

# Overview of MS Program in Computer Science

PFW Virtual Graduate Program Information Session

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Department of Computer Science

**PURDUE**  
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**FORT WAYNE**

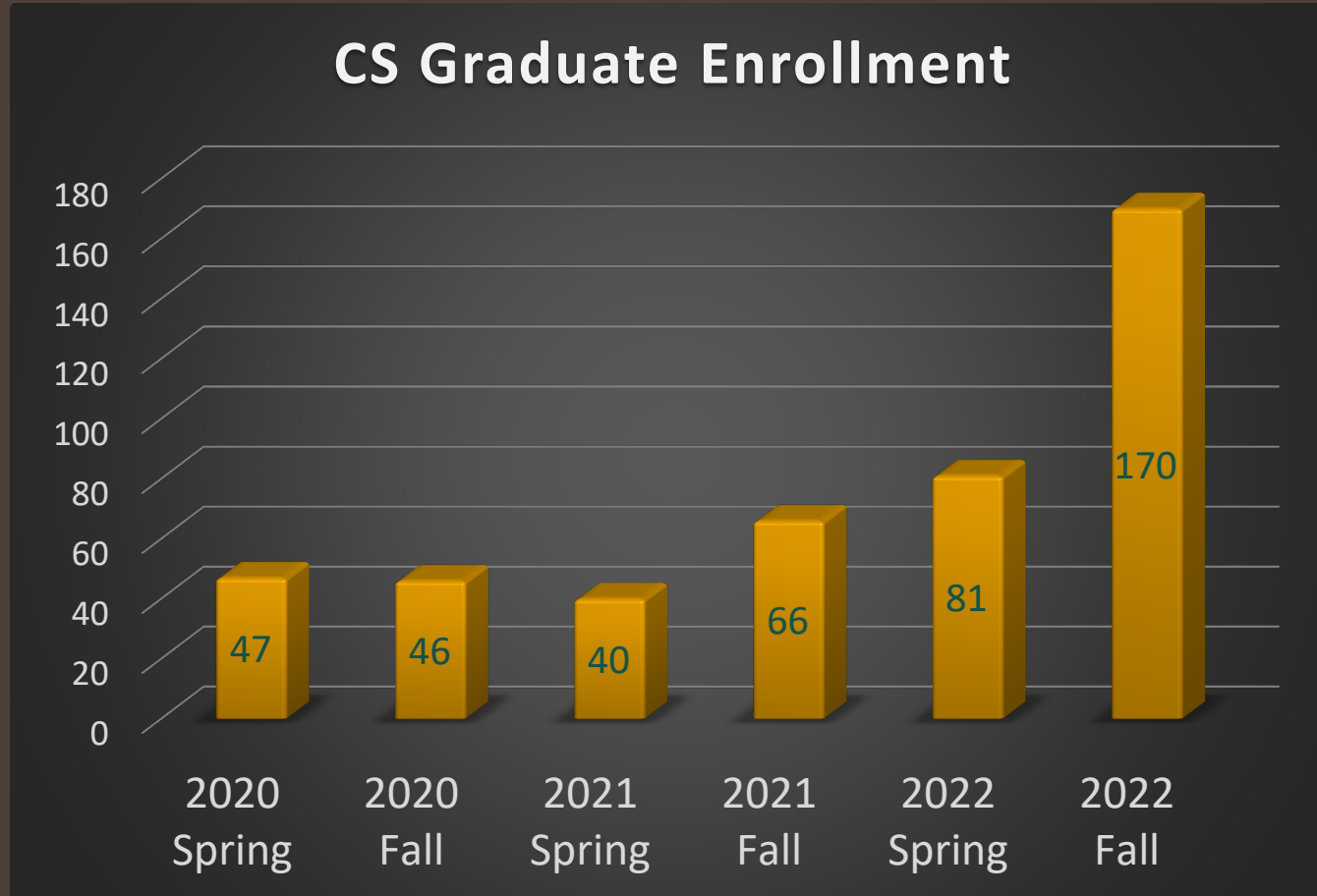
# INTRODUCTION

- In 1997, the CS department initiated a Master of Science degree in **Applied Computer Science (ACS)** with an emphasis on software engineering.
  - The master's program is designed to meet the objectives of students with a professional interest in computer-related fields and also to help meet the computing expertise needs of their employers.
- The program has grown to be the largest graduate program in the ETCS College and the 2nd largest in Purdue Fort Wayne.
- In 2017, the master program name is changed from Applied Computer Science (ACS) to **Computer Science (CS)**.
- We also provide a **5-year combined B.S./M.S. program** in computer science

