BS – Physics: Astronomy Concentration

2022 Catalog year: College of Science and Engineering

Freshman: Fall semester
- CHEM 1335: Engineering Chemistry (F,S)
- CHEM 1135: Engineering Chem Lab (F,S,Su)
- TCCNS: CHEM 1308 or 1109
- BIO 1301/1101 or BIO 1311/1111

Freshman: Spring semester
- MATH 2471: Calculus I (F,S)
- MATH 2472: Calculus II (S)

Sophomore: Fall semester
- PHYS 2230: Intro Comp Mod Phys (F,S)
- PHYS 2435: Waves & Heat (F,S)
- PHYS 2425: Electricity & Magnetism (F,S)
- PHYS 2150: Prof Dev Phys (F,S)

Sophomore: Spring semester
- MATH 3323: Differential Equations TCNS: MATH 2320
- PHYS 2425: Electricity & Magnetism (F,S)
- PHYS 3311: Mechanics I (S)
- PHYS 3312: Modern Physics (F,S)

Junior: Fall semester
- PHYS 3318: Methods in Observational Astrophysics (F,S)
- PHYS 3418: Methods in Observational Astrophysics (F,S)

Junior: Spring semester
- PHYS 4305: Stat Phys (S)
- PHYS 4310: Elec. Fld Theory I (F)

Senior: Fall semester
- PHYS 4312: Quantum Mech I (F)

Senior: Spring semester
- PHYS 4308: Advanced Physics Lab (F,S)

Minor and/or elective courses
- 6 hours of astronomy concentration electives:
  - PHYS 3411: Advanced Physics Lab
  - PHYS 3416: Applied Electronics
  - PHYS 3417: Optics

4 hours of advanced physics electives:
- PHYS 3200: Phys Cog & Ped I
- PHYS 3313 (F) - Astrophysics
- PHYS 3318: Galactic and Extragalactic Astrophysics
- PHYS 3411 (S) - Adv Phys Lab
- PHYS 3416 (F) - Applied Elec.
- PHYS 3417 (F) - Optics
- PHYS 3418 - Methods in Obs Astro
- PHYS 4311 (F) - Cond. Mat. Phys
- PHYS 4320 (F,S) - Select Stud. in Phys
- PHYS 4211, 4221, 4321, 4422 – UG Research
- PHYS 4350B – Relativity

Key:
- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Arrows with dash lines are recommended prerequisites.
- Courses taught in specific semesters are indicated with the following codes:
  - F-Fall
  - S-Spring
  - Su-Summer Session I or II
- WI courses: PHYS 3210, 3411, 3416, 3417, 3418, 4360

Core courses must be completed:
- 6 credits Core 010
- 6 credits Core 020
- 6 credits Core 030
- 6 credits Core 040
- 3 credits Core 050
- 6 credits Core 060
- 6 credits Core 070
- 3 credits Core 080
- 6 credits Core 090, 091, 092, 093, and 094

Note: In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.

This is not an official degree audit and it is subject to change. This chart is intended to be used by students who start out at Texas State. Please contact the College of Science and Engineering Undergraduate Advising Center for advising.

US 1100 may be required for some students. Consult with an advisor regarding course choices.

See most recent online catalog for prerequisites.