

**Program Progression Guide**

**Disclaimer:** The 2022-2023 Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the Fall 2022, Spring 2023, and Summer 2023 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.

<b>University Degree Requirements</b>		
Minimum 2.0 Cumulative GPA	Minimum 120 Credits that fulfill degree requirements	32 Residency Credits (30000 and above) at a Purdue University campus
<b>University Core Curriculum**</b>		
<ul style="list-style-type: none"> <li>Human Cultures: Behavioral/Social Science</li> <li>Human Cultures: Humanities</li> <li>Information Literacy</li> <li>Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>Quantitative Reasoning</li> <li>Science</li> <li>Science, Technology &amp; Society Selective</li> <li>Written Communication</li> </ul>	
<b>Civic Literacy Proficiency - <a href="https://www.purdue.edu/provost/about/provostInitiatives/civics/">https://www.purdue.edu/provost/about/provostInitiatives/civics/</a></b>		
<b>Required Major Program Courses</b>		
A minimum of 32 semester credits of upper level (30000+) required. Earn a cumulative GPA of at least 3.30. Earn at least a "B" in each of the following classes: ECON 25100, ECON 25200, MGMT 31000, and MGMT 41100. Earn a minimum GPA of 3.5 in the following set of classes: STAT 41700, STAT 47201, STAT 47301, STAT 47901 (marked with a •). Earn grades of at least "B" in all of the MA and STAT classes in Required Major Courses. Earn a 2.50 GPA among required MA/STAT/MGMT/ECON classes in Required Major Courses. Pass the 2 SOA exams.		
<b>College of Science Core Curriculum</b>		
<ul style="list-style-type: none"> <li>Freshman Composition: 3-4 credits</li> <li>Technical Writing and Presentation: 3-6 credits</li> <li>Teaming &amp; Collaboration (NC)</li> <li>General Education - 9 credits</li> </ul>	<ul style="list-style-type: none"> <li>Foreign Language &amp; Culture: 0-9 credits</li> <li>Great Issues - 3 credits</li> <li>Laboratory Science: 6-8 credits</li> <li>Multidisciplinary: 0-3 credits</li> </ul>	<ul style="list-style-type: none"> <li>Mathematics: 6-10 credits</li> <li>Statistics: 3 credits</li> <li>Computing: 3-4 credits</li> </ul>
<b>Degree Electives</b>		
Any Purdue or transfer course approved to meet degree requirements in accordance with individual departmental policies. Consult the <u>No Count course list</u> 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.

## 2022-2023 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.

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4-5	Calculus I Option <sup>*</sup>	ALEKS 85+ or SATM 670/ACTM 29 requirement	4-5	Calculus II Option	Calculus I, C- or higher
3-4	ECON 25100		3	MA 37300 <sup>*</sup>	Calculus I, C- or higher
3-4	Science Core Option		3-4	Science Core Option	
3-4	Science Core Option		3-4	Science Core Option	
2	Free Elective (MA/STAT 17000)	Co-req Calc I	0-2	Free Elective	
1	Free Elective (MA 10800 or STAT 10100 1 <sup>st</sup> Year Seminar)				
<b>16-18</b>			<b>15-16</b>		

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		3	MA/STAT 41600 <sup>*</sup> Probability	Calculus III, C- or higher
3	ECON 25200 - Macroeconomics		3	MGMT 20100 Management Accounting I	MGMT 20000, C- or higher
3	STAT 35000 Introduction to Statistics	Calculus II, C- or higher	2-3	Free elective (STAT 25000 Recommended)	
3-4	Science Core Option		3-4	Science Core Option	
			0-1	Free Elective	
<b>16-18</b>			<b>15</b>		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
3	STAT 47301 • Intro to Arbitrage-Free Pricing of Financial Derivatives	MA 37300 and MA/STAT 41600, each C- or better	3	STAT 47902 • Short Term Act Models	STAT 41700 C- or higher
3	STAT 41700 • Statistical Theory	STAT 35000 and MA/STAT 41600, each C- or higher	3	STAT 49000 Statistics Risk Modeling	Jr/Sr Standing; STAT 35000, C- or higher
3	MGMT 31000	ECON 25100 & MGMT 20000 C- or higher	3	MGMT 41100 Investments Management - Honors Version Required if Offered	MGMT 31000 C or higher
3-4	Science Core Option		3-4	Science Core Option	
3-4	Science Core Option		3-4	Science Core Option	
<b>15-17</b>			<b>16-18</b>		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
4	STAT 47201 • Actuarial Models-Life Contingencies (Teamwork)	MA 37300 and MA/STAT 41600, each C- or better	3	STAT 42000 Introduction to Time Series	STAT 35000 and MA/STAT 41600, each C- or higher
4	MA 36600 Differential Equations	MA 35100, C- or higher/may be concurrent	3	MA 49000 Advanced Short Term Actuarial Mathematics or STAT 47501 Actuarial Models II •	STAT 47201
3	Science Core Option		3	Elective (Data Science or Stochastic Processes recommended)	MA/STAT 41600 or STAT 41700, each C- or higher
3	Free elective (Science, Technology & Society Selective Course)		3	MA 49000 Actuarial Science Capstone	
2	Free elective (Data Science Recommended)		3	Elective	
<b>16</b>			<b>15</b>		

Superscript of \* (eg Calculus I Option<sup>\*</sup>) indicates a course a student should earn a C or better in or contact their advisor.

### Science Core Curriculum Options

(one course needed for each requirement unless otherwise noted)

Options recommended for first- and second-year students	Options recommended for third- and fourth-year students
Freshman Composition <sup>UC</sup>	Technical Writing and Presentation <sup>UC</sup> (COM 217 recommended)
Computing (CNIT 17500)	Multidisciplinary Experience <sup>UC</sup>
Foreign Language and Culture <sup>UC</sup> (3 courses needed)	General Education <sup>UC</sup> (2 courses needed + MGMT 20000)
Laboratory Science (2 course sequence)	Great Issues

<sup>UC</sup>Select courses may also satisfy a University Core Curriculum requirement; see the University Core Requirement [course list](#) for approved courses. Students must have 32 credits at the 30000 level or above taken at Purdue.