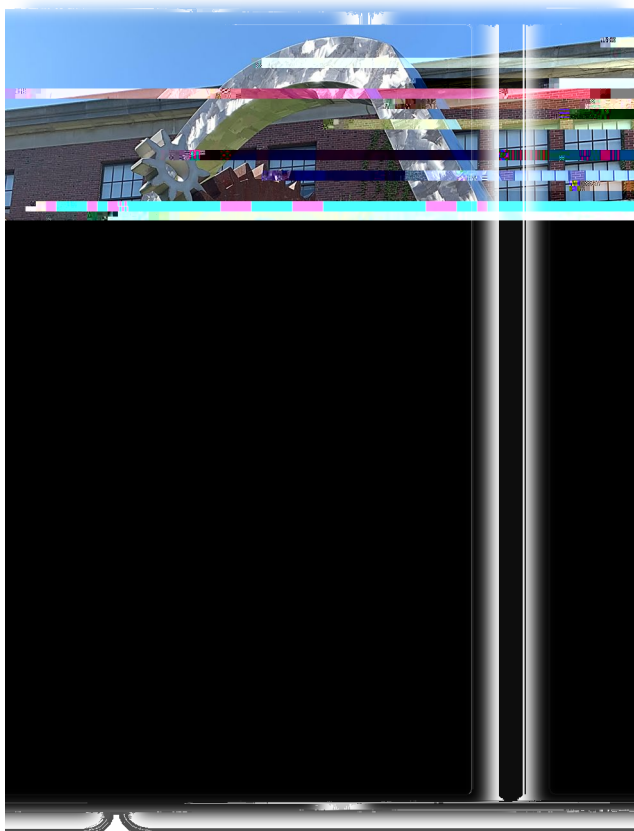


# University of Rochester



# Table of Contents

Welcome to the Department of Mechanical Engineering.....	3
The Master of Science (MS) Degree .....	4
General requirements.....	4
Plan A requirements.....	4
Plan B requirements.....	5
The Degree Doctor of Philosophy (Ph.D.).....	6
General requirements.....	6
Finding an advisor (research supervisor) and getting started .....	7
Ph.D. first year preliminary examination.....	8
Ph.D. dissertation advisory committee .....	9
Ph.D. qualifying examination .....	10
The final Ph.D. thesis defense and oral examination.....	11
Selecting a Date for the Ph.D. Thesis Defense .....	11
Format of the Ph.D. defense examination.....	14
Mechanical Engineering Faculty .....	15

## **Welcome to the Department of Mechanical Engineering**

Welcome to the University of Rochester's Department of Mechanical Engineering! We are happy that you have chosen to continue your studies with us. This handbook will explain the formal requirements for completion of your graduate degree in Mechanical Engineering. It supplements and clarifies the general University requirements spelled out in the Official Bulletin for Graduate Studies and the Regulations and University Policies available on the University web site at [www.rochester.edu/GradBulletin/](http://www.rochester.edu/GradBulletin/).

During your first year, you will be assigned a faculty advisor to assist you in course selection and preparation for either your first-year exam or further research. You may be asked to assist with teaching or grading of an undergraduate course. Teaching assignments are made by the department to best match the needs of the faculty and students. If you have a specific preference, speak to the Graduate Coordinator or your advisor.

We hope you will take advantage of the many opportunities available here in Roc

## The Master of Science (MS) Degree

### *General requirements*

The MS degree requires 30 semester hours of graduate credit. No more than 10 credits may be transferred from non-matriculated study at the University of Rochester or from an outside institution. There are two routes to the degree: Plan A (thesis) and Plan B (examination). Every student must complete a Program of Study form (available from the Graduate Coordinator). This form is completed with the help of your academic advisor and is then given to the Graduate Coordinator. The completed form goes to the Dean's office for signature and distribution to appropriate offices. The Program of Study should be completed as soon as possible, but in no case later than the end of the second semester. This form may be updated by submitting a revised Program of Study, which must be approved by your advisor. When selecting Plan A (thesis) or Plan B (coursework), make sure you discuss your options with the graduate coordinator first.

*y b.td0 012103*





*Mechanical Engineering Graduate Handbook*

research in parallel with your course work. Summer is a good time for conducting research as there are no classes or teaching duties. Making a strong start on research during the first year is a significant sign of good progress towards your degree.

### *Ph.D. first year preliminary examination*

First year Ph.D. students take this exam after their second semester, usually in late May. This examination is required of all first year Ph.D. students, and successful completion of this examination is required for formal admission into the Ph.D. program in the Department of Mechanical Engineering.

The examination: The examination process takes fourteen days. The examining committee consists of three Mechanical Engineering faculty members, one of whom is the student's academic research advisor. The examining committee and the date and time of the examination are chosen by the department Graduate Committee. You must have a GPA > 3.0 in 400-level courses and confirm with the Graduate Coordinator by a specified date to take the exam.

Each student will be given three published research papers for review. The Graduate Committee chooses these from papers submitted by the faculty. The papers will generally be in the student's broad area of research. The papers will usually be no more than two years old and will not be necessarily directly related to the student's chosen area of research, nor will they have been written by a member of the ME faculty. Within three days of receiving the papers, each student must inform the Graduate Coordinator in writing which of the three papers he/she has chosen to serve as a basis for the preliminary exam. Seven days later, each student must submit to the Graduate Coordinator a PDF copy of a carefully written document containing three sections of equal importance:

- Questions addressed by the author(s). Identify the questions addressed in the article and the reasons for examining these questions.
- Critical



*Mechanical Engineering Graduate Handbook*

year. The membership of the committee shall be approved by the Department chair and reported to the dean of graduate studies. The goal of the recommended annual meeting is to evaluate the student's progress and offer advice, and, if advisable, a written record of the meeting may be placed in the student's file. (A standard form for this written record is available from the Graduate Coordinator.)

