

Arizona State University

Learn more about studying at ASU

MS in Data Science, Analytics and Engineering (DSAE)

Ira A. Fulton Schools of Engineering

The DSAE master's degree program offers eight concentrations. Use this guide to find the concentration that best matches the student's academic background. Applying for the concentration most closely related to their prior studies will give them the best chance of being admitted.

Guide to DSAE concentrations

Computing and Decision Analytics (CDA)

Applicable bachelor's or master's degrees:

- Computer Science
- Computer Engineering
- Mathematics
- Engineering
- Statistics
- Operations Reserach
- Information Technology
- Or related field from regionally accredited institution

Specific notes

Applicants should have completed Calculus 1 & 2 along with two progressive programming languages.

Bayesian Machine Learning (BML)

Applicable bachelor's degrees:

- Mathematics
- Statistics
- Data Science
- Data Analytics

Specific notes

Applicants need a mathematics background, with extensive mathematics courses in their bachelor's degree.

Electrical Engineering (EE)

Applicable bachelor's degrees:

- Electrical Engineering
- Computer Engineering
- Physics

Specific notes

Applicants should have an electrical engineering background.

Computational Models and Data (CMD)

Applicable bachelor's degrees:

- Mathematics
- Statistics
- Data Science
- Data Analytics

Specific notes

Applicants need a mathematics background, with extensive mathematics courses in their bachelor's degree.

Materials Science and Engineering (MSE)

Applicable bachelor's degrees:

- Materials Science
- Computing
- Engineering
- Statistics
- Chemistry
- Physics
- Electrical Engineering
- Operations Research or related field

Specific notes

Applicants should have an engineering or mathematics background.

Sustainable Engineering and the Built Environment (SEBE)

Applicable bachelor's degrees:

- Civil Engineering
- Construction Engineering

Specific notes

Applicants should have a construction, civil or environmental engineering background.

Mechanical and Aerospace Engineering (MAE)

Applicable bachelor's degrees:

- Mechanical Engineering
- Aerospace Engineering or a related field

Specific notes

Applicants should have a mechanical or aerospace background.

Human Centered Applications (HCA)

Applicable bachelor's degrees:

- User Experience
- Human Centered Applications
- Systems Engineering
- Engineering

Specific notes

Applicants should have skills in statistics and data analysis.

Tuition and fees

Tuition and fees for 18 credits: $33,531*

This is the estimated cost of completing one year of graduate study at the Ira A. Fulton Schools of Engineering.

* Based on full-time tuition and program / institutional / student services / visa admin fees in the 2025–2026 academic year. Does not include cost for housing, meals, books and supplies, transportation, personal expenses, or health insurance. To see details of program costs, visit students.asu.edu/tuition

Scholarships

Up to $10,000 merit scholarship available for unconditionally admitted students with GPA 3.50+ and above IELTS 7.0 | TOEFL 90/95 | Duolingo DET 125 or equivalent.

$95,000
median full-time salary for master's graduates
(2022 Fulton Schools graduate survey)







How to apply

Complete the application form at admission.asu.edu/kaplan/asu-apply and submit the following supporting documents:

- ☐ Passport copy
- ☐ Proof of English proficiency (minimum IELTS 7.0 / TOEFL 90 / Duolingo DET 115 / Cambridge English 170 / Kaplan iBT 90)
- ☐ Official transcripts for every college and university where the student earned a bachelor's degree or higher
- ☐ Professional résumé
- ☐ Written statement / letter of intent
- ☐ Letters or recommendation: only needed if applying for CMD, BML or HCA concentrations. Recommenders must send letters directly to ASU.

After admission, submit financial documents for the I-20 request:

- ☐ Financial Guarantee form
- ☐ Passport copy
- ☐ Recent bank statement or scholarship letter showing no less than $66,515, which are the estimated expenses on the Financial Guarantee form

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Applicant tips

- Demonstrate relevant undergraduate coursework or experience in statistics or probability, linear algebra, and programming skills.
- Students applying to the CMD and BML concentrations must have a very high level of mathematics in their bachelor's degree, higher than the average engineering bachelor's degree.
- We encourage students to apply to multiple programs at ASU if they are not sure if they would be accepted by their top choice.
- Note that students do not need to apply to multiple programs within one Fulton school, such as the School of Computing and Augmented Intelligence.

Contact the Kaplan team in your region to get started
kaplanpathways.com/asu-contact

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