



MIME GRADUATE STUDENT ORIENTATION

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Professor and Graduate Director

Department of Mechanical, Industrial and Manufacturing Engineering

University of Toledo

August 12, 2018

10:00 am - 11:30 am

MIME Conference Room - Nitschke Hall 4020



COLLEGE of ENGINEERING

THE UNIVERSITY OF TOLEDO

8/22/2018

Outline

- ▶ Welcome - MIME Chairman
- ▶ MIME Focus Areas and Department Organization
- ▶ MIME Graduate Programs
- ▶ Registration and Plan of Study
- ▶ Resources/Facilities



MIME Focus Areas

- ❑ **MIME Department is recognized as one of the best on campus**
- ❑ **Graduate program in MIME is specialized in terms of both teaching and research**
 1. **Manufacturing Processes and Systems Focus Area**
 2. **Mechanics, Materials and Design Focus Area**
 3. **Computational and Experimental Thermal Science Focus Area**
- ❑ **Different required courses in each area**
- ❑ **Organized based on the faculty research and interests**



MIME Focus Areas

❑ What do they mean to you?

- Must select and concentrate on one focus area
- It will determine your course work, research and expertise
- But will not appear on your diploma.

❑ Selection of a Focus Area

- Based on statement of purpose at the time of application
- In general, students are admitted to a focus area to meet focus area research needs



MIME Focus Areas

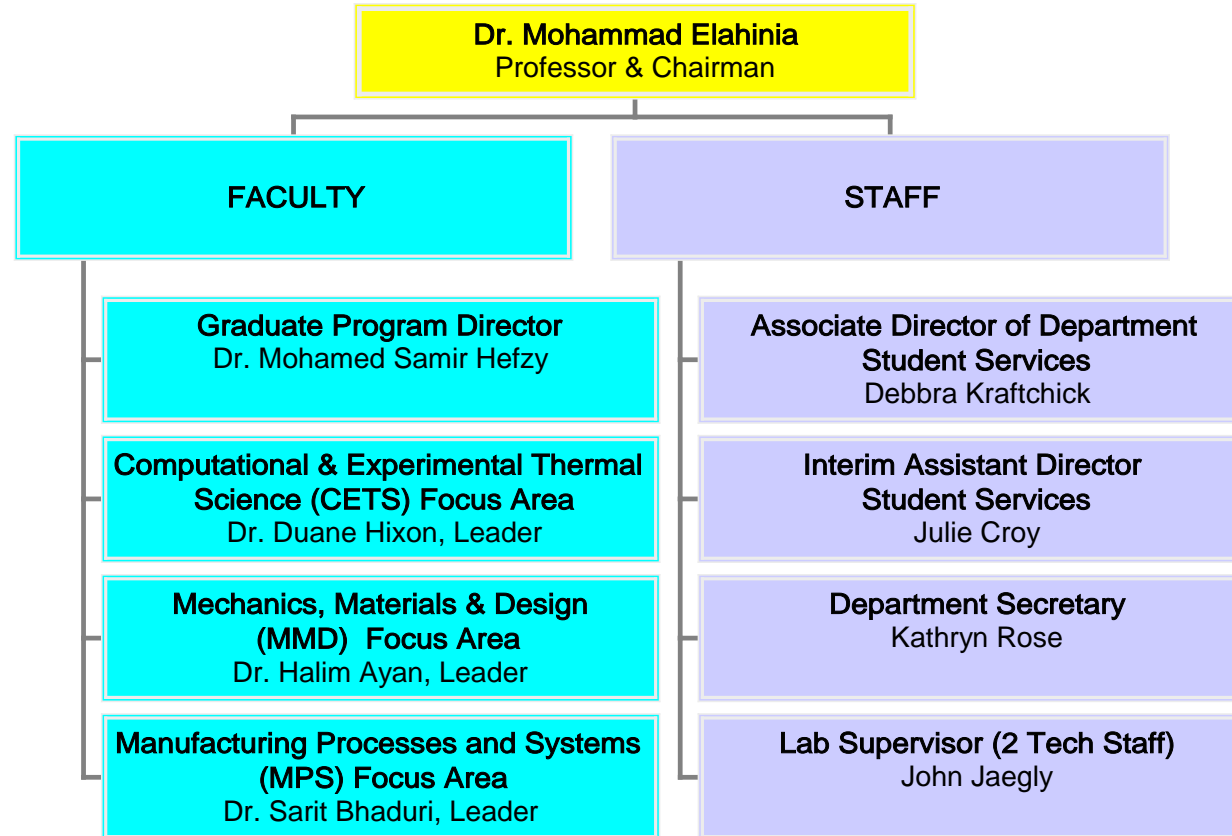
❑ Requirements?

