



MASTER OF SCIENCE

# MECHANICAL ENGINEERING

PURDUE UNIVERSITY®  
**FORT WAYNE**

Office of  
Graduate Studies

[PFW.EDU/GRADUATE](http://PFW.EDU/GRADUATE)

# A MESSAGE FROM THE DIRECTOR

Our Master of Science in Engineering (MSE) program at Purdue University Fort Wayne is technologically relevant and flexible for working adults. It is designed to accommodate working engineers taking one or two courses each semester, though also a good fit for full-time students, as they can take additional classes in systems engineering, organizational leadership, math, and statistics.

Our degree equips students to succeed in our rapidly-changing world and positions them to become senior engineering professionals or technical managers. All students are encouraged to conduct research and write a thesis. Research is a high-impact, transformational activity that benefits students, the industry and our program. Industry-sponsored research projects are ideal. A non-thesis MSE option is also available.



**Hosni Abu-Mulaweh, Ph.D**

Professor  
Mechanical Engineering  
Graduate Program Director  
[mulaweh@pfw.edu](mailto:mulaweh@pfw.edu)

# BENEFITS

## SHARPEN YOUR SKILLS AND ACHIEVE YOUR GOALS

The Master of Science in Engineering (MSE) with a specialization in Mechanical Engineering equips students to succeed in our rapidly-changing world and positions them to become senior engineering professionals or technical managers. Designed for working engineers, our program is flexible and offers a curriculum that can be supplemented with courses in a variety of other departments.

## THE PURDUE FORT WAYNE DIFFERENCE

Stand out with a graduate degree that enhances your qualifications through:

- Small class sizes
- Personal attention from dedicated faculty
- Course offerings designed for working adults
- Internationally recognized degree at a fraction of the cost

## LEARN FROM DEDICATED, EXPERT FACULTY

Our faculty have expertise in a wide range of areas. Students benefit from the distinct and renowned breadth of knowledge our professors and instructors have developed throughout their careers.

Engineering faculty research areas include:

- Thermal Systems
- Energy Systems
- Mechatronics
- Robotics and Automation
- Many research projects involve mathematical modeling and computer simulations of complex mechanical engineering systems

"The reason why I chose Purdue University Fort Wayne is that my teachers always say that it is a great school to attend. My friends also study there, and they gave me some recommendations about the school. I applied to Purdue University Fort Wayne because it is highly ranked not only in the US, but also in the world."

**MSE Graduate**

"I couldn't be more thankful for my experience at Purdue Fort Wayne. The faculty and staff are the best in the business and the skills that I have learned are already proving useful in my career. The MSE program combines an intimate learning experience where professors are engaged and truly care with a large respected university name like Purdue. It is the best of both worlds."

**MSE Graduate**

# COURSES

## **MASTER OF SCIENCE IN ENGINEERING (MSE) (30 CREDIT HOURS)**

The Mechanical Engineering specialization is designed to help students sharpen their engineering skills, grow professionally, and stay on top of recent developments in the field. Students in our program gain a broad and deeper understanding of engineering principles, state-of-the-art technologies, and technical management.

## **COURSE OF STUDY**

The course of study requires completion of 30 credit hours in the following components:

- Four 500-level, graduate mechanical (or closely related) engineering core courses
- Two additional 500-level, engineering course
- Two Thesis research courses (ENGR 69800) or two approved 500-level, graduate mechanical (or closely related) engineering courses
- Two math (or closely related) approved courses

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## **MECHANICAL ENGINEERING CORE REQUIREMENTS (12 CREDIT HOURS)**

ME 50500 Intermediate Heat Transfer

ME 50900 Intermediate Fluid Mechanics

ME 54400 Modeling and Simulation of Mechanical Engineering Systems

ME 54500 Finite Element Analysis: Advanced Theory and Applications

ME 54600 CAD/CAM Theory and Advanced Applications

ME 54700 Mechatronics, Robotics and Automation

ME 55000 Advanced Stress Analysis



## **ELECTIVE COURSES**

Students have the opportunity to take courses from the following departments:

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### **SYSTEMS ENGINEERING (SE)**

SE 52000 Engineering Economics  
SE 53000 Systems Engineering Management  
SE 54000 System Architecture  
SE 55000 Advanced Manufacturing Systems and Processes

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### **ORGANIZATIONAL LEADERSHIP (OL)**

OLS 51000 Foundations of Behavior and Leadership in Organizations  
OLS 52000 Foundations of Organizational Context  
OLS 53000 System Change and Organization Development

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### **MATH (MA) AND STATISTICS (STAT)**

STAT 51100 Statistical Methods  
STAT 51400 Design of Experiments  
MA 51100 Linear Algebra

# APPLICATION DEADLINES

	International	U.S. Citizen		International	U.S. Citizen
FALL	MAY 1	JUL 15	SPRING	NOV 1	DEC 1

## STEPS TO APPLY

### Application:

To begin your application create an account through the portal at [pfw.edu/grad-apply](https://pfw.edu/grad-apply). Applicants can make and save changes before submitting by logging in with the username and password used to create the account.

