PURDUE UNIVERSITY

Interdisciplinary Science – Concentration in Chemistry
College of Science

2022-2023

Program Progression Guide

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">Minimum 2.0 cumulative GPA.</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 Interdisciplinary Science – Concentration in Chemistry Degree Progression Guide

The College of Science has *suggested* the following degree progression guide for the Interdisciplinary Science – Concentration in Chemistry 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
3-5	Calculus Option I	ALEKS 85+ or SATM 670/ACTM 29 requirement	3-5	Calculus Option II	Calculus I C- or higher
3-4	Science Core Option		3-4	Science Core Option	
4-5	General Chemistry Selective I	Co-req Calc; ALEKS of 75	4-5	General Chemistry Selective II	General Chemistry I
4	Biology Selective I		3-4	Biology Selective II	Biology I
0-1	Free Elective		0-2	Biology Selective II or Free Elective	
15-18			**15-18**		

Credit	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
4-5	Organic Chemistry I with Lab	CHM 11600 or equivalent	4-5	Organic Chemistry II with Lab	Organic CHM I
3-4	Science Core Option		3-4	Science Core Option	
4	Physics Selective I	ALEKS 85+ or SATM 670/ACTM 29 requirement	3	Supporting Area Course	
3	Science Core Option		4	Physics Selective II	Physics I
1	Free Elective		1	Free Elective	
15-17			**15-17**		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
3	Supporting Area Course		3	CHM 24100	CHM 11600
3	Supporting Area Course		3-4	EAPS Selective Course	Lab Sci Selective I
3	STAT 35000	Calculus II C- or higher	3	Supporting Area Course	
3-4	Science Core Option		3	Science Core Option	
3	Science Core Option		3-4	Science Core Option	
15-16			**16-18**		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	Supporting Area Course		4	CHM 37200	Calc II AND Chem II or organic AND PHYS
3	Science Core Option		3	Science Core Option	
3	Science Core Option		3	Supporting Area Course	
3	Free Elective		3	Free Elective	
3	Free Elective		3	Free Elective	
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
Freshman Composition[UC]	Technical Writing and Presentation[UC] (COM 217 recommended)
Computing (CS 17700 or CS 15900)	Multidisciplinary Experience[UC]
Foreign Language and Culture[UC] (3 courses needed)	General Education[UC] (3 courses needed)
	Great Issues

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.

Interdisciplinary Science Degree Requirements

University Core Requirements

The following requirements are met through completion of a student's degree requirements:
Written Communication
Oral Communication
Information Literacy
Science Selective (2)
Human Cultures Humanities
Human Cultures Behavioral/Social Science
Quantitative Reasoning
Science, Technology & Society Selective

Science Core Requirements (30-37 credits)

(3-4) Freshmen Composition
(3) COM 21700 - (satisfies Oral Communication)
(0-3) Teambuilding and Collaboration
(3) Language I
(3) Language II
(3) Language and Culture III (satisfies Human Cultures Humanities)
(3) General Education I (satisfies Human Cultures Behavioral/Social Science)
(3) General Education II
(3) General Education III
(3) Great Issues
(0-3) Multidisciplinary/Science, Technology & Society Selective

Interdisciplinary Science Core Requirements (38-48 credits)

(7-8) BIOL Selective - BIOL [11000 & 11100] or [12100 & 13100 & 13500]
(8-10) CHM Selective - CHM [11500 & 11600] or [12500 & 12600] ***(satisfies Science Selectives)***
(3-4) Computer Science Selective – CS 15800, CS 15900, CS 17700, or CS 18000
(3-4) EAPS Selective - EAPS [10000, 10900/19100, or 11100] or EAPS [(22100 or 22500) and 23000]
(6-10) Calculus Selective– MA [16100 & 16200] or [16500 & 16600] or [22300 & 22400] or [MA 23100 & 23200] *(satisfies Quantitative Reasoning)*
(8-9) PHYS Selective - PHYS [17200 & (27200 or 24100/25200)] or [22000 & 22100]
(3) STAT Selective – STAT 35000, 50300, 51100

Supporting Area Requirement (18 credits)

Courses may not overlap Core or Primary Area courses but may overlap the program requirements. The Supporting Area may be built on the numerous minors available to Science students or on any coherent grouping of courses with a central unifying theme. These might include preprofessional, scientific writing, sales, forensics, technical studies, international studies, science policy, ethics, women's studies, African-American studies, etc. The possibilities are very broad but any plan must be approved by the College of Science dean or designee.

Electives (0-22 credits)

Required Primary Area (12-17 credits) **–** *Choose one area of eight:*

1. **Biology** (15-17 credits)

(3) BIOL 23100
(2) BIOL 23200
(3) BIOL 24100
(2) BIOL 24200
(2) BIOL 28600
(3-5) BIOL 32800, 36600, 39500 (Macromolecules) or [43800 & 43900]

2. Chemistry (16-18 credits)
(8-10) CHM [25500, 25501, 25600 & 25601] or [26505, 26300, 26605, & 26400]
(4) CHM 24100
(4) CHM 37200

3. Computer Science (16 credits)
MA 16100/16200 required in Core.
CS 18000 required in Core.
(3) CS 18200
(3) CS 24000
(4) CS 25000
(3) CS 25100
(3) CS elective at or above 30000 level

4. Earth, Atmospheric, and Planetary Science (15-16 credits)
(3-4) EAPS 11100 or equivalent OR EAPS [22100 or 22500] & 23000, whichever is not taken in the core.
(3) EAPS 11200 or any EAPS course at or above 20000 level
(3) EAPS elective at or above 200 level
(3) EAPS elective at or above 200 level
(3) EAPS elective at or above 200 level

5. Mathematics (16-17 credits)
MA 16100/16200 required in Core.
(4) MA 26100 or 27100
(3-4) MA 36600 or 26200
(3) MA 35100
(3) MA 45300, 45000, 34100, or 44000
(3) MA elective at or above 30000 level

6. Physics (13-14 credits)
MA 16100/16200 required in Core.
PHYS [17200 & (27200 or 24100/25200)] required in Core.
(4) MA 26100
(3-4) PHYS 34200 or 34400
(3) PHYS elective at or above 30000 level
(3) PHYS elective at or above 30000 level

7. Statistics (12-13 credits)
MA 16100/16200 required in Core.
(3) STAT 51200
(3) STAT 51300 or 51400
(3) STAT 22500, 31100, 41600, or 51600
(3-4) STAT [41700, 51300, or 51400]; or MA 26100

8. Environmental Biology (17 credits)
(3) BIOL 23100
(3) BIOL 24100
(2) BIOL 28600
(3) BIOL 48300
(3) BIOL 58500
(3-5) BIOL 32800, 36600, 39500 (Macromolecules), or [43800 & 43900]

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The student is ultimately responsible for knowing and completing all degree requirements.
Degree Works is knowledge source for specific requirements and completion.