- Core and elective courses
- Students must meet requirements set by focus area faculty in order to be certified for graduation.
 - ❑ Following an approved “plan of study” guarantees that you will be certified to graduate upon its successful completion





M.I.M.E. Department Organization



Administration

► Department Chairperson -

Dr. Mohammad Elahinia (x8210)

- As administrator
 - ◆ Overall responsibility for department -- all administrative as well as academic matters.
 - ◆ Student matters -- unusual (extraordinary) problems/issues.

- As academic advisor
 - ◆ Faculty responsibilities



Student Services Staff

► **Associate Director of Department Student Services-**

Ms. Debra Kraftchick (NI 4006 – x 8204)

- First person to see records and student files
- Process department/university forms
- Registration/scheduling/reminders/new sections as needed
- Direct students to right resources



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Student Services Staff

► **Interim Assistant Director of Department Student Services-**

Ms. Julie Croy (NI 4006 – x 8204)

- At the present time, Ms. Croy is involved only with undergraduate students



Student Services Staff



► Department Secretary -

Ms. Kathryn Rose (NI 4005 – x 8210)

- Responsible for secretarial support
 - Instructional support to faculty
 - Appointments with Chairman on special issues
 - All department purchases and travel forms
 - Financial matters and forms including preparation of GAPA's and time cards (if needed)
 - If funded, you must see Ms. Rose for completion of tax and other forms, You must complete all forms for funding including those for establishing a tax ID #.

You will not be paid until all forms have been filled and submitted.



Student Services Staff

► Graduate Program Director

Dr. Mohamed Samir Hefzy (NI 4056 – x 8234) (mohamed.hefzy@utoledo.edu)

- Initial advisor to all new students (except RAs)
- Determines all TA duties, evaluates TAs
- Approves plans of study/certifies graduation
- Approves practical training requests
- Authorizes program changes
- Other graduate program issues



Faculty

► Academic Advisors

- Supervise graduate research
- Approve plans of study
- Approve changes to plans of study
- Award RAs



Faculty

► Computational and Experimental Thermal Sciences Focus Area

- Dr. Sorin Cioc
- Dr. Duane Hixon (focus group leader)
- Dr. Chunhua Sheng
- Dr. Hossein Sojoudi



Faculty

► **Materials, Mechanics and Design Focus Area**

- Dr. Halim Ayan (focus group leader)
- Dr. Lesley Berhan
- Dr. Mohammad Elahinia
- Dr. Nicoleta Ene
- Dr. Mohamed Samir Hefzy
- Dr. Efstratios Nikolaidis
- Dr. Reza Rizvi
- Dr. Brian Trease



Faculty

► Manufacturing Processes and Systems Focus Area

- Dr. Sarit Bhaduri (focus group leader)
- Dr. Matthew Franchetti
- Dr. A. H. Jayatissa
- Dr. Ioan Marinescu
- Dr. Hongyan Zhang



WHY ARE WE HERE?

▶ Graduate Student Goals

- *Better job opportunities*

▶ College Goals

- To be a transformative force of the world
- To be a venue for instructional & scholarship excellence
- Research mission is very important at the graduate level
- As graduate students, every one of you must contribute to the research and scholarship mission of the college
 - **WE NEED THE BEST FROM YOU!**
 - **You are expected to start your research during the 1st semester. This means selecting an advisor in the first few weeks.**



Graduate Student

- ▶ **Proactive learner vs. reactive learner**
- ▶ **Primary responsibility for your own education**
- ▶ **A full-time job**
 - ▶ **Greater than 40 hours/week**
 - ▶ **Working weekends and late nights**
- ▶ **Open-ended, varies with the student and the project**
 - **Over when you complete your course and research requirements**



Graduate Student Duties

- Select and register for classes based on approved plan of study.
- **Select an advisor by end of fall term at the latest.** Submit advisor selection form to Dr. Hefzy.
 - <http://www.utoledo.edu/engineering/mechanical-industrial-manufacturing-engineering/research/>
- Fill out a plan of study before the beginning of the 2nd semester.
- If a Teaching Assistant, must take the ITA speaking test.
- Attend Graduate Seminar.
- Keep your Thesis Advisor informed on your progress.
- Satisfactory progress in research is a requisite for continued financial support (assistantship).