# INTRODUCTION

- The master's program in CS is designed for individuals holding undergraduate degrees in computer science.
- Students from a variety of disciplines (mostly STEM fields such as engineering, technology and mathematics) are also able to satisfy the degree requirements by completing appropriate prerequisite courses and fulfilling the requirements of the graduate computer science program.

# INTRODUCTION



# ADMISSION GENERAL

- PFW Graduate Admission Requirement is available at <https://www.pfw.edu/international-admissions/masters/>
- The admission information of the MS CS program is available at the University catalog page, [https://catalog.pfw.edu/preview\\_program.php?catoid=61&poid=15891&hl=%22Computer+Science%22&returnto=search](https://catalog.pfw.edu/preview_program.php?catoid=61&poid=15891&hl=%22Computer+Science%22&returnto=search)

# APPLICATION DUE

- Deadlines for graduate students living inside the United States
  - Spring start: November 15
  - Fall start: June 30
- Deadlines for graduate students living outside the United States:
  - Spring start: November 15
  - Fall start: June 15

# GPA FOR ADMISSION

- **At least 3.0 GPA** is required for admission
- If the overall GPA is less than 3.0 but the applicant majored CS or has CS work experience and strong math background, the application might be conditionally admitted.
  - The condition is usually to maintain at least B (3.0) from course work in the first semester.

- The CS MS program does **not require a GRE score** for admission.



- All the international applicants (ie. whose native language is not English) should submit their English fluency score. This is the University's requirement. There is no exception.
- However if the applicant's foreign country uses English for the native language, the applicant might receive the waive. Please check it with the graduate school office.
- For questions, please contact to the graduate school office (Susan Humphrey, [susan.humphrey@pfw.edu](mailto:susan.humphrey@pfw.edu)).

- You may select one following options
  - TOEFL: 80 overall, with minimum bands of 19 Reading, 18 Speaking, 18 Writing, and 14 Listening
  - TOEFL Essentials: 8 overall, with minimum bands of 8 Reading, 8 Speaking, 8 Writing, and 8 Listening
  - IELTS: 6.5 overall, with minimum bands of 6.5 Reading, 6.0 Listening, 6.0 Speaking, and 5.5 Writing
  - ELS: Level 112
- Reference: <https://www.pfw.edu/international-admissions/masters/>

# APPLICATION REVIEW

- When the application is complete with all the required materials and credential evaluation (for international applications), the application will be forwarded to the department for review.
- Application process time: 1 – 2 weeks

# APPLICATION FEE WAIVE

- The students who attended a qualified graduate school event (such as a Purdue Fort Wayne information session or recruitment event) will receive the instruction for application waive code.
- The email title will be “Fee Satisfaction Eligibility” which has the student name and application number.
- Our international education office verifies and uploads the Fee Satisfaction to that application.
- For the Fee Satisfaction question, please ask to the DSC Marketing Office (Melinda Conley, [conleym@pfw.edu](mailto:conleym@pfw.edu) )

# APPLICATION STATUS CHECK

- Contact to the graduate school office ( Susan Humphrey, [susan.humphrey@pfw.edu](mailto:susan.humphrey@pfw.edu))

# DEGREE NAME

- The degree name of our CS MS program is the “**Master of Science**” in Computer Science.
  - Our MS program covers the general computer science discipline.
- Our MS program does not provide other degrees such as MS in Software Engineering and MS in Data Science.
  - Our MS program covers the general computer science discipline. Currently we don't divide the program according to specific specialization areas. However, we have many courses to support certain specialization areas such as data science (machine learning) and software engineering and security.

