What can you do with a degree in

Mathematics?

Anything! A mathematics degree can lead you to wide-ranging fields from research and education, Internet start-ups and biotech companies and even to baseball analytics for a major league team.

The renowned polymath Benjamin Franklin once said, "No employment can be managed without arithmetic, no mechanical invention without geometry." Today Franklin's 18th-century statement is truer than ever.

If you have a love and talent for the rigors and curiosities of mathematics, then the world is yours According to several national surveys:

» Math majors routinely receive the highest scores on graduate entrance exams, such as the LSAT and GMAT.

» Math majors earn high starting salaries.

» Math majors report high levels of job satisfaction.

Graduates are career-ready

Mathematics students gain the knowledge and skills to excel in their chosen careers from day one to ensure their future success. Our students learn an array of mathematical theories, concepts and areas from nationally recognized faculty, who specialize in topics ranging from topology and applied mathematics to mathematical biology and actuarial sciences. Months before graduation, **Morgan Pearson** ('18, pictured right) landed a job as an international assistant with the Texas Rangers where he will be responsible for player recruitment and projects related to statistics and baseball analytics.

Recent graduates work as:

Insurance managers

Actuaries

Investment entrepreneurs

Systems engineers and analysts

System and application software managers for the US Air Force

Mathematics teachers

Financial mathematicians

Research biomathematicians at OHSU

Computer scientists

Electrical engineers

Tax accountants

Robotics experts

Oregon State University

Department of Mathematics
Oregon State University
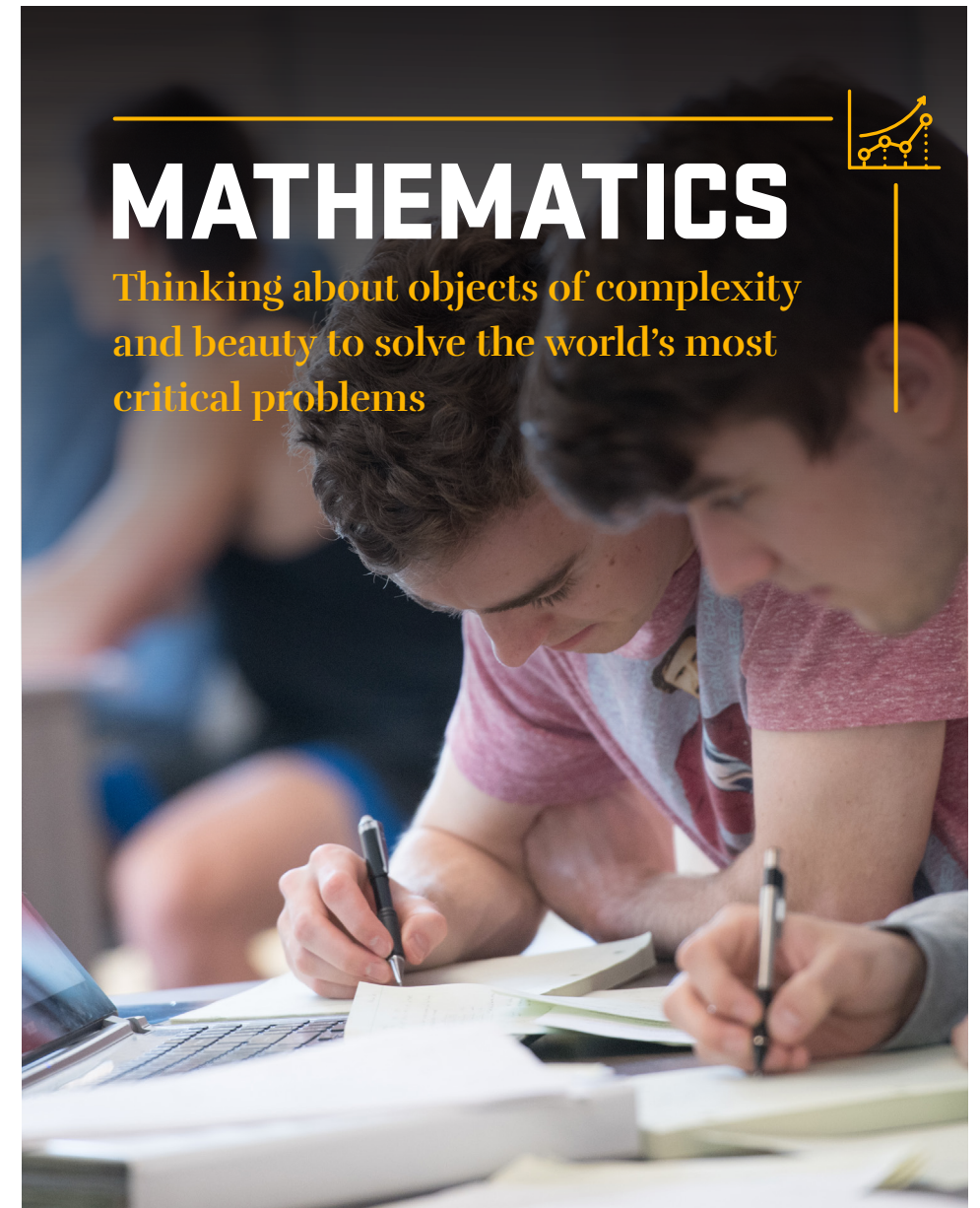368 Kidder Hall
Corvallis, OR 97331

