PURDUE UNIVERSITY

Science Education - Physics Concentration

College of Science 2022-2023

Program Progression Guides

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.

<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">Civic Literacy Proficiency - https://www.purdue.edu/provost/about/provostInitiatives/civics/</th></tr>
<tr><td colspan="3"></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 courses required to graduate. 2.5 average in Physics Concentration ^ courses required to graduate. 3.0 average in Professional Education courses required to graduate (No grade below a C-). 127 semester credits required for Bachelor of Science degree.</td></tr>
<tr><th colspan="3">College of Science Core Curriculum</th></tr>
<tr><td>Freshman Composition – 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
Multidisciplinary - 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. Consult the No Count course list for courses, which may not be used to meet any College of Science degree requirement.</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.

2022-2023 Science Education - Physics Concentration - Degree Progression Guide

The College of Science has suggested the following degree progression guide for the Science Education – Physics Concentration 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
2-3	EDCI 20500 - Exploring Teaching As A Career		2-3	EDCI 28500 - Multiculturalism And Education	
4	PHYS 17200 (HONORS)	ALEKS 85+ or SATM 670/ACTM 29 requirement	1-3	EDCI 35000 - Community Issues & Applications For Educators	
4	CHM 11500	ALEKS 75+ or SATM 620/ACTM 26 requirement	1-3	EDST 20010 - Educational Policies And Laws	
4-5	MA 16100 or MA 16500	ALEKS 85+ or SATM 670/ACTM 29 requirement	4	PHYS 27200 (HONORS)	PHYS 17200, MA 16200 co-req
3-4	Science Core Option		4	CHM 11600	CHM 11500
			4-5	MA 16200 or MA 16600	MA 16100 or MA 16500
17-19			**16-17**		

Credit	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
1	EDCI/EDPS 20002 - Special Populations Seminar: English Language Learners And Students With Gifts And Talents		1	EDCI/EDPS 20001 - Special Populations Seminar: Focus On Students With Disabilities And Differentiation Approaches	
2-3	EDCI 37001 - Teaching And Learning English As A New Language		2-3	EDPS 23500 - Learning And Motivation	
1	EDPS 24800 - Differentiating Curriculum And Instruction		1	EDPS 24000 - Children With Gifts, Creativity, And Talents	
2-3	EDPS 36201 - Positive Behavioral Supports		2	EDPS 26501 - The Inclusive Classroom	
3	PHYS 30600^ Fall only	PHYS 27200, MA 26100 co-req	3	PHYS 30700 Spring only	PHYS 27200, MA 26100 co-req
1	PHYS 34000^	PHYS 34400 co-req	3	PHYS 42200 Spring only	PHYS 27200
4	PHYS 34400^ Fall only	PHYS 27200, MA 26100 co-req	3	STAT 30100 (Sci, Engr Selective)	
4	MA 26100*	MA 16200			
18			**15-16**		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
1-3	EDCI 27000 - Introduction To Educational Technology And Computing		3	PHYS 36000 Spring only	(PHYS 31000 or 33000), PHYS 34400
1-3	EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems		4	CS 17700 OR CS 18000	
4	PHYS 31000 Fall only	PHYS 27200, MA 26100	2-3	EDCI 42800 - Teaching Science In The Middle And Junior High School OR EDCI 55800 - Integrated Science, Technology, Engineering And Mathematics (STEM) Education Methods-Secondary	
3	PHYS 33000 Fall only	PHYS 27200, MA 26100			
2	PHYS 45000	PHYS 42200			
3	Science Core Option		3-4	PHYS 53600 OR PHYS 58000	PHYS 27200 (or PHYS 34400, 31000)
3	Science Core Option		3	Science Core Option	
17			**15-16**		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	EDCI 42400 - The Teaching Of Earth And Physical Science In The Secondary Schools		12	EDCI 49800 (Teambuilding and Collaboration Experience)	EDCI 20500, 28500 AND EDPS 23500, 26501 (C- or better)
1-3	EDPS 32700 - Classroom Assessment				
1-3	EDPS 43010 - Secondary Creating And Managing Learning Environments	EDCI 20500, 28500 AND EDPS 23500, 26501 (C- or better)			
3	PHYS/ASTR ≥ 300 level	Varies			
3	Science Core Selection				
3	Science Core Selection				
1	Elective				
15-18			**12**		

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] (2 courses + EDCI 28500) Computing (CS 17700 or CS 15900) /Teamwork Foreign Language and Culture[UC] (3 courses needed)	Technical Writing and Presentation[UC] (COM 217 recommended) Multidisciplinary Experience[UC] Great Issues General Education[UC] (2 courses + EDPS 23500)

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.