

Core Mathematics Honors

College of Science

2024-2025

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					
				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 			
Civic Literacy Proficiency - https://ww	w.purdue.edu/pro	vost/about/pr	ovostIn	itiatives/civics/	
Required Major Program Courses Student should strive to earn a B- or better. Av MA 44000, MA 44200, and MA 45000 must be	-		_		
College of Science Core Curriculum					
 Written Communication: 3-4 credits Technical Writing and Presentation: 0-6 c Cultural Diversity: 0-9 credits Computing: 3-4 credits 	• Great Issu • Laborator	ducation: 9 credits es in Science: 3 credits science: 6-8 credits ics: 8-10 credits		 Science, Technology, and Society: 3 credits Statistics: 3 credits Team-Building and Collaboration: 0-3 credits 	
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 Core Mathematics Honors Degree Progression Guide

The Mathematics Department has *suggested* the following degree progression guide for the Core Mathematics Honors 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		3-4	Programming Option	
3-4	Science Core Option		3-4	Science Core Option	
1	Free Elective (MA 10800 recommended)		2	Free Elective	
3-4	Free Elective		3	Free Elective	
15-18			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
3-4	Science Core Option		4	MA 36600 Ordinary Differential Equations	Co-req or pre MA 35100 C- or higher
3-4	Science Core Option		3	COM 21700	
3	Free Elective (MA 30100 recommended)	Calculus II, C- or higher	3-4	Science Core Option	
2	Free Elective		0-3	Free Elective	
15-18			15-16		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
3	MA 42500 Elements Of Complex Analysis	MA 35100 C- or higher	3	MA 35301 Linear Algebra II	MA 35100 C- or higher
3	MA 44000 (requires MA 35301 - students with calculus credit prior to beginning at Purdue may work with their advisor to alter their plan to meet pre-requisites for MA 44000 in Fall junior year. Students beginning in Calculus I first semester should plan to take MA 44000 in a later fall semester)	Calculus III (grade varies depending on course) MA 44000 requires MA 35301 with B- or better.	3	STAT or STAT 35500	Calculus II, C- or higher
3-4	Science Core Option		3-4	Science Core Option	
3-4	Science Core Option		3	MA 42800	MA44000 B- or higher and MA35100 C- or higher
2	Free Elective		3	Free Elective	
15-17			15-16		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	MA 45000 Algebra Honors	Requires MA 35301 with B- or better	3	MA 44200	Requires MA 35301 with B- or better
3	MA Selective	Varies by Class	3	MA Selective	Varies by Class
3	Science Core Option		3-4	Science Core Option	
3	Great Issues in Science Option		3	Free Elective	
15-18			15		

Superscript of * (eg Calculus I Option*) indicates a course 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	
Written Communcation ^{UC}	Technical Writing and Presentation ^{UC} (COM 217 recommended)	
Computing (CS 17700 or CS 15900)/Teamwork	Science, Technology, and Society ^{UC}	
Foreign Language and Culture ^{UC} (3 courses needed)	General Education ^{UC} (3 courses needed)	
Laboratory Science (2 course sequence)	Great Issues	

^{UC} Select courses may also satisfy a University Core Curriculum requirement; see the University Core Requirement <u>course list</u> for approved courses. Students must have 32 credits at the 30000 level or above taken at Purdue.