

# MATHEMATICS: STANDARD TRACK (MATH)

Our research specialties are in algebra, analysis, geometry, number theory, probability and topology. The American Mathematical Society has ranked us in the top group of U.S research departments. Industries employ mathematicians doing statistical and actuarial work (for example the financial and insurance industry, and healthcare), in accounting, computer software, and in engineering-related industries, like aerospace. Many mathematicians plan to enter other professions upon graduation, and many attend graduate or professional school in other areas (for example law, medicine, economics or physics).

# TOP FIVE REASONS TO STUDY THIS MAIOR

- Increase your capacity to think analytically.
- 2. Develop skills to solve complex problems.
- 3. Engage with a variety of mathematics subfields.
- Participate in an active collaborative program.
- 5. Prepare yourself for a wide variety of future careers or further studies.



College of Arts and Sciences 541-346-4705 math.uoregon.edu

#### WHERE CAN I GO?

Students in Mathematics may choose to pursue a Bachelor of Arts (BA) or Bachelor of Science (BS), a Master of Arts (MA) or Master of Science (MS), or a Doctor of Philosophy (PhD). Mathematics provides students with a foundation for employment in:

Computer systems design firms

Software and technology companies

Local, state, and federal government agencies

Insurance agencies

Brokerage firms

Professional, scientific, and technical consulting firms

Financial companies and banks

Research institutes

K-12 schools

Colleges and universities

#### **ALUMNI JOBS**

Actuary analyst

Software engineer

Energy resource analyst

Geologist

Technology consultant

Senior application analyst

## COURSES YOU MAY NEED

#### **1ST YEAR**

Take appropriate calculus (MATH 25x); MATH 281: MATH 341: Two math labs

#### 2ND YEAR

MATH 282; MATH 342; Choose one: (a) MATH 307 + 2 labs or (b) MATH 231/232

#### **3RD YEAR**

CS 122 or CS 210 or Other approved course; MATH 316/7 or MATH 347/8 or MATH 391/2

#### 4TH YEAR

Four 3xx-4xx MATH courses from approved list, including at least one two-term sequence

#### **MAJOR CREDITS**

| Required  | 44 |
|-----------|----|
| Electives | 16 |
|           |    |
| Total     | 60 |

## CORE EDUCATION REQUIREMENTS

BS or BA Degree Minimum = 180 credits.

Core Education is approximately 71—83 credits depending on transfer credits and placement scores and requires courses in:

Writing

Math and/or CS (BS) or Language (BA)

US: Difference, Inequality, Agency

**Global Perspectives** 

Areas of Inquiry in:

Arts and Letters

Social Science / Science

#### WHAT WILL I LEARN?

**Statistics** 

Theoretical and applied research

Accounting and finance

Project management

Systems analysis

Risk assessment

Actuarial science

Probabilistic and other analytic methods

Teaching and tutoring

Technical writing

### EXPERIENTIAL LEARNING OPPORTUNITIES

Paid summer internships

Experience for Undergraduates (REU)

Math Circle Assistant

#### SPECIALIZED COURSES

Analysis and Number Theory

Combinatorics

Differential Equations

Abstract Algebra

History and Applications of Calculus

Topology

Differential Geometry

Mathematical Cryptography

### ADD A MINOR OR CERTIFICATE

**Business Administration** 

Chemistry

Computer Information Science

Computer Information Technology

**Economics** 

#### **CONTACT US**

Tykeson College and Career Advising 541-346-9200 advising.uoregon.edu/tykeson