

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.

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		
A minimum of 32 semester credits of upper level (30000+) required. Average GPA in courses must be 2.00 or higher in Required Major Courses .		
College of Science Core Curriculum		
<ul style="list-style-type: none"> Freshman Composition: 3-4 credits Technical Writing and Presentation: 3-6 credits Teaming & Collaboration (NC) General Education - 9 credits 	<ul style="list-style-type: none"> Foreign Language & Culture: 0-9 credits Great Issues - 3 credits Laboratory Science: 6-8 credits Multidisciplinary: 0-3 credits 	<ul style="list-style-type: none"> 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 <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 Mathematics with Computer Science Degree Progression Guide

The Mathematics Department has *suggested* the following degree progression guide for the Mathematics with Computer 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		4	CS 18000 – CS 18000 Prob. Solving & O-O Programming (meets Computing / Teambuilding & Collaboration)	Calculus I, C- or higher or co-req
3-4	Science Core Option		3-4	Science Core Option	
1	Free Elective (MA 10800)		3	Free Elective	
4	Free Elective or Computing Option (CS 17700)		1	Free Elective	
15-18			15-17		

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	STAT 35000 Introduction To Statistics	Calculus II, C- or higher	3	MA 37500 Introduction To Discrete Mathematics (used as CS 18200 pre-requisite)	Calculus III, C- or higher
3-4	Science Core Option		3	Science Core Option	
3	Science Core Option		3	Science Core Option	
2	Free Elective		3	Free Elective	
15-17			15		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
4	MA 36600 Ordinary Differential Equations	Co-req or pre MA 35100 C- or higher	3	MACS Math Selective I	Varies by Class
3	CS 24000 Programming In C	CS 18000 and MA 37500 C or higher	3	CS 25100 Data Structures And Algorithms	CS 24000 and MA 37500, C or higher
3-4	Science Core Option		3-4	Science Core Option	
3	Free elective		6	Free Elective	
2	Free Elective				
15-16			15-16		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	CS 31400/MA 51400 Numerical Methods	CS Programming and MA 35100, C or higher	3	MA/STAT Selective	Varies by Class
3	MACS Math Selective II	Varies by Class	3	CS Selective	Varies by Class
3	Science Core Option		3	Science Core Option	
3	Science Core Option		3	Science Core Option	
3	Free Elective (Science, Technology & Society Selective Course)		3	Free Elective	
15			15		

Superscript of * (eg Calculus I Option*) indicates a student should earn a minimum of a B-. See advisor for further details. 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 ^{UC} Foreign Language and Culture ^{UC} (3 courses needed) Laboratory Science (2 course sequence)	Technical Writing and Presentation ^{UC} (COM 217 recommended) Multidisciplinary Experience ^{UC} General Education ^{UC} (3 courses needed) Great Issues