MINOR IN MATHEMATICS

Program Learning Outcomes for the Minor in Mathematics

Upon completing the minor in Mathematics, students will have:

1. Achieved practical fluency in calculus and linear algebra.
2. Acquired a background at the undergraduate level in a small variety of central areas of mathematics.
3. Become acquainted with formal mathematical reasoning, including proofs.

Requirements for the Minor in Mathematics

Students pursuing the minor in Mathematics must complete:

- A minimum of 6 courses (18 credit hours) to satisfy minor requirements.
- A minimum of 4 courses (12 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 Mathematics		18

Minor Requirements

Code	Title	Credit Hours
Core Requirements [1, 2, 3]		
Analysis		
Select 1 from the following:		3
MATH 302	ELEMENTS OF ANALYSIS	
MATH 321	INTRODUCTION TO ANALYSIS I	
MATH 331	HONORS ANALYSIS	
MATH 381	INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS	
MATH 382	COMPUTATIONAL COMPLEX ANALYSIS	
Discrete Mathematics and Algebra		
Select 1 from the following:		3
MATH 306	ELEMENTS OF ABSTRACT ALGEBRA	
MATH 356	ABSTRACT ALGEBRA I	
MATH 365	NUMBER THEORY	
MATH 368	TOPICS IN COMBINATORICS	
Linear Algebra		
Select 1 from the following:		3
MATH 221	HONORS CALCULUS III	
MATH 354	HONORS LINEAR ALGEBRA	
MATH 355	LINEAR ALGEBRA	
Elective Requirements [1, 3, 4]		
Select 3 additional courses from departmental (MATH) course offerings.		9
Total Credit Hours		**18**

Footnotes and Additional Information

[1] The required 6 courses (18 credit hours) for the minor must be selected from departmental (MATH) course offerings at the 200-level or above. A maximum of 1 course (3 credit hours) from any particular course or course number may be applied to the minor.

[2] Certain approved courses taken outside the Department of Mathematics (MATH course offerings) may be used to satisfy one area of the Core Requirements (Analysis, Discrete Mathematics and Algebra, or Linear Algebra), but will not count towards the required 6 courses (18 credit hours). An approved upper-level departmental (MATH) course (other than courses numbered MATH 490 through MATH 499) may be used to satisfy an area of the Core Requirements. Students seeking to substitute approved courses should consult in advance with the chair of the undergraduate committee.

[3] Of the 6 courses (18 credit hours) required for the minor, at least 4 courses (12 credit hours) must be taken from departmental (MATH) course offerings at the 300-level or above.

[4] A maximum of 3 credit hours from courses such as MATH 479 and courses numbered MATH 490 through MATH 499 (research and supervised reading courses) may fulfill Elective Requirements.

Policies for the Minor in Mathematics

Program Restrictions and Exclusions

Students pursuing the minor in 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.

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. Requests for transfer credit must be approved for Rice equivalency by the designated transfer credit advisor for the appropriate academic department offering the Rice equivalent course (corresponding to the subject code of the course content). The Office of Academic Advising maintains the university's official list of transfer credit advisors (https://oaa.rice.edu/advising-network/transfer-credit-advisors/) on their website: https://oaa.rice.edu. Students are encouraged to meet with the applicable transfer credit advisor as well as their academic program director when considering transfer credit possibilities.

Additional Information

For additional information, please see the Mathematics website: https://math.rice.edu/.

Opportunities for the Minor in 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 Mathematics website: https://math.rice.edu/.