

Mathematics at Augustana College

Why mathematics?

Augustana graduates in mathematics pursue careers in fields including statistics; operations research; actuarial, biological and physical sciences; and teaching. A 2012 survey published in *Forbes* showed that the top 15 highest-earning college degrees have one discipline in common: mathematics.

Why Augustana?

The five full-time faculty all hold the Ph.D., and one professor is the endowed Earl H. Beling Professor in Mathematics. The Beling Scholar program funds students' independent study or research projects in computer science or mathematics.

All mathematics majors complete a Senior Inquiry research project, which may be completed on campus or through summer research, student teaching or an internship.

Every summer, math students have opportunities to work with faculty on research or travel to professional meetings such as the section meeting of the Mathematical Association of America (MAA) and MathFest, the annual summer meeting of MAA.

Augustana has had a chapter of Pi Mu Epsilon, the national mathematics honor society, since 1979. The college also has a mathematics and computer science club, which started as the mathematics club in 1952.

The Math Student Resource Room (*a.k.a.* Ratiocination or "Rat" Room) in the Olin Center for Educational Technology is a walk-in help center staffed by experienced mathematics student tutors.

Careers and internships

Students can receive up to 9 credits in mathematics internships. They also may gain hands-on experience in the field through summer research and student teaching. Recent majors have completed internships at AVG Automation Corp, Deere & Company, Dow Chemical, Jack Daniels, Land of Lincoln Legal Assistance, Mid-American Energy, Olympic Steel and ii-A, a finance and insurance firm in Sydney, Australia.

All of Augustana's teaching mathematics graduates have found middle- or high-school teaching jobs after graduating. Augustana math majors also enroll in prestigious graduate programs such as Notre Dame and the Universities of Illinois, Iowa and Oregon.

Augustana College



Augustana offers a 30-credit **mathematics major**, an 18-credit **mathematics minor**, a 30-credit **teaching mathematics major** and a **major in applied mathematics**. The applied mathematics major is 42-46 credits, including 9 credits in one or three applied disciplines: accounting, biology, business administration, chemistry, economics, communication sciences and disorders, physics, geography or geology.

Popular second majors or minors include chemistry, computer science, music, physics and secondary education.

Students who wish to pursue work in **actuarial science** take a two-course sequence that covers all material found on the first actuarial exam.

For details and course descriptions, see augustana.edu/catalog.

What alumni say

When I came to Augustana I didn't have much direction in terms of what I wanted to study. I enrolled in courses spanning all areas of study but quickly knew the math program was where I wanted to be.

Although challenging, a math degree provides analytical problem-solving skills that can be obtained through few other majors. Fortunately, the faculty is there to help you each step of the way. The professors are not only highly intelligent and great teachers, but also truly care about the academic and personal development of each student.

Dave Macfadden '10, mathematics

Actuarial analyst at The Segal Company, Chicago

When I started Augustana as a first-year, I only had a vague idea that I wanted to major in math. However, after I became involved on campus and had an opportunity to truly explore my interests, I realized I also wanted to become a teacher.

Hands down, my math and education professors helped me to get where I am today. Because Augustana is a small liberal arts school I was fortunate enough to work with the same faculty throughout my four years here, so not only was I able to form relationships with them, but they were able to see me grow and help steer me on the path that I needed to be on.

Mary O'Malley '11, mathematics and secondary education

Upper-level mathematics teacher at Galena High School, Galena, Illinois

The mathematics and education major at Augustana not only taught me higher-level mathematics but it introduced a new way of thinking and learning about math. The faculty in Augustana's math department truly cares about the education of their students. They not only challenge you to be a better problem solver but help you work to integrate what you are learning in class into other areas of your life.

What impressed me most about the math department at Augie was how supportive the professors were in and outside the classroom. They take note of what you are interested in and give you opportunities to integrate your personal interests into the classroom. They provided me with a solid, in-depth understanding of math that now helps me better communicate mathematical content to my students.

Susan Fricke '13, mathematics and secondary education

Mathematics teacher, Batavia High School, Batavia, Illinois



I chose Augustana because of the liberal arts curriculum, its small overall size and small class sizes. I didn't know what I was going to do, or even what I was going to major in when I first got here, but now I know exactly what I'm doing ... what I want for my life after Augie. I am so excited for the future!

My advisor, Dr. Bengtson, helped me by encouraging me to take the classes that I was interested in, but also by nudging me into the upper-level math classes early on. I was a little scared of them, but he was always very encouraging and knew that I would succeed. He also encouraged me to apply for an REU (Research Experiences for Undergraduates), which I am extremely grateful for, because my REU experience at Valparaiso University helped me decide to go to graduate school.

Samantha Tyner '12, mathematics, economics and French

Pursuing Ph.D. in statistics at Iowa State University

The math classes I took at Augie helped me in several ways to be a teacher. During the higher-level classes I learned what it was like to be one of those struggling students, so it gave a perspective as a student I never really faced. Those classes helped me see and learn why we do some of the things we do in math, and how they all relate. This helped me have a better grasp, understanding, and appreciation for the math that I teach in high school.

The math classes at Augie helped me think in a variety of new ways and to try different thoughts, see if they worked, and evaluate why or why not they did or did not work. The classes helped me become just a general problem solver, and logical thinker.

Marty Resner '13, mathematics and secondary education

Mathematics teacher and assistant varsity football coach, Bettendorf High School, Bettendorf, Iowa

I arrived on [the Augustana College] campus right after Labor Day 1958, and there spent the best three years of my life.... Here, I was free to read, to learn and to think through things at my own pace.

Daniel Tsui '61, mathematics

Emeritus Senior Scholar at Princeton University and winner of the 1998 Nobel Prize in Physics

