

Applied Physics 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 | | | | | |
|--|---|--------------|---|-------------------|------------------------------|
| Minimum 2.0 Cumulative GPA | Minimum 120 Credits that fulfill | | 32 Residency Credits (30000 and above) at a | | |
| | degree requirements | | 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 | | |
| University Core Curriculum Course Listing | | | | | |
| Required Major Program Courses | | | | | |
| Departmental specific requirements. 3.0 Minimum 3.0 cumulative GPA | average in I | PHYS/ASTR | classes require | d to graduate. | |
| | | | | | |
| College of Science Core Curriculum | | | | | |
| Written Composition – 3 credits Technical Writing and Presentation - 3 Teaming & Collaboration (NC) General Education - 9 credits | Great Issues - 3 credits Great Issues - 3 credits Laboratory Science - 8 credits Science Statistics - 3 credits Computing - 3 credits | | | | |
| Degree Electives | | | | | |
| Any Purdue or transfer course approved | to meet der | aroo roquira | ments in accou | rdance with indiv | vidual denartmental nolicies |

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.

2024-25 Applied Physics Honors 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 |
| 4-5 | Calculus I Option ^{UC} | ALEKS 85 | 4 | CHM 11600 ^{UC} | CHM 11500 |
| 4 | CHM 11500 ^{UC} | ALEKS 75 | 4-5 | Calculus II Option ^{UC} | Calculus I C- or higher |
| 3-4 | Science Core Option – Written Communication | | 3-4 | Science Core Option | |
| 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 | Science Core Option -Computing | |
| 4-5 | Calculus III Option UC | Calculus II C- or higher | 3 | Science Core Option- Statistics | |
| 3-4 | Science Core Option | | 3-4 | Science Core Option | |
| 15-17 | | | 15-17 | | |

| Credit | Fall 3rd Year | Prerequisite | Credit | Spring 3rd Year | Prerequisite |
|--------|---------------------------------|-----------------------------------|--------|---------------------|---|
| 3 | PHYS 41000 | PHYS 272 + Co-req Calculus III | 3 | PHYS 43000 | (PHYS 272 + coreq Calculus III and (PHYS 306 or MA 362)) C- or better |
| 3 | PHYS 46000 | PHYS 344 + coreq PHYS410 | 3 | Major Selective | Prerequisites may vary |
| 2 | PHYS 45000 | PHYS 42200 | 3 | Major Selective | Prerequisites may vary |
| 3 | Science Core Option – COM 21700 | | 3 | Major Selective | Prerequisites may vary |
| 3 | Science Core Option | | 3 | Science Core Option | |
| 14 | | | 15 | | |

| Credit | Fall 4th Year | Prerequisite | Credit | Spring 4th Year | Prerequisite |
|--------|------------------------------------|---|--------|---------------------|------------------------|
| 4 | PHYS 41600 | Coreq (PHYS 410 and 430 and 460) C- or better | 3 | Major Selective | Prerequisites may vary |
| 3 | PHYS 59300 | | 3 | Major Selective | Prerequisites may vary |
| 3 | Major Selective | Prerequisites may vary | 3 | Major Selective | Prerequisites may vary |
| 3 | Major Selective | Prerequisites may vary | 3 | Science Core Option | |
| 3 | Science Core Option – Great Issues | • | 3 | Science Core Option | |
| 16 | | | 15 | | |

| 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.