Graduate Programs



- **MS (MSIE & MSME)**
 - **Thesis and Project options**
 - 30 semester credit hours
 - 9 hours of thesis or 6 hours of project
 - If you receive TA or RA funding from the MIME department you must do a thesis. In this case, you cannot switch from the thesis option to project or coursework only options.
 - If you receive TS support from the MIME department you must do a project. In this case, you cannot switch from the project option to coursework only option.
 - **Coursework only option**
 - 30 semester credit hours
- **PhD**
 - **Minimum requirements: 60 semester credit hours beyond MS.**



MS Degree

- **Mathematics: 3 credits**
 - From list of approved courses
- **Focus area core courses: 6 or 9 credits**
 - Only approved courses
- **Elective courses:**
 - Focus area electives
 - From list of approved courses with approval of advisor
 - 9 or 12 credits: thesis option
 - 12 or 15 credits: project option
 - 18 or 21 credits: coursework only option
- **All the above must be advanced level courses: 6000 level, 5000 level less common**
- **Thesis research: 9 credits**
- **Project research: 6 credits**



PhD Degree

- **Research-Based Degree**
 - **Must pass focus area PhD qualifying examination in Spring semester**
 - Expected within 1st year in program
 - If failed once, may petition for a retest one year later, if petition is granted.
 - **No specific topic requirements (other than core and math requirements, if not taken already), but courses must be approved by advisor**
 - **15 credits minimum advanced coursework**
 - Planned for Ph.D. research (consult your advisor)
 - Preparation to take Ph.D. qualifying exam in spring semester
- **Dissertation Research: 45 credits minimum**



PhD Degree

- **Qualifying Exam**
 - **Must be taken in Spring semester**
 - **Advanced (senior) undergraduate level and/or first year graduate level**
- **Dissertation Proposal**
 - **A definite project identified and substantial preliminary research work done. This includes literature survey, plan of tasks, feasibility study**
- **Dissertation Defense**
 - **Write dissertation and defend it in open forum**
 - **Significant, consequential, original**



Advanced Graduate Courses

- **Typically at 6000/8000 levels**
 - MS students – 6000 level
 - PhD students – 8000 level
- **Equivalent courses**
 - Might be numbered at a lower level but considered equivalent to MIME 6000/8000 level courses
 - Consult your advisor
- **MS program advanced course requirement**
 - 12 credits (core, approved math or elective) at 6000 level



Plan of Study

- **A “Roadmap” of Graduate Program**
 - List of all courses taken or to be taken
 - Must be approved by advisor, Graduate Program Director, Associate Dean of COE Graduate Studies, and College of Graduate Studies
- **When to File**
 - As soon as possible but not later than beginning of Spring semester
- **Where to File**
 - Office of the Department Associate Director of Student Services
- **Benefits**
 - Registration without additional advisor’s approval
 - Prevent having to take additional courses to meet degree program requirements
 - Timely planning and approval of program



Registration



- **Requirements for Supported Students**

- All MS and PhD students who receive full-time support must register for 9 credit hours during each of the fall and spring semesters.

- **Graduate Seminar MIME 6930**

- Attendance required.
- Notification of time and location by email

- **MS students: register for graduate research and thesis MIME 6960 (3 credits)**

PhD students: register for independent research MIME 8900 (3 credits).

- Use your advisor's section number.
- If you do not have an advisor, register MIME 6900/8900-080, and prepare a thesis proposal paper by December 1st and submit it to your advisor



Registration Forms

- **Course Request Form**

- Needed only for the **first** term. Thereafter, use web registration by accessing the **myUT portal**.
- Course Request Form needs the advisor's signature
- Course Request Forms are needed for thesis or dissertation registration.



Registration Process



- **Where to register?**
 - Registrar's Office – Rocket Hall
- **What documents needed?**
 - Completed and signed “Course Request Form” and “Seminar Request Form”, if any
- **Instructional Fee Credit?**
 - Tuition credit given automatically to supported students. It takes time for instructional fees to be credited to students' accounts. **Supported students need to pay all other fees to avoid monthly late payment fees of \$50.00.**
- **Late Registration fees?**
 - Register **prior** to the 1st day of the semester to avoid late registration fees that range from \$50.00 to \$200.00 depending on how late you register.



Registration Example – Computational and Experimental Thermal Sciences



- **Core**

- **Computational Fluid Dynamics I (MIME 6440/8440)**
- **Intermediate Fluid Mechanics and Heat Transfer (MIME 6980/8980)**

- **Elective**

- **Turbomachinery (MIME 5510)**

- **Engineering Mathematics**

- **Advanced Engineering Mathematics I (MIME 6000/8000)**



Registration Example – Mechanics, Materials and Design

- **Core**
 - **Advanced Mechanics of Materials (MIME 5300)**
- **Elective**
 - **CAD- Finite Element methods (MIME 5280)**
 - **Dynamics of Human Movement (MIME 5230)**
 - **Eng. Analysis of Smart Materials (MIME 6980/8980)**
 - **Elasticity (MIME 6350/8350)**
- **Engineering Mathematics**
 - **Advanced Engineering Mathematics I (MIME 6000/8000)**



Registration Example – Manufacturing Processes and Systems

- **Core**
 - **Design of Experiments (MIME 6720/8720)**
- **Elective**
 - **CAD- Finite Element methods (MIME 5280)**
 - **Dynamics of Human Movement (MIME 5230)**
 - **Manufacturing Engineering (MIME 5060)**
 - **Alternative Energy (MIME 5980)**
- **Engineering Mathematics**
 - **Advanced Engineering Mathematics I (MIME 6000/8000)**



