

Program Progression Guide

Disclaimer: The [2024-2025 Purdue West Lafayette catalog](#) is considered the source for academic and programmatic requirements for students entering programs during the Fall 2024, Spring 2025, and Summer 2025 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**		
<ul style="list-style-type: none"> • Human Cultures: Behavioral/Social Science • Human Cultures: Humanities • Information Literacy • Oral Communication 	<ul style="list-style-type: none"> • Quantitative Reasoning • Science • Science, Technology & Society Selective • Written Communication 	
Civic Literacy Proficiency - https://www.purdue.edu/provost/about/provostInitiatives/civics/		
Required Major Program Courses		
Earn at least a B- in each of the following classes: ECON 25100, ECON 25200, MGMT 31000, and MGMT 41100. Earn grades of at least B in all of the MA and STAT classes in the Required Major Courses. Students should strive to earn a C or better. Earn a cumulative GPA of at least 3.30. Earn a minimum GPA of 3.5 in the following set of classes: STAT 41700, STAT 47201, STAT 47301, STAT 47902, STAT 47401 SRM, and STAT 47501 or MA 49000 ASTAM (marked with a *). Earn a 2.50 GPA among required MA/STAT/MGMT/ECON classes in Required Major Courses.		
College of Science Core Curriculum		
<ul style="list-style-type: none"> • Written Communication: 3-4 credits • Technical Writing and Presentation: 0-3 credits • Computing: 3-4 credits • Cultural Diversity: 0-9 credits 	<ul style="list-style-type: none"> • General Education: 6 credits • Great Issues in Science: 3 credits • Laboratory Science: 6-8 credits • Mathematics: 8-10 credits 	<ul style="list-style-type: none"> • Science, Technology, and Society: 3 credits • Statistics: 3 credits • Team-Building and Collaboration
Degree Electives		
Any Purdue or transfer course approved to meet degree requirements in accordance with individual departmental policies. The College of Science has identified courses that are below the disciplinary level of each program and major area of study. While similar, Not Recommended course lists vary between departments.		

* 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.

2024-2025 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 *	ALEKS 85+ or SATM 670/ACTM 29 requirement	4-5	Calculus II Option	Calculus I, C- or higher
3	ECON 25100 Microeconomics		3	MA 37300 *	Calculus I, C- or higher
3-4	First-Year Composition		3-4	Programming Option	
3-4	Science Core Option		3-4	Science Core Option	
2	Free Elective (MA/STAT 17000 recommended)	Co-req Calc I	0-2	Free Elective	
1	Free Elective (MA 10800 or STAT 10100 recommended)				
16-18			15-18		

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 or STAT 35500	Calculus II, C- or higher	2-3	Free elective (STAT 25000 Recommended)	
3-4	Science Core Option		3	COM 21700 Science Writing and Presentation	
			0-1	Free Elective	
16-18			15		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
3	STAT 47201 Fundamental Long Term Actuarial Mathematics – meets Teamwork requirement	MA 37300 and MA/STAT 41600, each C- or better	3	STAT 47902 Fundamental Short Term Actuarial Mathematics	STAT 41700 C- or higher
3	STAT 41700 Statistical Theory	STAT 35000 and MA/STAT 41600, each C- or higher	3	STAT 42000 Introduction to Time Series	STAT 35000 and MA/STAT 41600, each 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	STAT 47401 Statistics for Risk Modeling I	
3-4	Science Core Option		3-4	Science Core Option	
16-18			15-16		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	STAT 47501 Advanced Long Term Actuarial Mathematics OR free elective	MA 37300 and MA/STAT 41600, each C- or better	4	MA 36600 Ordinary Differential Equations	
1-5	STAT 49000 Topics in Statistics for Undergraduates – Statistics for Risk Modelling II	DPT Permission	1-5	STAT 49000 Topics in Statistics for Undergraduates - Actuarial Science Capstone	
3	STAT47301 Intro to Arbitrage-Free Pricing of Financial Derivatives		3	MA49000 Topics in Mathematics for Undergraduates – Advanced Short Term Actuarial Mathematics OR free elective	
3	Great Issues in Science Option		3	Science Core Option	
3	Free elective		3	Elective	
15			16		

Superscript of * (eg Calculus I Option*) 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
Written Communication ^{UC}	Technical Writing and Presentation ^{UC} (COM 217 recommended)
Computing (CNIT 17500)	Science, Technology, and Society ^{UC}
Foreign Language and Culture ^{UC} (3 courses needed)	General Education ^{UC} (2 courses needed + MGMT 20000)
Laboratory Science (2 course sequence)	Great Issues

^{UC}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.