541-737-4686
math.oregonstate.edu

College of Science
Oregon State University
128 Kidder Hall
Corvallis, OR 97331

541-737-4811
science.oregonstate.edu

MATHEMATICS

Thinking about objects of complexity and beauty to solve the world's most critical problems

COLLEGE OF SCIENCE
ACADEMIC BROCHURE / 2018

Oregon State University

WHERE CAN MATHEMATICS TAKE YOU?

The Department of Mathematics is a vibrant center for undergraduate and graduate level mathematics. It is home to many award-winning and outstanding researchers and teachers.

Our faculty frequently engage in interdisciplinary research and work towards solutions for today's pressing applied and theoretical problems, such as the transport of contaminants in the Earth's subsurface and the modeling and analysis of biological systems.

Endless opportunities

Mathematics students are well prepared for graduate school and careers in industry or research where mathematics plays a pivotal role. Grounding in pure or abstract mathematics gives students the analytical and problem-solving skills that industry demands. Applied mathematics and mathematical models are used extensively worldwide to address problems in engineering, business, computer science as well as the natural and social sciences.

Mathematics majors interested in careers in financial and actuarial industries can also pursue a minor in Actuarial Science. Many of our students continue their studies at top graduate schools in mathematics and other STEM fields.

Student Activities

» The **OSU Math Club** sponsors lectures, discussions and mathematics-centered activities for students.

» The **Association for Women in Mathematics** is a student organization that encourages women to pursue active careers in the mathematical sciences.

» The **Actuarial Science Club** promotes the actuarial profession, the actuarial preparatory track, internships and job opportunities.

» The Oregon State University chapter of the **Society for Industrial & Applied Mathematics** welcomes anyone interested in applied mathematics and its applications to industry.

The Mathematics Department offers the opportunity for majors to compete in national contests, such as the Putnam, Virginia Tech and COMAP competitions. Students can participate in study abroad programs as well as in our Research Experiences for Undergraduates summer program. Look for more information on the department website.

The **Mathematics and Statistics Learning Center** is a free resource providing help for lower-division mathematics courses. It also serves as a friendly gathering place for mathematics majors.

Student success

Professional advisors are available to help students make academic decisions that best support their personal goals and abilities. Students can consult them for help selecting courses and for guidance about navigating university policies. For current course requirements, refer to the OSU General Catalog online.

For information about careers and graduate programs, contact the department.

Focusing your degree

» **Applied and Computational Mathematics** is tailored for those interested in applied mathematics, scientific computation or engineering, preparing students for jobs in industry or government labs.

» **Mathematical Biology Option** will teach students how to use mathematics to solve problems in the biological sciences. This specialization will equip students for jobs in the biotech and pharmaceutical industries as well as research institutes.

» **Statistics Option** prepares students for careers in data analysis, economics, financial engineering or environmental studies as well as for graduate study in statistics.

» **Secondary Teaching Emphasis** provides the necessary mathematics background and prerequisites for subsequent certification to teach mathematics and science at the secondary level.

Tyler Mendes '15 graduated to work as an actuary

Caleb Smith '16 attended Budapest Semesters in Math

Sample Curriculum

YEAR ONE

Calculus
Physics
General course: The Politics of Developing Nations
Approved physical or biological science courses

YEAR TWO

Calculus
Linear Algebra
General course: Race, Space & Difference

Study abroad

YEAR THREE

Advanced Calculus
Linear Algebra
Abstract Algebra
Discrete Math
Mathematical Modeling, Fundamental Concepts of Topology or Non-Euclidean Geometry
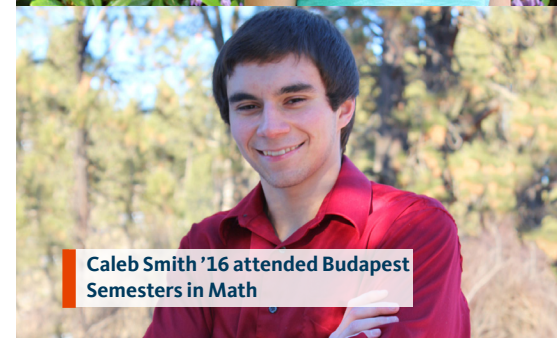General course: Appearance, Power & Society

Summer research

YEAR FOUR

Students can plan their senior year to give breadth and depth in 6 areas of mathematics:

Algebra and Number Theory, Analysis, Applied Mathematics, Geometry and Topology, Numerical Analysis, Probability.