

ACTUARIAL SCIENCE, MINOR

Actuaries use mathematics, statistics, predictive analytics, finance, and economics to predict the occurrence of uncertain events and their financial impact to minimize risk in business, finance, government, insurance, retirement planning, etc. Actuarial careers are always listed among the top ten jobs in the world based on salary, work/life balance, low levels of stress, and lateral and upward mobility. It is one of the most clearly defined career paths for mathematicians. The advanced training actuaries acquire in predictive analytics enables them to make important contributions to many fields including sports analytics. The Actuarial Science Minor (<https://www.sru.edu/academics/majors-and-minors/actuarial-studies-minor/>) provides the coursework to prepare students for up to five actuarial exams and Validation by Educational Experience (VEE) credit in all three areas approved by the Society of Actuaries.

To access Minor Requirements, please view the Curriculum Guide tab.

Related Links

Actuarial Science, Minor Program Page (<https://www.sru.edu/academics/majors-and-minors/actuarial-studies-minor/>)

Mathematics and Statistics Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/mathematics-and-statistics/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensures/>)

Curriculum Guide

GPA Requirement

Minor GPA: 2.0 or higher

Minor Requirements

- Students must complete at least 9 credit hours of MATH/STAT in their minor from SRU
- Students enrolled in both the Minor in Actuarial Science and Minor in Statistics must complete at least 9 credits in each of these minors that are NOT being counted in the other.
- Mathematics majors must choose at least 15 credit hours in this minor distinct from those being counted toward the major.
- A minimum of 6 credit hours must be upper division (courses numbered 300 and above)
- A minor shall be no fewer than 18 credits.
- Note: VEE Credit – complete requirements for Society of Actuaries VEE credit in at least two areas. Students must earn a 'B' or better in each course in the VEE areas in order to earn the credit.
- VEE Areas:
 - Mathematical Statistics: STAT 352 and STAT 353
 - Accounting and Finance: FIN 320 and ACCT 209
 - Economics: ECON 201/ECON 202 sequence or ECON 301/ECON 302 sequence

Code	Title	Hours
Required Courses for Minor in Actuarial Studies		
MATH 280	Theory of Interest	3
STAT 352	Mathematical Statistics I	3
STAT 353	Mathematical Statistics II	3

Required Courses for Non-Mathematics Majors

Math majors may not count these course in the Actuarial Studies Minor		
MATH 225	Calculus I	4
MATH 230	Calculus II	4
Electives		
Select courses from below to reach 24 credits total for this minor:		7-15
ACCT 209	Financial Accounting	
ACCT 210	Managerial Accounting	
CPSC 323	Fundamentals of Database Systems	
CPSC 358	Simulation	
ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	
ECON 301	Macroeconomic Analysis	
ECON 302	Microeconomic Analysis	
ECON 312	Critical Choices in Health Care Policy	
ECON 318	Introduction to Econometrics	
ENGL 205	Introduction to Professional Writing	
FIN 320	Managerial Finance	
FIN 321	Investments	
FIN 323	Financial Markets and Institutions	
FIN 326	Intermediate Corporate Finance	
FIN 329	Principles of Insurance	
MATH 231	Calculus III	
MATH 311	Deterministic Models of Operations Research	
MATH 315	Numerical Mathematics	
MATH 335	Mathematical Modeling	
MATH 482	Actuarial Mathematics	
MATH 484	Life Contingencies	
STAT 252	Introduction to Statistical Modeling	
STAT 254	Nonparametric Statistics	
STAT 256	Statistical Computing	
STAT 354	Mathematical Statistics III	
STAT 363	Statistical Learning	
Total Hours		24

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- ACCT 209, ACCT 210, ECON 201, ECON 202 may not be used by students from the School of Business
 - MATH 231 may not be used by Math majors

* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information*

on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.

PASSHE - Pennsylvania State System of Higher Education Institutions

Minor in Actuarial Science (52H)

This program is effective as of Fall 2021

Revised 07.27.2021

UCC 10.13.2020