



Arizona State University (Tempe campus)

Computer Science (Big Data Systems), MS

Study details

Course type: Master's degree

Degree: Computer Science (Big Data Systems), MS ESCSEBDMS

Study mode: Full time

Duration: 24 Month

Cost of study

Cost : 29 880 USD

Reg. fee : 115 USD

Scholarship :

Insurance : 2 765 USD

Intake/s

Jan

Requirements

Admission requirements

- Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering.
- Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution.
- Applicants must have a minimum cumulative GPA of 3.25 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.25 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. official GRE test scores
4. statement of purpose
5. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency regardless of their current residency. Official TOEFL scores should be submitted from tests that must have been taken within the last two years (only required for those who did not graduate with a baccalaureate degree from an accredited U.S. institution). The TOEFL score must be valid on the first day of class for the term the student is applying for. The department requires a TOEFL iBT score

above 90 or a minimum overall IELTS band score of 7.0.

International students must have taken the official GRE General Test within the previous five years and submit those test scores. ASU does not accept the GRE® General Test at home edition.

All international records must be submitted in the original language, accompanied by an official English translation. If the student has attended a U.S. institution, one set of official transcripts from every college and university attended, except ASU, is required.

Students assigned any deficiency coursework upon admission must complete those classes with a grade of "C" or higher (scale is 4.00 = "A") within two semesters of admission to the program. Deficiency courses commonly taken include:

CSE 230 Computer Organization and Assembly Language Programming

CSE 310 Data Structures and Algorithms

CSE 330 Operating Systems

CSE 340 Principles of Programming Languages **or** CSE 355 Introduction to Theoretical Computer Science

Accommodation

Provided by partner agencies;

On-campus housing and meals \$18,933

Speciality

STEM-OPT for international students on F-1 visas

This program may be eligible for an Optional Practical Training extension for up to 24 months. This OPT work authorization period may help international students gain skills and experience in the U.S. Those interested in an OPT extension should review ASU degrees that qualify for the STEM-OPT extension at ASU's International Students and Scholars Center website.

The OPT extension only applies to students on an F-1 visa and does not apply to students completing a degree through ASU Online.

Additional information

Program description

Degree awarded: MS Computer Science (Big Data Systems)

The big data systems concentration within the MS degree program in computer science is designed for graduate students who want to pursue a thorough education in the area of big data systems. The program has a thesis and nonthesis project portfolio option.

This concentration provides students with knowledge, skills and advanced research expertise in designing scalable systems (parallel, distributed and real-time) for acquiring, storing, processing and accessing large-scale heterogeneous multisource data and in using analytical tools to mine information from the data.

Graduates are able to choose and deploy the appropriate data management processing and analysis systems with a suitable structured or unstructured data model that a particular task and domain application needs.

Accelerated program options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's plus master's degree with:

- Computer Science, BS
- Computer Science (Cybersecurity), BS
- Computer Science (Software Engineering), BS
- Computer Systems Engineering, BSE
- Computer Systems Engineering (Cybersecurity), BSE
- Software Engineering, BS

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program.

Career opportunities

Graduates are able to analyze and apply key theories, algorithms and software modules used in the field of computer science.

Career examples include:

- computer network architect
- computer system analyst
- computer systems engineer
- data scientist or engineer
- machine learning, AI computer vision engineer
- software developer
- software engineer