MINOR IN COMPUTATIONAL AND APPLIED MATHEMATICS

Program Learning Outcomes for the Minor in Computational and Applied Mathematics

Upon completing the minor in Computational and Applied Mathematics, students will be able to:

1. Use modern numerical methods to analyze and solve typical problems in linear systems.
2. Design and test a mathematical model, following a multi-stage process.

Requirements for the Minor in Computational and Applied Mathematics

Students pursuing the minor in Computational and Applied Mathematics must complete:

- A minimum of 6 courses (18 credit hours) to satisfy minor requirements.
- A minimum of 5 courses (15 credit hours) taken at the 300-level or above.

The courses listed below satisfy the requirements for this minor. In certain instances, courses not on this official list may be substituted upon approval of the minor's academic advisor, or where applicable, the Program Director. (Course substitutions must be formally applied and entered into Degree Works by the minor's Official Certifier (https://registrar.rice.edu/facstaff/degreeworks/officialcertifier/)). Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

Code	Title	Credit Hours
Total Credit Hours Required for the Minor in Computational and Applied Mathematics		18

Minor Requirements

Code	Title	Credit Hours
Core Requirements		
CAAM 210	INTRODUCTION TO ENGINEERING COMPUTATION	3
CAAM 335	MATRIX ANALYSIS	3
CAAM 336	DIFFERENTIAL EQUATIONS IN SCIENCE AND ENGINEERING	3
or CAAM 378	INTRODUCTION TO OPERATIONS RESEARCH AND OPTIMIZATION	
Elective Requirements [1]		
Select 1 elective course from departmental (CAAM) course offerings at the 300-level or above		3
Select 2 elective courses from departmental (CAAM) course offerings at the 400-level or above		6
Total Credit Hours		**18**

Footnotes and Additional Information

[1] To fulfill the remaining Computational and Applied Mathematics minor requirements, students must complete a total of 3 additional courses (9 credit hours) at the 300-level or above from Computational and Applied Mathematics (CAAM) departmental course offerings. The elective courses completed must be taken for a minimum of 3 credit hours each. At least 2 of these 3 elective courses (6 credit hours) must be completed at the 400-level or above.

Policies for the Minor in Computational and Applied Mathematics

Program Restrictions and Exclusions

Students pursuing the minor in Computational and Applied Mathematics should be aware of the following program restriction:

- As noted in Majors, Minors, and Certificates (https://ga.rice.edu/undergraduate-students/academic-opportunities/majors-minors-certificates/), i.) students may declare their intent to pursue a minor only after they have first declared a major, and ii.) students may not major and minor in the same subject.

- Students pursuing the minor in Computational and Applied Mathematics may not additionally declare the major in Operations Research.

Transfer Credit

For Rice University's policy regarding transfer credit, see Transfer Credit (https://ga.rice.edu/undergraduate-students/academic-policies-procedures/transfer-credit/). Some departments and programs have additional restrictions on transfer credit. The Office of Academic Advising maintains the university's official list of transfer credit advisors on their website: https://oaa.rice.edu. Students are encouraged to meet with their academic program's transfer credit advisor when considering transfer credit possibilities.

Departmental Transfer Credit Guidelines

Students pursuing the minor in Computational and Applied Mathematics should be aware of the following departmental transfer credit guidelines:

- Requests for transfer credit will be considered by the program director (and/or the program's official transfer credit advisor) on an individual case-by-case basis.

Additional Information

For additional information, please see the Computational and Applied Mathematics website: https://www.caam.rice.edu/

Opportunities for the Minor in Computational and Applied Mathematics

Academic Honors

The university recognizes academic excellence achieved over an undergraduate's academic history at Rice. For information on university honors, please see Latin Honors (https://ga.rice.edu/undergraduate-students/honors-distinctions/university/) (*summa cum laude, magna*

cum laude, and *cum laude*) and Distinction in Research and Creative Work (https://ga.rice.edu/undergraduate-students/honors-distinctions/university/). Some departments have department-specific Honors awards or designations.

Additional Information

For additional information, please see the Computational and Applied Mathematics website:

https://www.caam.rice.edu/