

PURDUE
UNIVERSITY

PURDUE UNIVERSITY
CODO
INFORMATION

ACTUARIAL SCIENCE
MATHEMATICS
STATISTICS



WHAT IS...?

Actuarial Science

- Application of mathematical and statistical methods to assess risk
- Graduates are prepared for careers in areas such as insurance and finance, as well as graduate school

Mathematics

- Science that deals with the logic of shape, quantity, and arrangement
- Teaches logic and analytical thinking
- Graduates are prepared for careers in a wide variety of areas in business, government, and industry, as well as graduate schools

Statistics

- Mathematical study of data and chance
- Graduates are prepared for careers in applied statistics, statistical programming, and mathematics, as well as graduate school

WHAT CAN I DO WITH A MATH/STAT DEGREE?

MATHEMATICS/STATISTICS/ACTUARIAL SCIENCE

Bachelor's Degree

Prepares students for careers such as:

- Biostatistician
- Actuarial Analyst
- Economist
- Market Researcher
- Financial Consultant
- Mathematician
- Numerical/Data Analyst
- Statistician
- Systems Analyst
- And more!

Master's/Ph.D Degrees

Empowers students to obtain advancement in the fields of education and research. Students also continue to Law, Medical, or Business schools, as well as higher level positions in industry, business, and government.

MAJOR OPTIONS

MATHEMATICS

CORE MATHEMATICS

- Theoretical studies, prep for grad school

MATHEMATICS EDUCATION

- Certification to teach in grades 5-12

APPLIED MATHEMATICS

COMPUTER SCIENCES

BUSINESS

OPERATIONS RESEARCH

MATHEMATICS/STATISTICS

- Leads to a double major in both mathematics and statistics



Prep for employment in government, research, industry

Degree requirements for each major can be found [here](#).

MAJOR OPTIONS

STATISTICS

APPLIED STATISTICS

- Prep for employment in government, business, or industry

MATHEMATICAL STATISTICS

- Prep for grad school in quantitative fields or for employment
- Leads to a double major in both mathematics and statistics
- Prep for possible application to Purdue's 5th year MS program (additional coursework required)



Degree requirements for each major can be found [here](#).

MAJOR OPTIONS

ACTUARIAL SCIENCE

ACTUARIAL SCIENCE

- Also fulfills requirements for an Applied Statistics major
- Only 1 extra course needed to complete a minor in Management
- Prep for first 4 – 5 Actuary Exams (10 total)
- Goal is to pass 2 exams prior to graduation
- Prep for employment as an Actuary



Degree requirements for each major can be found [here](#).

DEGREE REQUIREMENTS

MATHEMATICS/STATISTICS/ACTUARIAL SCIENCE

Major courses

Science Core

University Core

+ Free Electives

120 total credits



COMMON MAJOR COURSES

ALL 10 MAJORS



MA 161/165 – Calculus I

MA 162/166 – Calculus II

MA 261 – Calculus III

STAT 350 – Intro to Statistics

MA 351 – Linear Algebra

SCIENCE CORE REQUIREMENTS

COLLEGE OF SCIENCE

Composition & Presentation

Computing

General Education

Great Issues

Laboratory Science

Language & Culture

Mathematics (automatically completed as part of major!)

Multidisciplinary Experience

Statistics

Teambuilding & Collaboration



UNIVERSITY CORE CURRICULUM (UCORE)

FOUNDATIONAL OUTCOMES

Behavioral/Social Science
Quantitative Reasoning
Humanities
Information Literacy
Oral Communication
Science
Science, Technology & Society
Written Communication

Required by the State. It is not the intent of the foundational outcomes to require more coursework. Most outcomes can be met by the Science Core requirements.



DEGREE ENHANCEMENTS

FIND YOUR NICHE WITH FREE ELECTIVES



Free electives can be used to take interesting courses or you can complete a minor or double major.

Many options are available! Talk to your advisor about your interests.

Common choices include:

- Computer Science
- Economics
- Management
- Physics
- Entrepreneurship Certificate

CODO REQUIREMENTS

ACTUARIAL SCIENCE

Minimum Semesters:	1
Minimum Hours:	12
Minimum GPA:	2.00
Course Requirements:	<p>A grade of C or better in MA 37300 AND a grade of C or better in a two course Calculus sequence of the following: MA 16100, MA 16500, MA 16200, MA 16600, MA 18100, MA 18200, MA 17300, MA 17400, MA 26100, MA 27100, MA 16300, or MA 16400. If the student has established credit [AP, IB, etc.] for Calculus I, II, and III (or beyond), then they must have a C or better in the next math course in the Actuarial Science major AND MA 37300 with a grade of C or better.</p>
Comments:	<p>2.50 average in MA/STAT/MGMT/ECON courses required for Actuarial Science major requirements. Not on probation.</p>

CODO REQUIREMENTS

MATHEMATICS (EXCLUDING SECONDARY MATHEMATICS EDUCATION MAED)

Minimum Semesters:	1
Minimum Hours:	12
Minimum GPA:	2.00
Course Requirements:	Satisfy ONE of the following two options: <ul style="list-style-type: none">•Have [an average 2.7 GPA AND at least two graded courses] in the approved calculus sequence (16100/16500, 16200/16600, 26100/27100).•Have completed the three course calculus sequence (via some combination of graded courses, transfer credit, and credit by exam) AND have a B- or better in at least one required 300+ level major course AND a 2.0 average GPA in all required major courses beyond the three course calculus sequence.
Comments:	2.00 GPA in major courses beyond the three credit calculus sequence. Not on probation.

CODO REQUIREMENTS

SECONDARY MATHEMATICS EDUCATION MAED

Minimum Semesters:	1
Minimum Hours:	12
Minimum GPA:	2.00
Course Requirements:	Satisfy ONE of the following two options: <ul style="list-style-type: none">•Have [an average 2.7 GPA AND at least two graded courses] in the approved calculus sequence (16100/16500, 16200/16600, 26100/27100).•Have completed the three course calculus sequence (via some combination of graded courses, transfer credit, and credit by exam) AND have a B- or better in at least one required 300+ level major course AND a 2.0 average GPA in all required major courses beyond the three course calculus sequence.
Comments:	2.50 GPA in MA/STAT/CS major courses including calculus. Not on probation.

CODO REQUIREMENTS

STATISTICS

Minimum Semesters:	1
Minimum Hours:	12
Minimum GPA:	2.00
Course Requirements:	A GRADE of C or better in one of the following Calculus courses: MA 16100, MA 16500, MA 16200, MA 16600, MA 18100, MA 18200, MA 17300, MA 17400, MA 26100, MA 27100, MA 16300, or MA 16400 OR a B- or better in MA/STAT 41600
Comments:	2.50 GPA in math/science/CS courses that meet degree requirements. Not on probation.

STEPS TO CODO INTO MA/STAT/ACSC

Step 1: Print 2 copies of the Change of Curricula (CODO) Form (Please use black/blue ink ONLY). Print your name and identification number on the top line and complete part "1" of the form. [Click here for the CODO form.](#)

Step 2: Take the CODO Form to your current college or school for approval.

Step 3: Take the CODO Form to MATH 231 for approval.

Step 4: You will receive an e-mail confirming, denying, or delaying your CODO. The College of Science will submit approved CODO forms to the Office of the Registrar for processing.

Step 5: Confirm that your CODO was processed by checking [myPurdue](#).

CODO papers turned in by the second Friday of the semester will be processed for that semester. Those turned in after that deadline will be processed for the following semester.



QUESTIONS??

[CLICK HERE FOR INFORMATION](#)

**MA/STAT/ACSC
Advisors**

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