PURDUE UNIVERSITY

Physics
College of Science

2025-2026

Program Progression Guide

Disclaimer: The 2025-2026 Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the Fall 2025, Spring 2026, and Summer 2026 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.

<table>
<tr><th colspan="3">University Degree Requirements</th></tr>
<tr><td>Minimum 2.0 Cumulative GPA</td><td>Minimum 120 Credits that fulfill degree requirements</td><td>32 Residency Credits (30000 and above) at a Purdue University campus</td></tr>
<tr><th colspan="3">University Core Curriculum**</th></tr>
<tr><td colspan="2">Human Cultures: Behavioral/Social Science
Human Cultures: Humanities
Information Literacy
Oral Communication
University Core Curriculum
Course Listing</td><td>Quantitative Reasoning
Science
Science, Technology & Society Selective
Written Communication</td></tr>
<tr><th colspan="3">Required Major Program Courses</th></tr>
<tr><td colspan="3">Departmental specific requirements. 2.0 average in PHYS/ASTR classes required to graduate.
Minimum 2.0 cumulative GPA</td></tr>
<tr><th colspan="3">College of Science Core Curriculum</th></tr>
<tr><td>Written Communication – 3 credits
Technical Writing and Presentation - 3 credits
Teaming & Collaboration (NC)
General Education - 9 credits</td><td>Foreign Language & Culture – 9 credits
Great Issues - 3 credits
Laboratory Science - 8 credits
Science, Technology & Society - 3 credits</td><td>Mathematics - 6-10 credits
Statistics - 3 credits
Computing - 3 credits</td></tr>
<tr><th colspan="3">Degree Electives</th></tr>
<tr><td colspan="3">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.</td></tr>
</table>

* 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.

2025-26 Physics Degree Progression Guide

The Physics Department has *suggested* the following degree progression guide for the Physics 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	PHYS 17200 Honors sections[UC]	ALEKS 85	4	PHYS 27200 Honors sections[UC]	PHYS 17200 + Co-req: Calculus II
4	Calculus I Option[UC]	ALEKS 85	4	CHM 11610 + lab (11620 or 11630)[UC]	CHM 11510 + lab
4	CHM 11510 + lab (11520 or 11530)[UC]	ALEKS 75	4	Calculus II Option[UC]	Calculus I C- or higher
3	Science Core Option – Written Communication		3	Science Core Option	
15			**15**		

Credit	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	PHYS 30600	PHYS 272 + Co-req Calculus III	3	PHYS 30700	PHYS 272 + Co-req MA 261
2	PHYS 34000	Co-req PHYS 344	3	PHYS 36000	PHYS 344
4	PHYS 34400	PHYS 272 + Co-req Calculus III	3	Science Core Option- Statistics	
4	Calculus III Option[UC]	Calculus II C- or higher	3	Science Core Option	
3	Science Core Option		2	FREE ELECTIVE	
16			**14**		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
4	PHYS 31000	PHYS 272 + Co-req Calculus III	3	PHYS 33000	PHYS 272 + Calculus III
3	PHYS/ASTR Selective ≥ 300-level	Pre-reqs may vary	2	PHYS 45000	Co-reg PHYS 422
3	Science Core Option - Computing		3	PHYS 42200	PHYS 272
3	Science Core Option		3	Science Core Option – COM 21700	
3	Science Core Option		3	FREE ELECTIVE	
16			**14**		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	PHYS 51500	PHYS 310,344 Co-req 360,330	3-4	PHYS 53600 or PHYS 58000	Pre-reqs may vary
3	Science Core Option – Great Issues	Jr/Sr standing; may require COM or ENGL	3	Science Core Option	
3	Science Core Option		3	Science/Engineering Selective ≥ 300-level	Pre-reqs may vary
3	Science/Engineering Selective ≥ 300-level	Pre-reqs may vary	3	FREE ELECTIVE	
3	FREE ELECTIVE		3	FREE ELECTIVE	
15			**15-16**		

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)
Statistics (STAT 30100 or 35000)	General Education[UC] (3 courses needed)
Computing (CS 17700, CS 17600 or CS 15900)	Great Issues
Foreign Language and Culture[UC] (3 courses needed)	

[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.

2025-26 Physics Major Science Courses

Required Major Courses (42- 43 credits)

Credits	Course Number	Course Description
4	PHYS 17200H (fall)	Modern Mechanics Honors (also satisfies Science Selective for core and CoS teambuilding experience requirement)
4	PHYS 27200H (spring)	Electric and Magnetic Interactions Honors (also satisfies Science Selective for core)
4-5	Calculus III Option	Select from MA 26100, MA 27101 (satisfies Quantitative Reasoning for core)
3	PHYS 30600 (fall)	Math Methods of Physics I
3	PHYS 30700 (spring)	Math Methods of Physics II
4	PHYS 31000 (fall)	Intermediate Mechanics
3	PHYS 33000 (spring)	Intermediate Electricity & Magnetism
2	PHYS 34000	Quantum Science Lab
4	PHYS 34400 (fall)	Intro To Quantum Science
3	PHYS 36000 (spring)	Quantum Mechanics
3	PHYS 42200 (spring)	Waves & Oscillations
2	PHYS 45000	Intermediate Laboratory
3	PHYS 51500 (fall)	Thermal & Statistical Physics
Major Selective* (12-13 credits)		
3	PHYS/ASTR Selective ≥300 level	
3-4	Adv Lab Option: PHYS 53600 (spring) or PHYS 58000 (spring)	PHYS 53600- Electronic Techniques PHYS 58000- Computational Physics
3	Science/Engineering Selective ≥300 level	(could be met by CoS statistics requirement)
3	Science/Engineering Selective ≥300 level	(could be met by CoS Great Issues requirement)