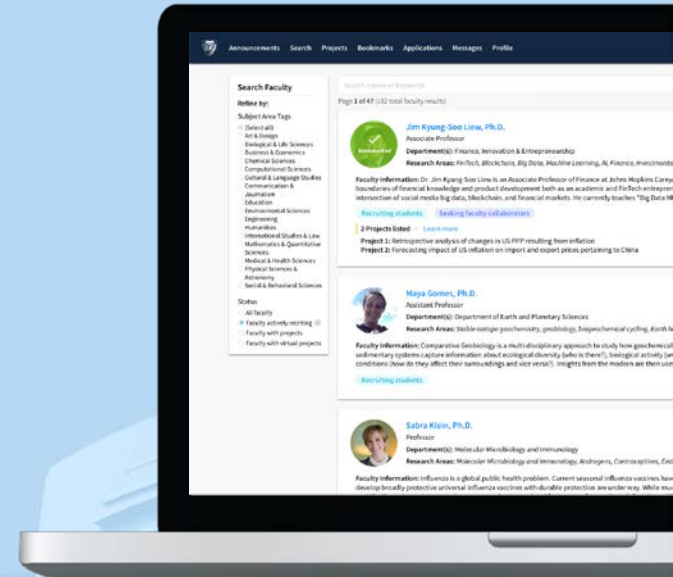
Academic Advising – where to get help

- Your faculty advisor
- Graduate Academic Advising page - <https://me.jhu.edu/education/graduate-studies/advising/>
- Your advising manual
- Advising Week meetings – March/April and October/November
- Academic Staff - Mike Bernard and John Soos

University-wide marketplace for research opportunities and collaboration

- Find and connect with faculty mentors
- Recruit undergrads and other students across disciplines to support your projects
- Discover PhD/postdoc collaborators
- Get matched with part-time consulting opportunities with companies seeking subject matter experts

Get started by logging in with your JHED credentials at <https://foragerone.com/auth/login> and creating your profile.



If you have Troubles

Don't Wait! If you...

...are struggling with course work or exams,

...have trouble attending lectures,

...have emotional or mental health struggles,

...have financial or living space problems,

...are not getting along with your roommates,

...have family concerns,

...feel overwhelmed:

Ask for Help Early – it's okay!

Talk to your **Professor, Faculty Advisor, or Teaching Assistant.**

Allison Leventhal

Student Life Administrator

410-516-2328 or aleventhal@jhu.edu

Christine Kavanagh

Associate Dean of Graduate Affairs

410-516-5938 or ckav@jhu.edu

Dr. Annalisa Peterson

Ombuds

410-218-6669 or

<https://www.jhu.edu/ombuds-office/>

Career Services

Career exploration
Connections for jobs
Info sessions for career preparation



Life Design Lab – Masters

Mr. Mark Savage

Life Design Educator

msavag16@jhu.edu

<https://studentaffairs.jhu.edu/life-design/>

PHutures – PhD

Dr. Roshni Rao – Director

r Rao12@jhu.edu

<https://provost.jhu.edu/integrative-learning-and-life-design/life-design/phutures/>

Mechanical Engineering “Careers and Life” - <https://me.jhu.edu/education/careers-and-life/>

Seminars / Teaching Assistants

Seminars

- EN.530.803 MechE Seminar – Thursday 3:00
- Other Seminars
 - EN.530.809 Mechanics and Materials – Friday 3:00
 - EN.620.745 Computational Sensing and Robotics – Wednesday 12:00
 - EN.500.602 Environmental and Applied Fluid Mechanics – Friday 3:00
 - EN.530.807 Fluid Mechanics – Friday 4:00



Teaching Assistant

- Opportunity for grading, labs, office hours, lectures
- Paid positions at equivalent of \$19/hour
- International students have English Language requirements

Safety and Common Sense

Campus Safety and Security Tips

- Baltimore is a vibrant, exciting city...
- Plenty of campus police and security staff
- Secure your laptops and valuables
- Back up your work on separate systems or cloud
- Don't leave items in your car in plain sight
- Use good judgment if walking at night

Hopkins Security

- General Info 410-516-4600
- Safety Escort 410-516-4600
- Emergency 410-516-7777 or 911



Computing

Get Started at <http://it.jhu.edu>

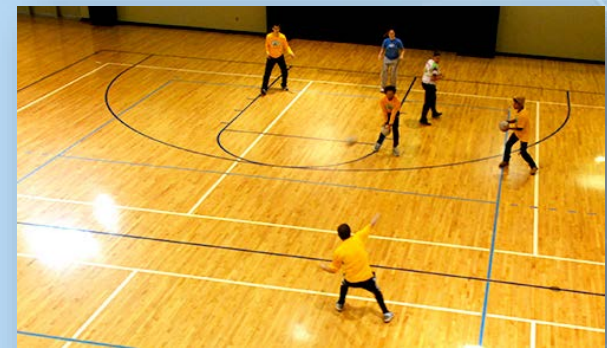
- E-mail
- Computer discounts
- Free anti-virus
- Wi-Fi
- Zoom
- Microsoft Teams
- Software



Recreation Center

- Membership is free for all graduate students!
- Enjoy the pool, climbing wall, fitness center, weight room, basketball courts!
- Fitness training, swim lessons, and other programs available
- Intramural and club sports leagues and Sports Clubs

<https://studentaffairs.jhu.edu/recreation/>



This'n'that...

In the back of your advising manuals...

- MEGA and GRO
- Join the ASME!
- Life outside class, on campus, and in Baltimore.
- Forms

Info for Graduate Students –

[https://me.jhu.edu/education/graduate-studies/
current-grad-students/](https://me.jhu.edu/education/graduate-studies/current-grad-students/)

**91 Things to Do in Baltimore...
try 10 this year!**



Department of Mechanical Engineering

Resources and Contacts

Humans

- Your Faculty Advisor
- Mike Bernard
- John Soos
- Prof. Tamer Zaki, Director of Graduate Studies
- Prof. Gretar Tryggvason, Department Head

me-academic@jhu.edu

me-academic@jhu.edu

t.zaki@jhu.edu

gtryggv1@jhu.edu

Otherwise

- MSE and Ph.D. Academic Advising Manuals
- Johns Hopkins
- Mechanical Engineering
- Graduate Advising
- Top 12 for Grad Students

<http://www.jhu.edu>

<http://www.me.jhu.edu>

<https://me.jhu.edu/education/graduate-studies/advising/>

<https://me.jhu.edu/education/graduate-studies/current-grad-students/>

**Best of luck
to you this year!**



Questions?