Resources

- ▶ Student Self Service (<http://myut.utoledo.edu>)

- ▶ MIME graduate student handbook

<https://www.utoledo.edu/engineering/mechanical-industrial-manufacturing-engineering/pdfs/graduate-student-handbook-2017-mime.pdf>

- ▶ Student Services

- Writing Center (<http://www.utoledo.edu/success/writingcenter/>)

Main Campus

**0130 Carlson Library (basement of Carlson Library)
419.530.7753**

<http://www.utoledo.edu/engineering/graduate-studies/>



THE UNIVERSITY OF TOLEDO

COLLEGE OF ENGINEERING OFFICE OF GRADUATE STUDIES

HOME CO-OP AND CAREERS UNDERGRADUATE STUDIES GRADUATE STUDIES COLLEGE COMPUTING FACULTY/STAFF RESEARCH ALUMNI/GIVING CONTACT

ENGINEERING GRADUATE STUDIES

Welcome to the College of Engineering Office of Graduate Studies. The UT College of Engineering offers PhD programs and Masters degree programs, including the part-time online Masters in General Engineering and the part-time Masters in Energy Engineering. Our MS programs prepare students for research and advanced engineering careers.

APPLY

GRADUATE PROGRAMS

- Apply
- Bioengineering Graduate Program (PhD, MS)
- Biomedical Engineering Graduate Program (PhD)
- Chemical Engineering Graduate Program (PhD, MS)
- Civil Engineering Graduate Program (PhD, MS)
- Computer Science Engineering Graduate Program (PhD, MS)
- Electrical Engineering Graduate Program (PhD, MS)
- Industrial Engineering (PhD, MS)
- Mechanical Engineering (PhD, MS)
- Master of Science in Engineering with a

FUTURE STUDENTS

CURRENT STUDENTS

INDUSTRY/ EMPLOYERS

COE NEW STUDENT ORIENTATION - AUGUST 21, 2018, 11:15-2:00PM, BRADY CENTER, NT 1000

Please plan to join us for lunch and networking with current students and faculty. Learn more about what to expect as you start your graduate program.

2018 DOCTORAL INSTRUMENTATION ASSISTANTSHIP - APPLICATION DEADLINE WEDNESDAY, AUGUST 23, 2018

All doctoral students in the college who have completed their PhD qualifying/comprehensive examinations and expect to remain in their doctoral program for 3 more years are eligible to apply.

NEWS, EVENTS, AND INFORMATION

3:09 PM 8/17/2018



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Other Resources

- ▶ Office of International Student & Scholar Services (OISSS)
 - ▶ Located in Snyder Memorial Room 1000.
 - ▶ 419-530-4229
 - ▶ I-9's and other Visa issues
- ▶ Student Services
 - ▶ Medical Center on the Main Campus (419-530-3451)
<http://www.utoledo.edu/healthservices/student/>
- ▶ Student Organizations
 - ▶ ASME, IIE, SAE, SWE, GSA, etc.

Other Resources

- ▶ Catherine S. Eberly Center for Women
 - ▶ www.womenscenter.utoledo.edu

- ▶ Student Recreation Center (Main Campus)
 - THE REC
 - <http://www.utoledo.edu/studentaffairs/rec/>
 - Need a valid UT Student Rocket Card.
 - Intramurals events, Fitness Classes.



- ▶ University Counseling Center (Main Campus Medical Center)
 - Psychiatry and counseling services
 - All appointments are free and confidential (419.530.2426)
- ▶ Student Mental Health and Wellness Services (Kobacker Center on the Health Science Campus)
 - Services are confidential
 - (419.383.3815)

Other Resources

▶ Computing facilities

❑ Computer account available

- Need to be registered
- Fees paid.
- See attendant in NI 1013, at least 24 hrs after registering and paying fees.

❑ Account includes e-mail access

▶ MIME Graduate Director



▶ Toledo is going to be your home for the next few years.

▶ Learn about the University of Toledo traditions: <http://www.utoledo.edu/traditions/>

- Fight-Song
- Homecoming
- T-O-L-E-D-O
- Rocksy - Rocky



- ▶ **We are all here for you to have a good experience**
- ▶ **Learn about different cultures and study**
- ▶ **Make your family proud of you**
- ▶ **Graduate in time**

ありがとう
Arigatō

متشكر
Köszönettel
كريم

Thanks

Bedankt

谢谢
Xièxiè

Obrigado!

teşekkür ederim

شكراً

Teşekkürler

Merci

Ευχαριστώ

Gracias

תודה

धन्यवाद
(dhanyabad)

Vielen
Dank

Grazie

Ευχαριστώ
efcharistó

Hvala

Asante

Díky

ขอบคุณ