

ACTUARIAL SCIENCE, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Degree Requirements

For the Bachelor of Science degree in Actuarial Science, a minimum of 120 credits:

Requirement	Credits
General Education	45
Electives	8
Requirements for the Major	82

15 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 6 credits of GWS courses; 6 credits of GQ courses; 3 credits of GS courses.

Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

Code	Title	Credits
Prescribed Courses		
BA 342	Socially Responsible, Sustainable and Ethical Business Practice	3
BA 411	Analyzing Business and Industry	3
BLAW 341	Business Law I: Introduction to Contracts, Liability Issues, and Intellectual Property	3
ECON 102	Introductory Microeconomic Analysis and Policy	3
ECON 104	Introductory Macroeconomic Analysis and Policy	3
MIS 250	Introduction to Problem Solving with Spreadsheet Analysis and Information Systems Management	3
<i>Prescribed Courses: Require a grade of C or better</i>		
ACCTG 211	Financial and Managerial Accounting for Decision Making	4
ENGL 202D	Effective Writing: Business Writing	3
FIN 301	Corporation Finance	3
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
MATH 231	Calculus of Several Variables	2
MGMT 301	Basic Management Concepts	3
MKTG 301	Principles of Marketing	3
RM 320W	Risk Management and Insurance	3
RM 410	Financial Mathematics for Actuaries	3
RM 411	Long Term Actuarial Mathematics - Fundamentals	3
RM 421	Short Term Actuarial Mathematics - Fundamentals	3
RM 430	Life and Health Insurance	3
STAT/MATH 414	Introduction to Probability Theory	3
STAT/MATH 415	Introduction to Mathematical Statistics	3

Additional Courses

Additional Courses: Require a grade of C or better

RM 412	Long Term Actuarial Mathematics - Advanced Topics	3
or RM 422	Short Term Actuarial Mathematics - Advanced Topics	
SCM 200	Introduction to Statistics for Business	4
or STAT 200	Elementary Statistics	
Select 3 credits from the following:		3
ENGL 15	Rhetoric and Composition	
ENGL 30H	Honors Rhetoric and Composition	
ENGL/CAS 137H	Rhetoric and Civic Life I	
ESL 15	ESL Composition for American Academic Communication II	
Select 3 credits from the following:		3
STAT 380	Data Science Through Statistical Reasoning and Computation	
STAT 462	Applied Regression Analysis	
STAT 483	Statistical Programming in SAS	

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better

Attainment of 12th-credit level proficiency in a single world language. 4
Proficiency must be demonstrated by either examination or course work.

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

Integrative Studies

- **Inter-Domain Courses (Inter-Domain):** 6 credits

Exploration

- **GN**, may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses**. This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.