

University of Indianapolis – Shaheen College of Arts & Sciences
2023-2024 Curriculum Guide for Actuarial Science Majors (ACTS)
 Bachelor of Science

Freshman and Sophomore Year

- **MATH 185** Orientation to the Math Sciences (1)
- **MATH 190** Calculus and Analytic Geometry I (4)
- **MATH 191** Calculus and Analytic Geometry II (4)
- **MATH 270** Calculus and Analytic Geometry III (4)
- **MATH 225** Introduction to R programming (2)
- **MATH 280** Linear Algebra (4)
- **MATH 350** Probability and Statistics I (3)
- **MATH 351** Probability and Statistics II (3)
- **ACCT 210** Financial Accounting (3)
- **FIN 210** Finance (3)
- **ECON 110** Microeconomics (3)
- **ECON 111** Macroeconomics (3)
- **CSCI 155** Introduction to Programming (3)

Junior and Senior Year

- **MATH 345** Applied Statistical Methods (4)
- **MATH 356** Financial Mathematics (4)
- **MATH 365** Time Series Analysis (3)
- **FIN 350** Investments (3)
- **MATH 456** Actuarial Mathematics I (3)
- **MATH 470** Capstone in Actuarial Science (3)

Also, students must take one elective to be chosen from the following list of courses:

- **MATH 425** Statistical Learning (4)
- **MATH 457** Actuarial Mathematics II (3)
- **MATH 466** Loss Models (3)
- **FIN 330** Risk Management and Insurance (3)
- **FIN 410** Derivatives Markets (3)

NOTE:

- ACTS majors are strongly encouraged to enroll in review courses (MATH 325, maximum of 2 credits). The courses are designed to help students prepare for the SOA exams P and FM. NOTE: A total of 63-64 hours is required for the Actuarial Science Major.
- A grade of C- (1.7 on a 4.0 scale) or higher is required in all courses applying toward the Actuarial Science Major.
- The Bachelor of Science degree requires a minimum of 120 hours.
- See the General Education Core Guide for additional course requirements.
- A student may complete more than one major as long as each major has at least 24 discrete hours. Please see the Academic Catalog for additional details.

REMEMBER: If you have any questions about Actuarial Science major and its requirements, contact Dr. Livia Hummel, Department of Mathematical Sciences (317-788-3320; hummell@uindy.edu; Martin Hall, Room 301D) or The Center for Advising and Student Achievement (788-2057, Schwitzer Student Center, Room 206). Courses and requirements sometimes change so keep in contact with your advisor.