

MATHEMATICS

 LA ROCHE UNIVERSITY

THE MAJOR IN MATHEMATICS introduces students to a field whose origins date from the dawn of history and whose ever-increasing pervasiveness and importance in science, engineering, business and finance renders it a veritable master-key to our understanding of the world about us.

The degree in mathematics opens many doors to students upon graduation, to a job in business, industry or government, to certification as a teacher, to graduate study in mathematics, statistics and computer science, or to a professional school such as in business or law.

The major also serves as a gateway not only to a job and career, but also to a world where logic and imagination combine to create timeless beauty and truth.

La Roche University offers two degree paths: a Bachelor of Arts in Mathematics and a Bachelor of Science in Mathematics. The Bachelor of Arts in Mathematics allows for more flexibility with credits, giving you the opportunity to double major. The Bachelor of Science in Mathematics major requires seven computer science credits and an additional four credits in physics.



CURRICULUM

MAJOR COMPONENT REQUIREMENTS

54 Credits

Analytic Geometry & Calculus I
Analytic Geometry & Calculus II
Analytic Geometry & Calculus III
Ordinary Differential Equations
Discrete Mathematics I
Discrete Mathematics II
Linear Algebra
Complex Variables
Probability & Statistics I

• Probability & Statistics II
• History of Mathematics
• Modern Abstract Algebra
• Geometry
• Real Analysis
• Junior-Senior Seminar
• **Physics Component**
• General Physics I
• General Physics I Lab
• General Physics II
• General Physics II Lab

Additional Major Requirements for Bachelor of Science in Mathematics

• General Physics III
• General Physics III Lab
• **Computer Science Component**
• Introduction to Computer Science
• Programming I
• Programming I Lab

Continued

LA ROCHE UNIVERSITY | 9000 Babcock Blvd. | Pittsburgh, PA 15237 | laroche.edu

Freshman Admissions

844-838-4578 | 412-536-1272
admissions@laroche.edu

Transfer Admissions

412-536-1260
transferadmissions@laroche.edu

CURRICULUM *(continued)*

ACADEMIC CORE CURRICULUM

37 credits

FOUNDATIONS OF KNOWLEDGE

15 credits

- Academic Reading and Writing
- Academic Writing and Research
- Digital Literacy
- College Algebra
- Oral Communication

LA ROCHE EXPERIENCE

4 credits

- LRX: Foundations
- Investigating Social Problems

BREADTH OF KNOWLEDGE

12 credits

- Natural and Physical World*
- Human Expression
- Values and Ethics
- Social Sciences
- Global Perspectives

DEPTH OF KNOWLEDGE

3 credits

- Interdisciplinary Inquiry

CORE ELECTIVES

3 credits

- Any Breadth of Knowledge Area Course **or** Interdisciplinary Inquiry

**Fulfilled in major requirements*

GENERAL ELECTIVES

18 credits