### *Ph.D. qualifying examination*

The purpose of the qualifying examination is to determine whether the student is fully prepared to undertake original research in the chosen area. This examination must be taken by the end of the third year of graduate study. The basis for the examination is a written research proposal prepared by the student, describing the current state of knowledge of a particular research topic, and outlining a research program that will lead to a satisfactory dissertation. Note that the student *need not demonstrate significant progress in the proposed research but must demonstrate a thorough understanding of the problem and present a sound plan of attack*. Contact the Graduate Coordinator as soon as you and your advisor begin thinking about scheduling your qualifying examination. There are several things you must complete before you can take this examination. The Graduate Coordinator can guide you through this process.

- You must submit your written research proposal to your examining committee and your committee nomination form to the Dean's Office at least 15 working days (weekends and University holidays not included) before the examination is to take place.
- Your program of study, which should have been completed at the end of your 3rd year must be on file, and updated if necessary.

The examining committee: The committee will consist of a minimum of three full-time faculty members of professorial rank. Two must be from within the Department of Mechanical Engineering and one from outside the Department. The committee members are chosen by your advisor in consultation with you: often they are the members of your advisory committee.

Typical examination format: The student will give an oral presentation giving an overview of

the research proposal, for the first 20-

weekends, evenings, holidays, or the days between December 24 and January 2.) Check the academic calendar for important dates and deadlines.

Use the Ph.D. date calculator to determine the deadline dates for getting your paperwork to the Graduate Studies Office and Ph.D. thesis defense committee.

After selecting a date for your Ph.D. thesis defense:

1. Meet with the Graduate Coordinator
  - Your graduate coordinator will advise you of any program-specific requirements for the thesis defense as well as work with you on the details of the thesis defense and oral examination.
  - The coordinator also will help you with scheduling the room for your thesis defense.
  
2. Submit Thesis and Committee Participants Names to Graduate Coordinator
  - The examining committee must consist of at least two full-time faculty from M.E. and one full-time faculty outside M.E.
  - When all Ph.D. thesis defense committee members and your committee chair agree to a specific date and time, inform your graduate coordinator as soon as you possible can, but no less than six weeks prior to your defense date.
  
3. Approval by the Ph.D. Thesis Defense Committee
  - You should provide your committee members at least one week notice before you submit your thesis for review.
  
4. Nominate a Faculty Member to serve as Chair for your Ph.D. Thesis Defense





## Mechanical Engineering Faculty

<b>Faculty</b>	<b>Office (in Hopeman)</b>	<b>Email</b>
Abdolrahim, Niaz	404	<a href="mailto:niaz@rochester.edu">niaz@rochester.edu</a>
Aluie, Hussein	406	<a href="mailto:hussein@rochester.edu">hussein@rochester.edu</a>
Askari, Hesam	223	<a href="mailto:askari@rochester.edu">askari@rochester.edu</a>
Athauda, Anushika	215	<a href="mailto:a.athauda@rochester.edu">a.athauda@rochester.edu</a>
Betti, Riccardo	212	<a href="mailto:riccardo.betti@rochester.edu">riccardo.betti@rochester.edu</a>
Boster, Kimberly		<a href="mailto:kboster@ur.rochester.edu">kboster@ur.rochester.edu</a>
Burnham-Fay, Ethan	215	<a href="mailto:ethan.burnham-fay@rochester.edu">ethan.burnham-fay@rochester.edu</a>
Clark, Robert	214	<a href="mailto:rclark@rochester.edu">rclark@rochester.edu</a>
Collins, Gilbert	307	<a href="mailto:g.w.collins@rochester.edu">g.w.collins@rochester.edu</a>
Davies, Jonathan	LLE	<a href="mailto:jdav@lle.rochester.edu">jdav@lle.rochester.edu</a>
Dias, Ranga	220	<a href="mailto:rdias@rochester.edu">rdias@rochester.edu</a>
Dissanayake, Sachith	304	<a href="mailto:Sachith.dissanayake@rochester.edu">Sachith.dissanayake@rochester.edu</a>
Funkenbusch, Paul	222	<a href="mailto:paul.funkenbusch@rochester.edu">paul.funkenbusch@rochester.edu</a>
Goncharov, Valeri	LLE	<a href="mailto:vgon@lle.rochester.edu">vgon@lle.rochester.edu</a>

Hu, Suxing

*Mechanical Engineering Graduate Handbook*

Pickel, Andrea	219	<a href="mailto:apickel@ur.rochester.edu">apickel@ur.rochester.edu</a>
Polsin, Danae	LLE	<a href="mailto:dpolsin@ur.rochester.edu">dpolsin@ur.rochester.edu</a>
Regan, Sean	LLE	<a href="mailto:sreg@lle.rochester.edu">sreg@lle.rochester.edu</a>
Ren, Chuang	203A	<a href="mailto:chuang.ren@rochester.edu">chuang.ren@rochester.edu</a>
Rygg, J. Ryan	307	<a href="mailto:j.r.rygg@rochester.edu">j.r.rygg@rochester.edu</a>
Sefkow, Adam	205	<a href="mailto:asef@lle.rochester.edu">asef@lle.rochester.edu</a>
Shang, Jessica	206	<a href="mailto:jshang4@ur.rochester.edu">jshang4@ur.rochester.edu</a>
Singh, Sobhit	345	<a href="mailto:s.singh@rochester.edu">s.singh@rochester.edu</a>
Slane, Laura	217	<a href="mailto:lslane@ur.rochester.edu">lslane@ur.rochester.edu</a>

End