

**Program Progression Guide**

**Disclaimer:** The 2021-2022 Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the Fall 2021, Spring 2022, and Summer 2022 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. Students must earn a 2.5 average GPA among required MA/STAT/MGMT/ECON courses excluding Calculus I, II, III, and STAT 35000.		
<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.

## 2021-2022 Actuarial Science Degree Progression Guide

The Mathematics Department has *suggested* the following degree progression guide for the Actuarial Science Degree. Students will work with their academic advisors to determine their best path to degree completion.

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4-5	Calculus I Option*	ALEKS 85+ or SATM 670/ACTM 29 requirement	4-5	Calculus II Option	Calculus I, C- or higher
3-4	Science Core Option		3	MA 37300 – meets multidisciplinary requirement*	Calculus I, C- or higher
3-4	Science Core Option		3-4	Science Core Option	
2	Free Elective (MA/STAT 17000)	Co-req Calculus I	3-4	Science Core Option	
3	ECON 25100 - Microeconomics		0-2	Free Elective	
1	Free Elective - (MA 10800 or STAT 10100 First Year Seminar Recommended)				
<b>16-18</b>			<b>15-18</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 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	3	Science Core Option	
3-4	Science Core Option		2-3	Elective (STAT 25000 Recommended)	
			0-1	Elective	
<b>16-18</b>			<b>15</b>		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
3	STAT 47301 Introduction to Arbitrage-Free Pricing of Financial Derivatives	MA 37300 and MA/STAT 41600, each C- or better	4	STAT 47901 Loss Models	STAT 41700 C- or higher
3	STAT 41700 Statistical Theory	STAT 35000 and MA/STAT 41600, each C- or higher	3-4	Science Core Option	
3	MGMT 31000	ECON 25100 & MGMT 20000 C- or higher	3	Science Core Option	
3-4	Science Core Option		3	STAT 51200 Applied Regression Analysis	Jr/Sr Standing; STAT 35000, C- or higher
3-4	Science Core Option		3	Free elective (MGMT 41100 or Accounting/Finance VEE Course – see academic advisor)	MGMT 31000 C- or higher
<b>15-17</b>			<b>16-17</b>		

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
4	STAT 47201 Actuarial Models-Life Contingencies – meets Teamwork requirement	MA 37300 and MA/STAT 41600, each C- or better	3	Free Elective - Credit Hours: 3.00 (Data Science or Stochastic Processes Recommended)	Varies
3	Science Core Option		7	Free Elective	
3	Free elective (Science, Technology & Society Selective Course)		2	Free elective (STAT 47500)	STAT 47201
1	Free elective				
<b>15</b>			<b>15</b>		

Superscript of \* (eg STAT 35000\*) indicates a course a student should earn a minimum of a C in these courses. Courses in ( ) are recommended.

### 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	Multidisciplinary Experience <sup>UC</sup>
Foreign Language and Culture <sup>UC</sup> (3 courses needed)	General Education <sup>UC</sup> (2 courses + MGMT 20000 needed)
Laboratory Science (2 course sequence)	Great Issues