

BS in Applied Physics (694825) MAP Sheet



Computational, Mathematical & Physical Sciences, Physics and Astronomy

For students entering the degree program during the 2025-2026 curricular year.

FRESHMAN YEAR

1st Semester

PHSCS 121 3.0
PHSCS 191 0.5
MATH 112 4.0
UNIV 101 2.0
First Year Writing 3.0
Religion Cornerstone course 2.0
Total Hours 14.5

2nd Semester

PHSCS 123 3.0
MATH 113 4.0
C S 111 3.0
American Heritage 3.0
Religion Cornerstone Class 2.0
Total Hours 15.0

SOPHMORE YEAR

3rd Semester

PHSCS 220 3.0
PHSCS 225 2.0
PHSCS 230 1.0
PHSCS 291 0.5
MATH 302 3.0
GE Arts, Letters, Sciences 3.0
Religion Cornerstone Class 2.0
Total Hours 14.5

4th Semester

PHSCS 222 3.0
PHSCS 240 2.0
MATH 303 4.0
GE Arts, Letters, Sciences 3.0
Religion Cornerstone Class 2.0
Total Hours 14.0

JUNIOR YEAR

5th Semester

PHSCS 245 2.0
PHSCS 318 3.0
PHSCS 321 3.0
PHSCS 330 1.0
GE Arts, Letters, Sciences 3.0
GE Religion 2.0
Total Hours 14.0

6th Semester

PHSCS 430 1.0
Applied Physics Elective 1 3.0
Applied Physics Elective 2 3.0
GE Arts, Letters, Sciences 3.0

Global and Cultural Awareness 3.0

GE Religion 2.0

Total Hours 15.0

SENIOR YEAR

7th Semester

PHSCS 441 3.0
Applied Physics Elective 3 3.0
GE Arts, Letters, Sciences 3.0
Open Elective 3.0
Open Elective 3.0
GE Religion 2.0
Total Hours 17.0

8th Semester

PHSCS 416 or WRTG 316 3.0
PHSCS 442, PHSCS 471, or EC EN 466 3.0
Applied Physics Elective 4 3.0
PHSCS 492R or 498R 3.0
General Elective 2.0
General Elective 2.0
Total Hours 16.0

See University Core requirements here:

<https://catalog.byu.edu/generaleducation>

CAREER OPPORTUNITIES

A degree in physics or physics-astronomy can provide: 1. Preparation for those who intend to enter industrial or governmental service as physicists or astronomers. 2. Education for those who intend to pursue graduate work in physics or astronomy. 3. Education in the subject matter of physics for prospective teachers of the physical sciences. 4. Undergraduate education for those who will pursue graduate work in the professions: business (e.g., an MBA), law, medicine, etc. 5. Fundamental background for other physical sciences and engineering, in preparation for graduate study in these fields. 6. Physics fundamentals required by the biological science, medical, dental, nursing, and related programs. For more information, see www.physics.byu.edu/undergraduate/careers.

THE DISCIPLINE

Over the centuries physicists and astronomers have studied the fundamental principles that govern the structure and dynamics of matter and energy in the physical world, from subatomic particles to the cosmos. Physicists also apply this understanding to the development of new technologies. For example, physicists invented the first lasers and semiconductor electronic devices. Physics and astronomy students learn to approach complex problems in science and technology

from a broad background in mechanics, electricity and magnetism, statistical and thermal physics, quantum mechanics, relativity, and optics. The tools students develop at BYU include problem solving by mathematical and computational modeling, as well as experimental discovery and analysis. All students gain professional experience in a research, capstone, or internship project, usually in close association with faculty. Together these experiences can provide excellent preparation for employment or for graduate studies in physics, other sciences, engineering, medicine, law, or business. Most physicists and astronomers work in research and development in industrial, government, or university labs to solve new problems in technology and science. They also share the beauty discovered in our physical universe by teaching in high schools, colleges, and universities.

MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION

FACULTY ADVISORS ASSIGNED BY LAST TWO DIGITS OF
BYU ID NUMBER. CONTACT:

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ADVISEMENT CENTER INFORMATION

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