

INTEGRATIVE SCIENCE, B.S. (ABINGTON)

Begin Campus: Any Penn State Campus

End Campus: Abington

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2024-25 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition.

General Science Option: Integrative Science, B.S. at Abington Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
BIOL 110 (GN) ^{*#†}	4 CHEM 112	3
CHEM 110 (GN) ^{*#†}	3 CHEM 113	1
CHEM 111 (GN) [†]	1 Global, Social, and Personal Awareness Course (from Department List)	3
MATH 140 or 140B (GQ) ^{*#††}	4 CAS 100A, 100B, or 100C (GWS) [‡]	3
ENGL 15, 30H, or ESL 15 (GWS) [‡]	3 BIOL 240W (or Supporting Course (consult with academic adviser for options))	3-4
First-Year Seminar	1	
	16	13-14

Second Year

Fall	Credits Spring	Credits
BIOL 220W or 230W (or Supporting Course (consult with academic adviser for options))	3-4 STAT 250 or 200 (GQ) [‡]	3-4
Life, Mathematical, or Physical Science Course	3 Life, Mathematical, or Physical Science Course	3
Teamwork and Interpersonal Communication Course (from Department List)	3 Integrative and Applied Science Course (from Department List)	3
General Education Course (GS)	3 General Education Course (GA)	3
PHYS 250 (GN) ^{*#}	4 PHYS 251	4
	16-17	16-17

Third Year

Fall	Credits Spring	Credits
Life, Mathematical, or Physical Science Course	3 400-Level Life, Mathemtical, or Physical Science Course [*]	3
General Education Course (Integrative Studies)	3 General Education Course (Integrative Studies)	3
Supporting Course (consult with academic adviser for options)	3 General Education Course (GH)	3
Supporting Course (consult with academic adviser for options)	3 Supporting Course (consult with academic adviser for options)	3
ENGL 202C (GWS) [‡]	3 Supporting Course (consult with academic adviser for options)	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
400-Level Life, Mathemtical, or Physical Science Course [*]	3 400-Level Life, Mathemtical, or Physical Science Course [*]	3
400-Level Supporting Course	3 400-Level Supporting Course	3
General Education Course (GHW)	3 General Education Course (Exploration)	3
Supporting Course (consult with academic adviser for options)	3 Supporting Course (consult with academic adviser for options)	3
Supporting Course (consult with academic adviser for options)	3 Supporting Course (consult with academic adviser for options)	2
	15	14

Total Credits 120-123

- * Course requires a grade of C or better for the major
 ‡ Course requires a grade of C or better for General Education
 # Course is an Entrance to Major requirement
 † Course satisfies General Education and degree requirement

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Program List Exclusions: The Following Coursework is not Applicable to Degree Requirements

Students may select supporting courses from nearly the entire range of the University's course offerings. However, the following courses may NOT be used to satisfy degree requirements for the Integrative Science major. This list applies to ALL options in the Integrative Science BS major.

- BIOL 001, 003, 011*, 012*
- BISC 001, 002, 003*, 004*
- BMB 001*
- CAS 126
- CHEM 001, 003, 005, 101, 108
- CMPSC 100
- ENGL 004, 005
- ESL 004, 005
- LL ED 005, 010
- MATH 003, 004, 010, 017, 018, 021, 030, 033, 034, 035, 036, 040, 081, 082, 083, 097, 110, 111, 200
- MICRB 150, 151A, 151B, 151C, 151D, 151E, 151F, 151G, 151W
- PHYS 001, 010, 097, 114, 150, 151
- STAT 100*

*On rare occasions, with adequate justification, a student may be permitted to use one or more of these courses to satisfy degree requirements. A petition must be submitted to request such an exception. Consult with your academic adviser.

In addition, the following types of courses may not be used to satisfy degree requirements in the Integrative Science major:

- Courses which are remedial in nature or which focus on reading improvement or study skills.
- Courses which substantially duplicate the subject matter covered in other completed courses taught at a comparable level.

Some courses may be counted toward degree requirements in the Science and Premedicine majors with some restrictions:

- No more than 4 credits of MATH 140A may be used.
- No more than 6 credits of ROTC courses (AIR, ARMY, NAVSC) may be used.
- No more than 12 credits of independent study (296, 496, etc.) may be used.
 - **Unless special permission is granted, Independent Study credit may only be used in "Supporting Courses" and "Any 400-level Course Work" categories.
- No more than 5 credits of KINES Physical Activity courses may be used.
 - **KINES Health Courses (KINES 180, etc.) are not limited to 5 credits.

