

PREMEDICINE, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Degree Requirements

For the Bachelor of Science degree in Premedicine, a minimum of 120 credits is required, with at least 18 credits at the 400 level:

Requirement	Credits
General Education	45
Requirements for the Major	99

24 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 3 credits of GHW courses; 9 credits of GN courses; 6 credits of GQ courses; 6 credits of GS courses.

Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/>).

Code	Title	Credits
Prescribed Courses		
HPA 101	Introduction to Health Services Organization	3
PSYCH 100	Introductory Psychology	3
SOC 1	Introductory Sociology	3
<i>Prescribed Courses: Require a grade of C or better</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
BIOL 230W	Biology: Molecules and Cells	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
CHEM 210	Organic Chemistry I	3
CHEM 212	Organic Chemistry II	3
CHEM 213	Laboratory in Organic Chemistry	2
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
NUTR 251	Introductory Principles of Nutrition	3
Additional Courses		
STAT 200	Elementary Statistics	3-4
or STAT 250	Introduction to Biostatistics	
Select one of the following options for your healthcare internship: ¹		
SC 294	Research Project Courses	1
or SC 494	Research Project Courses	
Select one of the following:		
CAS 453	Health Communication Theory and Research	3
NURS 464	Dying and Death	
PHIL/BIOET 432	Medical and Health Care Ethics	
Select one of the following:		
		4-5

BIOL 220W	Biology: Populations and Communities
BIOL 240W	Biology: Function and Development of Organisms
MICRB 201 & MICRB 202	Introductory Microbiology and Introductory Microbiology Laboratory

Additional Courses: Require a grade of C or better

Select 8-12 credits from the following: 8-12

PHYS 211 & PHYS 212 & PHYS 213 & PHYS 214	General Physics: Mechanics and General Physics: Electricity and Magnetism and General Physics: Fluids and Thermal Physics and General Physics: Wave Motion and Quantum Physics
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PHYS 250 & PHYS 251	Introductory Physics I and Introductory Physics II
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Select 4-5 credits from the following: 4-5

BIOL 421	Comparative Anatomy of Vertebrates
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BIOL 437	Histology
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BIOL 472 & BIOL 473	Human Physiology and Laboratory in Mammalian Physiology
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MICRB 412 & MICRB 422	Medical Microbiology and Medical Microbiology Laboratory
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Select 5-6 credits from the following: 5-6

BMB 400	Molecular Biology of the Gene
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BMB 401	General Biochemistry
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BMB 402	General Biochemistry
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CHEM 450 & CHEM 452	Physical Chemistry - Thermodynamics and Physical Chemistry - Quantum Chemistry
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Supporting Courses and Related Areas

Select 12 credits toward Area of Concentration ² 12

Select 7-15 credits from program list ³ 7-15

¹ Healthcare internship must be approved by Director of Science Premedicine Majors.

² Coursework to be selected in consultation with Premedicine Major Adviser. Can be counted toward minor.

³ A maximum of 12 credits of Independent Study [296, 496] may be applied toward credits for graduation. Students may apply 6 credits of ROTC.

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

Integrative Studies

- **Inter-Domain Courses (Inter-Domain):** 6 credits

Exploration

- **GN**, may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses.** This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or

within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/>)). For more information, check the Suggested Academic Plan for your intended program.