# DEGREE REQUIREMENTS

- The CS MS degree requires completion of **30 credit hours** with core requirements, electives, and/or a thesis.
- Students also need to maintain **at least 3.0** in their cumulative GPA for graduation.

# CURRICULUM REQUIREMENTS

- Core Requirements – **6 of the 30 credit hours** should be chosen from
  - ✓ ACS 560 - Software Engineering Cr. 3. and/or
  - ✓ CS 580 - Algorithm Design Analysis and Implementation Cr. 3.
  - Optionally, one from the following courses
    - ✓ CS 503 - Operating Systems Cr. 3
    - ✓ ACS 574 - Advanced Computer Networks Cr. 3.
- Remaining Requirements - **24 credit hours**
  - The remaining 24 credit hours will be chosen from computer science elective courses.
  - A limited number of other graduate courses in mathematics, engineering, and occasionally business may be approved on an individual basis.



# CURRICULUM REQUIREMENTS

- Remaining Requirements (cont.)
  - **Non-thesis Option** (default)
    - Completion of the **24 credit hours** from CS/ACS courses and optionally, an external elective course approved by the program director
  - **Thesis Option**
    - Completion of **6 credit hours in ASC 698-Research M.S. courses**
    - and the remaining **18 credit hours** from CS/ACS courses and optionally, an external elective course approved by the program director

# TIME TO COMPLETE

- Time to complete the CS MS program depends on the student's case.
- At least 3 semesters are needed for the completion.
- Many students also allocate 4 semesters for the degree.

# CURRICULUM

- Our curriculum covers the major traditional areas of computer science, and reflects current trends in the computing and information discipline:
  - software engineering,
  - computer security and networks
  - database and information systems
  - computer graphics and visualization
  - algorithms and theory
  - artificial intelligence, machine learning, data mining, data science
  - scientific computing, computer systems
- **CS graduate level courses are CS/ACS 5xx and ACS 698.**

# TEACHING MOBILITY

- Our CS MS program is a **residence program**.
- Most of courses are **face-to-face courses**.
- Students might take online courses but only 6 credit hours are allowed to be online course credits among 30 credit hours.

# CLASS TIME AND SIZE

- Most of graduate courses open in the evening to support students with work.
- The class size depends on the course. The average size of lecture-based courses are around 20 - 30.

# TRANSFER CREDIT

- Students may transfer **up to 9 – 12 graduate credit hours** of appropriate CS graduate course work with grades of a B (3.00) or better earned at other accredited institutions.
  - ✓ **Submit the syllabus of courses transferred and Purdue Graduate Credit Transfer Report form to the program director**
  - ✓ **After reviewing the course's syllabus, the credit transfer eligibility will be informed.**
    - **The transferred course should have equivalent level contents with our CS graduate course.**
  - ✓ **The final approval will be done by Graduate School Office**
- **No more than 12 graduate credits completed as a non-degree student (in PFW) will be counted toward the Master degree.**

- **GTA (Graduate Teaching Assistantship)**
  - A stipend, along with a remission of tuition and fees.
  - CS department has 5 GTA positions.
  - The department receives GTA applications in Spring and has the selection process for following academic year.
- **TA (Teaching Assistant)**
  - TAs for grading and course assistant
  - TAs are paid by their work hours and have no tuition benefit.
  - Contact to Kaye (CS Administrative Assistant) and/or course instructors

- **GRA (Graduate Research Assistantship)**
  - The office of graduate studies provides a very few GRAs with a stipend, along with a remission of tuition and fees.
  - Usually, the office releases the application information in Spring.
  - A faculty (who will work with the GRA) needs to submit the GRA application for a specific student with the department chair's recommendation.
  - Contact to Graduate School Office for the application deadline.
- **RA (Research Assistant)**
  - CS department may hire a couple of research assistants.
  - Contact to the department chair.



- **Others**
  - Many students work on campus.
  - Check "handshake" an employment service on campus:  
<https://www.pfw.edu/offices/career/students/job.html>
- For campus job rules, see  
<https://www.pfw.edu/international/employment/on-campus>
- For F-1: Maintaining Legal Status of international students, refer to  
<https://www.purdue.edu/IPPU/ISS/Student/F1/legalStatus.html>

# Q&A