



Physics with Teaching Bachelor of Science

Total Semester Hours: 86
Hours Per Semester: 14-18

Major Academic Plan (MAP) for Catalog Year 2026-2027

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

<p>Fall Semester 1 15 credits</p> <p>PHYS 231 Introductory Physics I^{1, F} MATH 235 Calculus I^{1*} EDUC 135 School and Society (2)⁶ EDUC 136 Teaching Diverse Students (2)⁶ EDUC 136L Cross-cultural Practicum (0)⁶</p> <p>CORE 101: First Year Seminar CORE 131: H. Human Flourishing (1)</p> <p>First Year CATC options-</p> <ul style="list-style-type: none"> ▪ COMM 101: Oral Comm (2) ▪ ENGW 103: First-Year Writing 	<p>Spring Semester 1 18 credits</p> <p>PHYS 232 Introductory Physics II^{5*} MATH 236 Calculus II* PHYS 294 Physics for the Future (2)</p> <p>First Year CATC Options</p>	<p>Summer 1</p> <p>Consider study abroad, internship, or research options – Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer research, or other options that provide work experience, build your resume, or grow you personally.</p>
<p>Fall Semester 2 18 credits</p> <p>PHYS 303 Modern Physics^{F*} PHYS 334 Computer Modeling (2)^{F*} PHYS 351 Analog Electronics (2)^{F*} MATH 237 Calculus III*</p> <p>Language Core Competency Visual and Performing Arts (2)</p>	<p>Spring Semester 2 17 credits</p> <p>MATH 333 Differential Equations* EDUC 225 Learning and Development*¹ EDUC 225L Teaching Aiding Practicum (1)</p> <p>Language Core Competency BITH 211/ARCH 211: Old Testament</p>	<p>Summer 2</p> <p>Consider Wheaton in the Black Hills course: PHYS 305 Dakota Skies^{Su, 1, 2, 4}</p> <p>Consider summer study options.</p>
<p>Fall Semester 3 18 credits</p> <p>Upper Division PHYS requirement³ EDUC 306 Classroom Communication and Curriculum Integration^{F*} EDUC 305 Learning Differences (2)</p> <p>Language Core Competency BITH 213/ARCH 213: New Testament</p>	<p>Spring Semester 3 18 credits</p> <p>PHYS 341 Analytical Mechanics^{S*#} LING 326 English Language Methods for Content Area Teachers (2)⁵ EDUC 305L Learning Differences Practicum (1)⁵ EDUC 324L Methods Practicum (1)⁵ SCI 321 Science for Middle and High School Teachers (2)^{5*} SCI 325 Methods of Teaching Middle Grade Science (2)^{5*}</p> <p>Advanced Integrative Seminar* Visual and Performing Arts (2)</p>	<p>Summer 3</p> <p>Consider Wheaton in the Black Hills course: PHYS 305 Dakota Skies^{Su, 1, 2, 4}</p> <p>Consider summer study options.</p>
<p>Fall Semester 4 14 credits</p> <p>EDUC 494 Senior Seminar (2) EDUC 496 Student Teaching (9)¹ EDUC 497 Philosophical Foundations of Education (3)¹</p>	<p>Spring Semester 4 18 credits</p> <p>PHYS 494 Senior Seminar (2)^{5*} ASTR 305 Astronomy^{1, 2, 4}, if not complete BITH 315: Christian Thought Thematic Core (8), Complete CATC</p>	<p>Summer 4</p> <p>Consider summer study</p>

Notes or Special Guidance for Majors:

*Course has a prerequisite

^F Fall only course

^S Spring only course

^{Su} Summer only course

Offered every other year

¹ Classes that meet CATC Thematic Core tags: PHYS 231 (SP), MATH 235 (AAQR), PHYS 303 (SIP). Education classes that meet CATC Thematic Core tags: EDUC 225 (SI) and EDUC 497 (with EDUC 135 taken at Wheaton) meet the PI theme. A maximum of 3 themes may be met with courses that also count for the major.

² Select one from PHYS 305 or ASTR 305

³ Select one from the following set of three upper-level physics courses: PHYS 342 Electromagnetic Theory ^{F##}, PHYS 344 Quantum Mechanics ^{FS##}, or PHYS 359 Thermodynamics ^{F##}.

⁴ Students have a choice between ASTR 305 and PHYS 305. PHYS 305 is taken at the Black Hills Science Station during the summer and not offered every year.

⁵ EDUC 305L and 324L must be taken in the semester prior to student teaching.

⁶ EDUC 135, 136, and 136L must be taken together. All of these courses are offered in the fall and the spring and should be completed in the first year.

- PHYS 342 is offered Fall only, in even years. PHYS 344 is offered Spring only, in even years. PHYS 341 is offered Spring only, in odd years. PHYS 359 is offered Fall only, odd years. All other PHYS courses are offered Fall only or Spring only in the semester indicated. SCI 321 and SCI 325 are Spring only. EDUC 306 is Fall only.