MATHEMATICAL SCIENCES

Chairperson: Jonathan Cutler

The Department of Mathematical Sciences offers Bachelor of Science Degrees in Mathematics, Bachelor of Science Degrees in Physics, Masters of Science Degrees in Mathematics, Master of Science Degrees in Statistics, Master of Arts Middle Grades Mathematics and a doctorate in Mathematics Education. 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, Physics, Physics 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 Physics program provides courses that present, in depth, areas of classical and modern physics.

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 Bachelor of Science degree in Physics is also a versatile degree. Our graduates have gone on to careers in research, industry, the health professions and teaching. The versatility afforded by a degree in mathematics or physics 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) (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 (B.S.) (Combined B.S./M.S. Pure & Applied Mathematics (http://catalog.montclair.edu/programs/mathematics-bs-combined-bs-ms-pure-applied-mathematics)
- Mathematics Major (B.S.) (Combined B.S./M.S. Statistics (http://catalog.montclair.edu/programs/mathematics-bs-combined-bs-ms-statistics)
- 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)
- Physics Major (B.S.) (http://catalog.montclair.edu/programs/physics-bs)
- Physics Major (B.S.) (Combined B.S./M.S. Pure & Applied Mathematics) (http://catalog.montclair.edu/programs/physics-bs-combined-ms-pure-applied-mathematics)
- Physics Major, Astronomy Concentration (B.S.) (http://catalog.montclair.edu/programs/physics-astronomy-concentration-bs)
- Physics Major, with Teacher Certification in Physical Science (Preschool-Grade 12) (B.S.) (http://catalog.montclair.edu/programs/physics-teacher-certification-physical-science-preschool-grade-12-bs)
- Physics Major, with Teacher Certification in Physics (Preschool-Grade 12) (B.S.) (http://catalog.montclair.edu/programs/physics-teacher-certification-physical-science-preschool-grade-12-bs)
- Physics Minor (http://catalog.montclair.edu/programs/physics-minor)

Graduate

- Mathematical and Computational Modeling (M.S.) (http://catalog.montclair.edu/programs/mathematical-computational-modeling-ms)
- Mathematics Education (PhD) (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)
- Mathematics, Mathematics Education Concentration (M.S.) (http://catalog.montclair.edu/programs/mathematics-education-concentration-ms)
- Mathematics, Pure & Applied Mathematics Concentration (M.S.) (http://catalog.montclair.edu/programs/pure-applied-mathematics-concentration-ms)
Mathematical Sciences

- Mathematics, Pure & Applied Mathematics Concentration (M.S.) (Combined B.S. Math/M.S.) (http://catalog.montclair.edu/programs/pure-applied-mathematics-concentration-ms-combined-bs-ms)
- Physical Science, Instructional Certification: Teacher Certification in Physical Science (Preschool-Grade 12) (http://catalog.montclair.edu/programs/teacher-certification-physical-science-preschool-grade-12-graduate)
- 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)