Life Science Option: Integrative Science, B.S. at Abington Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits	Spring	Credits
BIOL 110 (GN) ^{**†}	4	CHEM 112	3
CHEM 110 (GN) ^{**†}	3	CHEM 113	1
MATH 140 or 140B (GQ) ^{*†##}	4	Global, Social, and Personal Awareness Course (from Department List)	3
ENGL 15, 30H, or ESL 15 (GWS) [‡]	3	CAS 100A, 100B, or 100C (GWS) [‡]	3
CHEM 111 (GN)	1	BIOL 240W (or Supporting Course (consult with academic adviser for options))	3-4
First-Year Seminar	1		
	16		13-14

Second Year

Fall	Credits	Spring	Credits
BIOL 220W or 230W (or Supporting Course (consult with academic adviser for options))	3-4	CHEM 212	3
CHEM 210	3	CHEM 213	2
Teamwork and Interpersonal Communication Course (from Department List)	3	General Education Course (GA)	3
General Education Course (GS)	3	PHYS 251	4
PHYS 250 (GN) ^{*#}	4	Supporting Course (consult with academic adviser for options)	3
	16-17		15

Third Year

Fall	Credits	Spring	Credits
Supporting Course (consult with academic adviser for options)	3	400-level BMB, BIOL, BIOTC, or MICRB course [*]	3
General Education Course (Integrative Studies)	3	MICRB 201 (or Supporting Course (consult with academic adviser for options))	3
Supporting Course (consult with academic adviser for options)	3	General Education Course (Integrative Studies)	3
ENGL 202C (GWS) [‡]	3	General Education Course (GH)	3

STAT 250 or 200 (GQ) [‡]	3-4 Supporting Course (consult with academic adviser for options)	3
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15-16 **15**

Fourth Year

Fall	Credits	Spring	Credits
400-Level BMB, BIOL, BIOTC, or MICRB course [*]	3	400-level BMB, BIOL, BIOTC, or MICRB course [*]	3
400-Level Supporting Course	3	400-level Supporting Course	3
General Education Course (GHW)	3	General Education Course (Exploration)	3
Supporting Course (consult with academic adviser for options)	3	Supporting Course (consult with academic adviser for options)	3
Supporting Course (consult with academic adviser for options)	3	Supporting Course (consult with academic adviser for options)	2
	15		14

Total Credits 119-122

* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

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- BIOL 001, 003, 011*, 012*
- BISC 001, 002, 003*, 004*
- BMB 001*
- CAS 126
- CHEM 001, 003, 005, 101, 108
- CMPSC 100
- ENGL 004, 005
- ESL 004, 005
- LL ED 005, 010

- MATH 003, 004, 010, 017, 018, 021, 030, 033, 034, 035, 036, 040, 081, 082, 083, 097, 110, 111, 200
- MICRB 150, 151A, 151B, 151C, 151D, 151E, 151F, 151G, 151W
- PHYS 001, 010, 097, 114, 150, 151
- STAT 100*

*On rare occasions, with adequate justification, a student may be permitted to use one or more of these courses to satisfy degree requirements. A petition must be submitted to request such an exception. Consult with your academic adviser.

In addition, the following types of courses may not be used to satisfy degree requirements in the Integrative Science major:

- Courses which are remedial in nature or which focus on reading improvement or study skills.
- Courses which substantially duplicate the subject matter covered in other completed courses taught at a comparable level.

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- No more than 4 credits of MATH 140A may be used.
- No more than 6 credits of ROTC courses (AIR, ARMY, NAVSC) may be used.
- No more than 12 credits of independent study (296, 496, etc.) may be used.
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- No more than 5 credits of KINES Physical Activity courses may be used.
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Mathematical Science Option: Integrative Science, B.S. at Abington Campus

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First Year

Fall	Credits	Spring	Credits
MATH 140 (GQ) ^{*†‡}	4	MATH 141 (GQ) ^{*†}	4
ENGL 15, 30H, or ESL 15 (GWS) [‡]	3	CAS 100A, 100B, or 100C (GWS) [‡]	3
BIOL 110 (GN) ^{*†}	4	CMPSC 131	3
CHEM 110 (GN) ^{*†}	3	CHEM 112 (GN)	3
CHEM 111 (GN)	1	CHEM 113 (GN)	1
First-Year Seminar	1	General Education Course (GHW)	1.5
	16		15.5

Second Year

Fall	Credits	Spring	Credits
CMPSC 132	3	DS 220	3
MATH 220	3	MATH 230 or 251	4
General Education Course (GS)	3	General Education Course (Integrative Studies)	3
PHYS 250 (GN) ^{*#}	4	PHYS 251	4
Supporting Course (consult with academic adviser for options)	3	General Education Course (GHW)	1.5
	16		15.5

Third Year

Fall	Credits	Spring	Credits
MATH/STAT 318	3	MATH 311W	4
ENGL 202C (GWS) [‡]	3	MICRB 201	3
Teamwork and Interpersonal Communication Course (from Department List)	3	Global, Social, and Personal Awareness Course (from Department List)	3
MATH 425 [*]	3	CMPSC 446 [*]	3
STAT 401 [*]	3	General Education Course (Integrative Studies)	3
	15		16

Fourth Year

Fall	Credits	Spring	Credits
General Education Course (GA)	3	General Education Course (GH)	3
MATH/CMPSC 455 or STAT 462 [*]	3	CMPSC 445 [*]	3
Supporting Course (consult with academic adviser for options)	3	General Education Course (Exploration)	3
Supporting Course (consult with academic adviser for options)	3	Supporting Course (consult with academic adviser for options)	3

Supporting Course (consult with academic adviser for options)	3	
	15	12

Total Credits 121

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- CMPSC 100
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- ESL 004, 005
- LL ED 005, 010
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- MICRB 150, 151A, 151B, 151C, 151D, 151E, 151F, 151G, 151W
- PHYS 001, 010, 097, 114, 150, 151
- STAT 100*

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