MATHEMATICAL SCIENCES

Businesses need people who can collect and understand data, reason analytically and apply mathematical models to real-world problems. Our Mathematical Sciences major equips you with these important skills by focusing on applications of mathematics and statistics. In addition, our majors are required to complete a Business Studies major or minor, providing a background in business fundamentals. This combination of strong quantitative skills and business fundamentals is highly attractive to a broad range of employers.

At one of the nation's leading business schools, our combination of both math and business courses provides a strong theoretical and practical background that is in demand by today's leading organizations. You will learn how to use sophisticated models to solve problems in diverse business fields such as:

- Business planning
- Economics
- Engineering
- Environmental management
- Finance
- Marketing
- Science

HANDS-ON LEARNING

You can choose to further your classroom knowledge through our hands-on learning programs: corporate partnerships, internships, service–learning and study abroad.

By participating in these opportunities, you will gain valuable real-world experience, learn about diverse people and perspectives, and gain new skills for living and working in a global community.

CAREERS

The demand for college graduates with a Mathematical Sciences degree is high. Our curriculum prepares you for a wide variety of professional careers in industries such as:

- Actuary
- Business Analyst
- Consultant
- Data Scientist
- Educator
- Financial Engineer
- Market Researcher and Analyst
- Modeling and Simulation Analyst
- Operations Manager
- Quality Control Manager
- Research Analyst
- Risk Analyst
- Statistician

REQUIRED AND ELECTIVE COURSES

MAJOR REQUIREMENTS

Calculus III

Linear Algebra

Regression Analysis

Continuous Probability for Risk Management

Four Mathematical Sciences electives

MATHEMATICAL SCIENCES ELECTIVES
(PARTIAL LIST)

Probability Models for Business Decision-Making

Numerical Methods

Discrete Mathematics

Mathematical Logic

Game Theory

Mathematics of Sports

Financial Calculus and Derivative Pricing

Mathematical Theory of Interest

Intermediate Applied Statistics

Chaos, Fractals and Dynamics

Linear Models for Business Decision-Making

Mathematical Modeling in Environmental Management

Differential Equations

Discrete Probability

The Mathematics of Computer Graphics

Actuarial Topics in Probability and Risk Management

The Mathematics of Discrete Options Pricing

Data Science

Data Mining

Mathematical Statistics

Additional requirements apply for degree completion

BENTLEY
UNIVERSITY

Most Bentley students pursuing a Bachelor of Science degree take the following courses:

GENERAL EDUCATION REQUIREMENTS

Information Technology
Expository Writing I
Expository Writing II
Calculus I
Calculus II
Government
Problems of Philosophy
Principles of Microeconomics
Principles of Macroeconomics
First-Year Seminar (one credit)

For each of the following requirements, you can choose an applicable course from a wide variety of offerings:

Literature/Cinema
Natural Sciences
History
Behavioral Sciences
Humanities/Social Science elective

GENERAL BUSINESS COURSES

Legal and Ethical Environment of Business
Tools and Concepts
    in Accounting and Finance
Practice and Applications
    in Accounting and Finance
Business Statistics
Marketing-Operations Fundamentals
AND/OR
Human Behavior and Organizations

ARTS AND SCIENCES ELECTIVES

Choose five courses

BUSINESS OR UNRESTRICTED ELECTIVES

Choose five courses

TAKE IT TO THE NEXT LEVEL.

After you've selected a major, what else can you do to make your education work harder? Customize your degree with an optional second major, choose a minor or get a head start on graduate study.

OPTIONAL SECOND MAJORS Students majoring in Mathematical Science can add an optional Liberal Studies or Business Studies major to complement their degree without taking any additional courses. The Business Studies major ensures students leave campus with a strong foundation in the key principles of business including marketing, finance and operations. The Liberal Studies major allows students to choose from one of seven concentrations below and provides a well-rounded perspective that is highly sought after by today's leading employers.

The LSM concentrations are:
- American Studies
- Diversity and Society
- Earth, Environment and Global Sustainability
- Ethics and Social Responsibility
- Global Perspectives
- Health and Industry
- Media Arts and Society

MINORS You can further specialize your studies through one of our minors.
- Accountancy
- Business Economics
- Business Studies
- Computer Information Systems
- Data Technologies
- Earth, Environment and Global Sustainability
- English and Media Studies
- Entrepreneurial Studies
- Finance
- Gender Studies
- Global Management
- Health and Industry
- History
- Human Resources Management
- Information and Process Management
- Information Design and Corporate Communication
- International Affairs
- International Economics
- Law
- Leadership
- Management
- Marketing
- Modern Languages
- Natural and Applied Sciences
- Nonprofit Organizations
- Philosophy
- Politics
- Psychology
- Public Policy
- Sociology
- Sports Business Management
- Supply Chain/Operations Management

FALCON FAST-TRACK PROGRAM The Falcon Fast-Track program is designed for motivated undergraduate students with high academic standing in ANY undergraduate major. Depending on the program of study, master's degree requirements may be completed with one year of additional full-time academic work. Students enrolled in the Falcon Fast-Track Program have the opportunity to pursue one of nine master's programs.

For more information, visit *bentley.edu/fast-track*