Computational Mathematical Sciences, Min

LACMSMIN

How do scientists use math to represent the behavior of objects and systems? Gain a strong foundation in critical analysis, and be prepared to work in a wide variety of fields, including software development, governmental research, medical research, logistics and finance.

Description

The computational mathematical sciences minor offers a structured curriculum that includes a foundation in calculus with a focus on applied math. Students develop a framework of scientific computing and numerical analysis skills.

At a glance

• College/School: The College of Liberal Arts and Sciences

• Location: <u>Tempe</u>

Program requirements

2024 - 2025 Minor Map Minor Map (Archives)

The minor in computational mathematical sciences consists of a minimum of 18 credit hours. At least 12 credit hours must be completed at the upper-division level and all courses must be completed with a grade of "C" (2.00 on a 4.00 scale) or better.

Required Courses -- 18 credit hours

MAT 271: Calculus with Analytic Geometry II (MATH OR MA) or MAT 266: Calculus for Engineers II (MATH OR MA) (3-4)

MAT 272: Calculus with Analytic Geometry III (MATH OR MA) or MAT 267: Calculus for Engineers III (MATH OR MA) (3-4)

MAT 342: Linear Algebra or MAT 343: Applied Linear Algebra (3)

MAT 420: Scientific Computing (3)

MAT 421: Applied Computational Methods (MATH OR CS) (3)

MAT 423: Numerical Analysis I (MATH OR CS) or MAT 425: Numerical Analysis II (CS) (3)

Prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment requirements

GPA Requirement: 2.00

Incompatible Majors: BS in actuarial science; BS in applied mathematics; BS in computational mathematical science; BS in statistics; BS in data science; BA and BS in mathematics (including all concentrations); BAE in secondary education (mathematics)

Other Enrollment Requirements: None

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major or the minor program. Courses taken for the minor may not count toward both the major and the minor.

Career opportunities

A minor in computational mathematical sciences is one of the most versatile minors, offering students many potential career options. This minor assists in positioning students for careers in computer technology, business, medical research, teaching and education, engineering and more. Diverse areas of study, such as cancer modeling, weather forecasting and financial modeling, all involve computational mathematical sciences.

Contact information

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