



Mathematics

Total Credits: 42+

Department Chair: Professor Antonella Marini

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Find the Website [here](#)

The department of mathematical sciences offers degrees in three concentrations:

- 1. Specialization in Pure and Applied Mathematics**
- 2. Specialization in Computational Science**
- 3. Specialization in Actuarial and Financial Mathematics**

Specialization in Pure and Applied Mathematics

Total Credits: **36+**

REQUIRED COURSES (8 courses, 27 credits)

Course #	Course Name	Credits
MATH 1412	Calculus I	4
MATH 1413	Calculus II	4
MATH 1504	Discrete Mathematics & Application	3

Specialization in Computational Science

Total Credits: **39+**

REQUIRED COURSES (8 courses, 27 credits)

Course #	Course Name	Credits
MATH 1412	Calculus I	4
MATH 1413	Calculus II	4
MATH 1510	Multivariable Calculus	4
MATH 2105	Linear Algebra	3
MATH 2461	Probability Theory	3
MATH 2462	Mathematical Statistics or MAT 5002	3
MATH 2601	Ordinary Differential Equations or MAT 5209	3
MATH 2651	Numerical Methods or MAT 5003	3

ELECTIVES (4 courses, 12+ credits)

Chosen from computer science or advanced mathematics.

Recommended courses include

- COMP 1300
- COMP 1310
- COMP 1320
- COMP 2545
- COMP 3920

CORRELATES (2 courses, 6+ credits)

Chosen from computer science, or graduate mathematics, artificial intelligence, data analytics and visualization

Specialization in Actuarial and Financial Mathematics

Total Credits: **36**

REQUIRED COURSES (8 courses, 27 credits)

Course #	Course Name	Credits
MATH 1412	Calculus I	4