

Program Progression Guide

Disclaimer: The [2017-2018 Purdue West Lafayette catalog](#) is considered the source for academic and programmatic requirements for students entering programs during the Fall 2017, Spring 2018, and Summer 2018 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 <p>University Core Curriculum Course Listing</p>	<ul style="list-style-type: none"> Quantitative Reasoning Science Science, Technology & Society Selective Written Communication 	
Required Major Program Courses		
Departmental specific requirements. 2.0 average in PHYS/ASTR classes required to graduate. Minimum 2.0 cumulative GPA		
College of Science Core Curriculum		
<ul style="list-style-type: none"> Freshman Composition – 3 credits Technical Writing and Presentation - 3 credits Teaming & Collaboration (NC) General Education - 9 credits 	<ul style="list-style-type: none"> Foreign Language & Culture – 9 credits Great Issues - 3 credits Laboratory Science - 8 credits Multidisciplinary - 3 credits 	<ul style="list-style-type: none"> Mathematics - 6-10 credits Statistics - 3 credits Computing - 3 credits
Degree Electives		
Any Purdue or transfer course approved to meet degree requirements in accordance with individual departmental policies. Consult the No Count course list 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.

2017-18 Applied Physics Degree Progression Guide

The Physics Department has *suggested* the following degree progression guide for the Applied 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* cc	ALEKS 85	4	PHYS 27200 Honors sections* cc	PHYS 17200 + Co-req: Calculus II
4-5	Calculus I Option*	ALEKS 85	4	CHM 11600*	CHM 11500
4	CHM 11500*	ALEKS 75	4-5	Calculus II Option*	Calculus I C- or higher
3-4	First Year Composition Option		3-4	Language I Option	
0	Teambuilding and Collaboration Experience				
15-17			15-17		

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
1	PHYS 34000	Co-req Phys 344	3	PHYS 42200	PHYS 272
4	PHYS 34400	PHYS 272 + Co-req Calculus III	3-4	Language III/Culture/Diversity Option	Language 102/ usually no pre-req
4-5	Calculus III Option*	Calculus II C- or higher	3	Statistics Option	Pre-reqs may vary
3-4	Language II Option	Language 101	3	General Education I Option (Humanities)*	
			1	Free Elective (PHYS 23500)	
15-17			16-17		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
4	PHYS 31000	PHYS 272 + Co-req Calculus III	3	PHYS 36000	(PHYS 310 or 330) + PHYS 344
3	PHYS 33000	PHYS 272 + Co-req Calculus III	3	PHYS 51500	Co-req PHYS 310 + 344 + 360 + 330
2	PHYS 45000	PHYS 42200	3	Major Selective	Pre-reqs may vary
3-6	Technical Writing Option and Technical Presenting Option (COM 21700*)		3	Major Selective	Pre-reqs may vary
3-4	Computing Option (CS 15800)	Calculus I Co-req	3	General Education II Option (Humanities)*	
15-19			15		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	Major Selective	Pre-reqs may vary	3	Major Selective	Pre-reqs may vary
3	Major Selective	Pre-reqs may vary	3	Major Selective	Pre-reqs may vary
3	Major Selective	Pre-reqs may vary	3	Major Selective	Pre-reqs may vary
3	Great Issues (SCC-F)	Jr/Sr standing; may require COM or ENGL	3	General Education III Option (Behav/Social Science)*	
3	Free Elective	Pre-reqs may vary	1-3	Multidisciplinary Experience (STS)*	
			2	Free Elective	Pre-reqs may vary
15			15-17		

cc Identified as a critical course. Student should earn minimum of a B- see advisor for further details.

* Satisfies a University Core Requirement; Courses in () are recommended.

College of Science Core Curriculum (SCC)

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| <ul style="list-style-type: none"> A. Freshman Composition B. Technical Writing and Presentation C. Teaming and Collaboration D. General Education E. Foreign Language and Culture F. Great Issues | <ul style="list-style-type: none"> G. Laboratory Science H. Multidisciplinary I. Mathematics J. Statistics K. Computing |
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* Consult the University Core Requirement course list for approved course.

Required Major Courses (41- 42 credits)

- (4) PHYS 17200 (fall) - Modern Mechanics - Physics Majors are required to take the honors sections of PHYS 17200 (also satisfies Science Selective for core and CoS teambuilding experience requirement) cc
- (4) PHYS 27200 (spring) - Electric and Magnetic Interactions - Physics Majors are required to take the honors sections of PHYS 27200 (also satisfies Science Selective for core) cc
- (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
- (1) PHYS 31000 (fall) Intermediate Mechanics
- (4) PHYS 33000 (fall) Intermediate Electricity & Magnetism
- (4) PHYS 34000 Modern Physics Lab
- (3) PHYS 34400 (fall) Modern Physics
- (3) PHYS 36000 (spring) Quantum Mechanics
- (3) PHYS 42200 (spring) Waves & Oscillations
- (2) PHYS 45000 Intermediate Laboratory
- (3) PHYS 51500 (spring) - Thermal & Statistical Physics