

Mathematics

Do you find joy in solving puzzles? Do you find fractals fascinating, symmetry scintillating, game strategies gripping, data describable, modeling mind-provoking, or patterns provocative?

- 20 Average class size for the three calculus courses over the past four years. They have ranged in size between 12 and 29.
- 10 Average class size for all non-calculus math major courses over the past four years. They have ranged in size between 2 and 27.
- 100% Percentage of courses involving project work that explores ideas and applications in greater depth, including optimal placement of firebreaks to contain forest fires in Calculus I; public key cryptography in Calculus II; modeling mechanical and electronic circuits in Differential Equations; and explaining strategic choices by nations in Game Theory. By repeatedly engaging in such projects, mathematics students also develop their communication and collaboration skills, highly sought by employers.
- 44 Number of graduates with a mathematics major over the past ten years.
- 36% Percentage of mathematics graduates in the past ten years who have been Maple Scholars. This eight week summer program gives students the opportunity to engage in original research with a faculty mentor. Many others have engaged in research or independent studies during the academic year.
- 84% Percentage of mathematics graduates in the past ten years who acquired a second major or secondary teacher certification. Second majors have included physics, computer science, music, and history.
- 100% Percentage of mathematics students passing the Praxis Mathematics Content Knowledge Exam during academic years 2004-2014. 56% were above the 75th percentile nationally, and 38% qualified for ETS Recognition of Excellence. Two of our graduates have received "top ten" teacher awards multiple times.
- 100% Percentage of mathematics graduates in the past ten years who are employed, in graduate school, or not employed by choice. In the 2013 Alumni Survey of 2000-2012 graduates, 26 of 29 (90%) responding mathematics and computer science graduates secured their first paying job within one year of graduating. Alumni have gone on to become teachers, statisticians, administrators, software engineers, architects, actuaries, authors, actors, and farmers.
- 34% Percentage of mathematics graduates in the past ten years who have engaged in graduate study. All students who have requested recommendations from department faculty have been admitted to graduate school. Goshen College mathematics graduates have earned Ph.D. degrees in mathematics, mathematics education, operations research, statistics, computational astrophysics, and chemical engineering.

One of Many Possible Four-Year Plans of Study

First Year	Second Year	Third Year	Fourth Year
Calculus I Calculus II Discrete Math Programming I	Multivariate Calculus Differential Equations Probability & Statistics Problem Solving	Game Theory Linear Algebra Abstract Algebra Math History	Math Modeling Modern Geometry Connections & Discoveries Project or Internship

Questions? See www.goshen.edu/academics/mathematics/ for more details,
Or contact David Housman, dhousman@goshen.edu, 574-535-7405.