**BA – Physics**

**(SC-BA/PHYS)**

2020 Catalog year: College of Science and Engineering

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.

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

**KEY:**
- Arrows indicate prerequisites.
- Arrows with dotted lines indicate corequisites.
- 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: ENG 2310-2360, ENG 3303, PHYS 3210, 3411, 3416, 3417, 3418, 4360

**Courses taught in specific semesters are indicated with the following codes:**
- **MATH 2471** – Calculus I (F,S,Su)
- **MATH 2472** – Calculus II (F,S,Su)
- **MATH 2393** – Intro Comp Mod Phys (F,S)
- **MATH 2393** – Calculus III (F,S,Su)
- **PHYS 2150** – Prof Des Phys (F,S)
- **PHYS 2230** – Intro Comp Mod Phys (F,S)
- **PHYS 2435** – Waves & Heat (F,S)
- **PHYS 2425** – Electricity & Magnetism (F,S)
- **PHYS 1430** – Mechanics (F,S)
- **PHYS 1335** – Engineering Chemistry (F,S)
- **CHEM 1335** – Engineering Chemistry (F,S)
- **CHEM 1135** – Engineering Chem Lab (F,S,Su)
- **PHYS 2425** – Electricity & Magnetism (F,S)
- **PHYS 2150** – Prof Des Phys (F,S)
- **PHYS 2230** – Intro Comp Mod Phys (F,S)
- **PHYS 3320** – Intro Math Phys (F,S)
- **PHYS 3332** – Differential Equations (F,S,Su)
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**10 hours PHYS electives:**
- PHYS 3210 – Physics Cognition & Pedagogy I
- PHYS 3311 – Mechanics I
- PHYS 3313 – Astrophysics
- PHYS 3411 – Advanced Physics Lab
- PHYS 3416 – Applied Electronics
- PHYS 3417 – Optics
- PHYS 3418 – Methods in Observational Astrophysics
- PHYS 4121, 4221 – Undergraduate Research (F,S,Su)
- PHYS 4305 – Statistical Physics
- PHYS 4311 – Electromagnetic Field Theory I
- PHYS 4311 – Condensed Matter Physics
- PHYS 4312 – Quantum Mechanics I
- PHYS 4313 – Electromagnetic Field Theory II
- PHYS 4320 – Selected Studies in Physics
- PHYS 4350B – Relativity
- PHYS 4350D – Biophysics
- PHYS 4360 – Physics Cognition & Pedagogy II
- PHYS 4321 – Undergraduate Research (F,S,Su)

*(The Physics Faculty Undergrad Advisor invites students to propose substituting PHYS 4321 for one required advanced course.)

See most recent online catalog for prerequisites.

**Choose Two Upper Division Lab Course:**
- PHYS 3411 (S) – Advanced Physics Lab
- PHYS 3416 (F) – Applied Electronics
- PHYS 3417 (F) – Optics
- PHYS 3418 – Methods in Observational Astrophysics

**Core courses must be completed:**
- **US 1100**
- **PHIL 1305 or 1320**
- **ART/DAN/MU/TH 2313**
- **ENG 1310**
- **ENG 1320**
- **ANTH 1312/ECO 2301/POS 2310**
- **HIST 1310**
- **HIST 1320**
- **ECO 2314/GE 1310/PSY 1300/SCI 1310**

US 1100 & ENG 1310 recommended for first semester. HIST 1310/1320 not recommended for first semester.