### Application Fee:

The Graduate School application fee is \$60 (U.S. dollars) for domestic applicants and \$75 (U.S. dollars) for international applicants. Your application will not be processed until your nonrefundable application fee has been paid.

### Transcripts:

Through the application portal, you must upload transcript(s) and/or academic document(s) for every institution of higher education you attended regardless of whether or not a degree was received. If a degree was received then it must be printed on the transcripts. If no degree conferral is printed on the transcripts then a copy of the original diploma (degree certificate) is needed. If the documents are not in English, you must upload an English translation certified by the college or university that issued it. For those who have completed degrees in the People's Republic of China, you will also be required to submit the Graduation Certificate.

### Statement of Purpose (Essay):

The Academic Statement of Purpose is typically a 500-word statement that outlines:

- Your academic and professional background, detailing how your experiences have prepared you for graduate study in this field.
- Your career goals and how a graduate degree from Purdue Fort Wayne will help you achieve them.

Focus on demonstrating how you fit with the program by discussing faculty members you want to work with, the program's qualities, or specific research or career opportunities.

### Personal History Statement:

Approximately 500 words, highlights your unique experiences, challenges, and achievements that have shaped who you are today.

This is your chance to share:

- Your personal background, such as your upbringing, or life events that influenced your perspective.
- Why you're a good fit for Purdue Fort Wayne's program beyond academics, emphasizing personal qualities like resilience, leadership, or community engagement.

This statement is your opportunity to stand out and present a compelling narrative about your journey and why you want to earn your graduate degree at Purdue Fort Wayne.

### Recommendations:

Submit names of at least two individuals who are qualified to evaluate your academic or on-the-job performance who can attest to your ability to pursue a graduate degree. In the online application to the Purdue Graduate School, once you click "Send to Recommender," each individual will receive an email with instructions for submitting their recommendation online. Once submitted, the graduate program to which you applied will have access to view your recommendation(s).

# INTERNATIONAL APPLICANTS

All international applicants must also submit the following items to be considered for admission:

- **English Proficiency Scores:**

TOEFL iBT Overall Score: 80 with the following minimum section requirements:

Reading: 19

Listening: 14

Speaking: 18

Writing: 18

IELTS Overall Score: 6.5 with the following minimum section requirements:

Reading: 6.5

Listening: 6.0

Speaking: 6.0

Writing: 5.5

TOEFL Essentials Overall Score: 8 with the following minimum section requirements:

Reading: 8

Listening: 8

Speaking: 8

Writing: 8

Duolingo English Test Overall Score: 115 with the following minimum section requirements:

Literacy: 115

Comprehension: 115

Conversation: 115

Production: 115

ELS- Certificate Level 112

## Waiver of English Proficiency Scores

Routine waivers of an English Proficiency exam are granted for applicants that meet an alternate criterion:

- Earned a Baccalaureate, graduate, or professional degree within the last 36 months prior to the time of recommendation for admission - from a school where English is the primary language of instruction, in a country where English is the native language.
- Citizen of official English-speaking country

**Note:** Some graduate programs may still require a test of English proficiency, please confirm the acceptance of the waiver with your department.

## OFFICIAL TRANSCRIPTS

You must provide official transcripts and/or academic records at the request of the graduate program or if you are admitted and choose to enroll. An official transcript bears the original signature of the registrar and/or the original seal of the issuing institution. An unofficial transcript printed from your current/previous institution(s) student system is not an acceptable document. Official documents should be submitted to:

**Purdue University Fort Wayne**  
Office of Graduate Studies  
Doerner School of Business Room 304  
2101 E. Coliseum Blvd.  
Fort Wayne, IN 46805-1499, USA  
[graduate@pfw.edu](mailto:graduate@pfw.edu)

Domestic transcripts must be sent directly from a Registrar's office to the Office of Graduate Admissions via mail or email. If you mail them yourself, it must be in an envelope sealed by the registrar.

# PURDUE UNIVERSITY FORT WAYNE



**PFW.EDU/GRAD-INFO**  
**260-481-6111**  
**EA/EOU**

