# Program Progression Guide

**Disclaimer**: The 2017-2018 Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the Fall 2018, Spring 2019, and Summer 2019 semesters. The Program Progression Guide assists students in the development of an individualized 8-semester plan. Students are encouraged to use this guide, myPurduePlan* (online degree auditing tool) and the Student Educational Planner (SEP) as they work with their academic advisor towards the completion of their degree requirements.

**Notification**: Each student is ultimately responsible for knowing, monitoring and completing all degree requirements.

An undergraduate degree in the College of Science requires completion of the following degree requirements.

| University Degree Requirements | | |
|---|---|---|
| Minimum 2.0 Cumulative GPA | Minimum 120 Credits that fulfill degree requirements | 32 Residency Credits (30000 and above) at a Purdue University campus |

**University Core Curriculum\*\***

- Human Cultures: Behavioral/Social Science
- Human Cultures: Humanities
- Information Literacy
- Oral Communication

- Quantitative Reasoning
- Science
- Science, Technology & Society Selective
- Written Communication

**Required Major Program Courses**

A minimum of 32 semester credits of upper level (30000+) required. Students must earn a 2.5 average GPA among required MA/STAT/MGMT/ECON courses excluding Calculus I, II, III, and STAT 35000 AND A or B in major courses excluding MGMT 20000 and 20100 AND 3.5 Average GPA in major courses marked with a • and pass two SOA exams.

**3.3 Graduation GPA required for Bachelor of Science degree.**

**College of Science Core Curriculum**

- Freshman Composition: 3-4 credits
- Technical Writing and Presentation: 3-6 credits
- Teaming & Collaboration (NC)
- General Education - 9 credits

- Foreign Language & Culture: 0-9 credits
- Great Issues - 3 credits
- Laboratory Science: 6-8 credits
- Multidisciplinary: 0-3 credits

- Mathematics: 6-10 credits
- Statistics: 3 credits
- Computing: 3-4 credits

**Degree Electives**

Any Purdue or transfer course approved to meet degree requirements in accordance with individual departmental policies. Consult the No Count course list for courses which may not be used to meet any College of Science degree requirement.

* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.

\*\* University Core Curriculum Outcomes may be met through completion of the College of Science Core curriculum. Students should consult with their academic advisors and myPurdue Plan for course selections.

# 2018-19 Actuarial Science Honors Degree Progression Guide

The Mathematics Department has *suggested* the following degree progression guide for the Actuarial Science Honors Degree.  Students will work with their academic advisors to determine their best path to degree completion. Course pre-requisites are specific to this degree plan. Courses meeting the College of Science Core Curriculum requirements are marked with "SCC" and a letter corresponding to the legend below:

**College of Science Core Curriculum (SCC)**

A. Freshman Composition
B. Technical Writing and Presentation
C. Teaming and Collaboration
D. General Education
E. Foreign Language and Culture
F. Great Issues

G. Laboratory Science
H. Multidisciplinary
I. Mathematics
J. Statistics
K. Computing

| Credits | Fall 1st Year | Prerequisite | Credits | Spring 1st Year | Prerequisite |
|---|---|---|---|---|---|
| 4-5 | Calculus I Option CC  SCC-I | ALEKS 85+ | 4-5 | Calculus II Option SCC-I | Calculus I, C- or higher |
| 3-4 | ENGL 10600/10800 SCC-A | | 3 | MA 37300 CC SCC-H | Calculus I, C- or higher |
| 3-4 | Language I Option SCC-E | | 3-4 | Computing Option (CS 17700 & meets Teambuilding * Collaboration) SCC-K | |
| 2 | Free Elective (MA/STAT 17000) | Co-req Calc I | 3-4 | Language II Option SCC-E | |
| 3 | Free Elective | | 1 | Free Elective | |
| **15-18** | | | **14-17** | | |

| Credit | Fall 2nd Year | Prerequisite | Credits | Spring 2nd Year | Prerequisite |
|---|---|---|---|---|---|
| 4-5 | Calculus III Option | Calculus II, C- or higher | 3 | MA 35100 Elementary Linear Algebra | Calculus III, C- or higher |
| 3 | MGMT 20000 Introductory Accounting SCC-D | | 3 | MA/STAT 41600 CC Probability | Calculus III, C- or higher |
| 3 | ECON 25100 Microeconomics | | 3 | MGMT 20100 Management Accounting I | MGMT 20000, C- or higher |
| 3 | STAT 35000 Introduction to Statistics SCC-J | Calculus II, C- or higher | 2 | Free elective (STAT 25000 Recommended) | |
| 3 | Language III/Culture/Diversity Option SCC-E | | 3-6 | Technical Writing Option and Technical Presenting Option (COM 21700) SCC-B | |
| **16-17** | | | **15-18** | | |

| Credit | Fall 3rd Year | Prerequisite | Credit | Spring 3rd Year | Prerequisite |
|---|---|---|---|---|---|
| 4 | STAT 47201* Actuarial Models-Life Contingencies | MA 37300 and MA/STAT 41600, each C- or better | 4 | STAT 47301 Introduction to Arbitrage-Free Pricing of Financial Derivatives | MA 37300 and MA/STAT 41600, each C- or better |
| 3 | STAT 41700* Statistical Theory | STAT 35000 and MA/STAT 41600, each C- or higher | 3-4 | Laboratory Science II Option SCC-G | Lab Sci Option I |
| 3 | MGMT 31000 | ECON 25100 & MGMT 20100 & STAT 35000 or STAT 41600, C- or higher/MGMT 30400 no restrictions | 3 | General Education I Option SCC-D | |
| 3-4 | Laboratory Science I Option SCC-G | | 2 | Free Elective (STAT 47500 Life Contingencies II) | |
| 3 | ECON 25200 Macroeconomics | | 3 | Free elective | |
| | | | 1 | Free elective | |
| **16-17** | | | **16-17** | | |

| Credit | Fall 4th Year | Prerequisite | Credit | Spring 4th Year | Prerequisite |
|---|---|---|---|---|---|
| 4 | MA 36600 Differential Equations | MA 35100, C- or higher/may be concurrent | 3 | STAT 42000 Introduction to Time Series | STAT 35000 and MA/STAT 41600, each C- or higher |
| 3 | STAT 51200 Applied Regression Analysis | Jr/Sr Standing; STAT 35000, C- or higher | 3 | Great Issue Option  SCC-F | Jr/Sr Standing; may require COM or ENGL |
| 3 | General Education II Option SCC-D | | 3 | MGMT 41100 Investments Management - Honors Version Required if Offered | MGMT 31000 or MGMT 30400, C or higher |
| 3 | Free elective (Science, Technology & Society Selective Course) | | 4 | STAT 47901 Loss Models | MA/STAT 41600 or STAT 41700, each C- or higher |
| 2-3 | Free elective | | 2 | Free elective | |
| **15-16** | | | **15** | | |

Superscript of CC (eg Calculus I Option CC ) indicates a Critical Course