



MASTER OF SCIENCE IN ENGINEERING  
**ELECTRICAL &  
COMPUTER  
ENGINEERING**

**PURDUE UNIVERSITY**  
**FORT WAYNE**

Office of  
Graduate Studies

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

# A MESSAGE FROM THE DIRECTOR

Thank you for considering a Master of Science in Engineering from Purdue University Fort Wayne. Students in our programs work with world-class faculty who provide a transformative educational experience, advancing the latest research, applied to real-world problems.

Offering three concentrations in the degree program allows students to choose the right fit for their needs and provides a thesis-option for those that want to more deeply explore a research question of their own.

An engineering degree from Purdue University is one of the most recognizable and admired degrees in the world of STEM. Focused on real-world application, Purdue Fort Wayne offers small class sizes, designed and scheduled for working adults who are looking to advance their knowledge and careers.



**Chao Chen, Ph.D.**

Professor  
Electrical and Computer Engineering  
Graduate Program Director  
chenc@pfw.edu

# BENEFITS

## SHARPEN YOUR SKILLS AND ACHIEVE YOUR GOALS

The Master of Science in Engineering (MSE) is designed to meet the needs of motivated engineers seeking to advance their careers. The following technical concentration areas are currently offered:

- Computer Engineering
- Electrical Engineering
- Systems Engineering

Our program provides students with a solid theoretical foundation to understand the complexity of modern electrical and computer systems as well as tools to create new technologies and solve new engineering problems. Our curriculum is well designed to prepare graduates for technically demanding careers in industry such as electronics, defense, automotive, electric machines, and power systems.

## 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:

- Signal Processing
- Biomedical Imaging
- Embedded Systems
- RF Circuits and Systems
- Wireless Communications and Networks
- Internet of Things
- Machine Learning
- Robotics and Control
- Computer Vision
- Smart Grids and Energy Systems
- Enterprise and Lean System Design
- Manufacturing Systems
- Healthcare Systems

## 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

"Purdue Fort Wayne gave me an easy access to good quality education. Professors are great, classes are great, and the campus is well equipped. Overall very happy with the program!"

**Sami Shalak**

# COURSES

## COURSE OF STUDY

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

- The core courses (4 courses, 12 credits) are courses specific to the student's concentration and are meant to provide students with a strong foundation of principles and theories in that area of expertise
- The engineering electives (2 courses, 6 credits) offer students a chance to develop depth in their area of concentration and related disciplines
- Graduate-level courses (2 courses, 6 credits) from Engineering (ECE, SE, ME, ENGR), mathematics (MA), statistics (STAT), computer science (ACS or CS), or Technology are required
- The general electives (2 courses, 6 credits) offer students the flexibility to tailor the program to meet their specific career needs in approved courses of the student's choosing
- Research (thesis) credit is not required for students on the non-thesis option
- Students pursuing the thesis option are required to register for 6 credits ECE 69800 research credits

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

The MSE program is designed to provide opportunities for qualified individuals seeking to advance in their careers. Students can pursue one of the following concentrations:

- Computer Engineering
- Electrical Engineering
- Systems Engineering (see individual booklet)
- Mechanical Engineering (see individual booklet)

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## COMPUTER ENGINEERING CORE COURSES (12 CREDIT HOURS)

ECE 53800 Digital Signal Processing I  
ECE 54700 Introduction to Computer Communication Networks  
ECE 56700 FPGA Designs for Signal Processing Applications  
ECE 60000 Random Variables and Signals  
ECE 66100 Computer Vision

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## ELECTRICAL ENGINEERING CORE COURSES (12 CREDIT HOURS)

ECE 53800 Digital Signal Processing I  
ECE 54300 Wireless Communication Networks  
ECE 56900 Introduction to Robotics  
ECE 58400 Linear Control Systems  
ECE 60000 Random Variables and Signals

# APPLICATION DEADLINES

MAY  
1

International: regular fall admission

JUN  
30

U.S. Citizen: regular fall admission

NOV  
1

International: regular spring admission

NOV  
15

U.S. Citizen: regular spring admission

## STEPS TO APPLY

### Application:

To begin your application create an account through the portal at [pfw.edu/grad-apply](http://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, cultural heritage, 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  
Doermer 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



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