# MATHEMATICAL SCIENCES

**Chairperson:** Dr. Ashuwin Vaidya

The Department of Mathematical Sciences offers Bachelor of Science Degrees in Mathematics, Masters of Science Degrees in Mathematics, Master of Science Degrees in Statistics, Master of Arts in Middle Grades Mathematics and a doctorate in Mathematics Education (https://www.montclair.edu/mathematics-education-phd). See the Programs of Study tab for details about the various programs.

All the programs introduce central ideas in a variety of areas in Mathematics, Mathematics Education, and Statistics and develop problem-solving ability by teaching students to combine critical thinking with rigorous reasoning. The Mathematics program provides students with a spectrum of courses in pure and applied mathematics, statistics and develops rigorous mathematical thinking.

The Bachelor of Science degrees in Mathematics are extremely versatile degrees. Graduates with these degrees have found their mathematical and analytical training in demand in business, industry, government, and in the teaching profession. The versatility afforded by a degree in mathematics allows graduates to easily adjust to unexpected shifts in employment opportunities and move from one of these areas to another and find numerous employment opportunities. Logical and critical thinking can be used in many different jobs. All our programs provide a strong foundation for graduate study.

The Undergraduate Advisor is the resource for specific information such as advanced placement, transfer credits, dual majors, and independent study.

**Undergraduate**

- Mathematics Major (B.S.) (http://catalog.montclair.edu/programs/mathematics-bs)
- Mathematics Major (B.S.)(Combined B.S./M.A.T. with Teacher Certification in Mathematics (Preschool-Grade 12) and Teacher of Students with Disabilities) (http://catalog.montclair.edu/programs/teacher-certification-mathematics-preschool-grade-12-students-disabilities-combined-bs-mat)
- Mathematics Major (B.S.)(Combined B.S./M.A.T. with Teacher Certification in Grades K-6 and Teacher of Students with Disabilities) (http://catalog.montclair.edu/programs/mathematics-combined-bs-mat-teacher-certification-grades-k-6-students-disabilities)
- Mathematics Major with Teacher Certification in Elementary School Teacher in Grades K-6 (B.S.) (http://catalog.montclair.edu/programs/teacher-certification-mathematics-elementary-grades-k-6)
- Mathematics Major, Discrete Applied Mathematics Concentration (B.S.) (http://catalog.montclair.edu/programs/discrete-applied-mathematics-concentration-bs)
- Mathematics Major, Mathematics Education Concentration with Teacher Certification in Mathematics (Preschool - Grade 12) (B.S.) (http://catalog.montclair.edu/programs/mathematics-education-concentration-teacher-certification-preschool-grade-12-bs)
- Mathematics Minor (http://catalog.montclair.edu/programs/mathematics-minor)

**Graduate**

- Applied Mathematics (M.S.) (http://catalog.montclair.edu/programs/applied-mathematics-ms)
- Mathematics Education (Ph.D.) (http://catalog.montclair.edu/programs/mathematics-education-phd)
- Mathematics, Instructional Certification: Teacher Certification in Mathematics (Preschool-Grade 12) (http://catalog.montclair.edu/programs/teacher-certification-mathematics-preschool-grade-12-graduate)
- Mathematics (M.S.) (http://catalog.montclair.edu/programs/mathematics-ms)
- Mathematics, Mathematics Education Concentration (M.S.) (http://catalog.montclair.edu/programs/mathematics-education-concentration-ms)
- Statistics (M.S.) (http://catalog.montclair.edu/programs/statistics-ms)
- Statistics (M.S.) (Combined B.S. Math of Finance/M.S.) (http://catalog.montclair.edu/programs/statistics-ms-combined-bs-math-finance-ms)
- Statistics (M.S.) (Combined B.S. Math/M.S.) (http://catalog.montclair.edu/programs/statistics-ms-combined-bs-math-ms)
- Teaching Middle Grades Mathematics (M.A.) (http://catalog.montclair.edu/programs/teaching-middle-grades-mathematics-ma)
- Teaching Middle Grades Mathematics Certificate Program (http://catalog.montclair.edu/programs/teaching-middle-grades-mathematics-certificate-graduate)