BS – Physics: Astronomy Concentration (SC-BS/PHYS/PAST)

2024 Catalog year: College of Science and Engineering

Freshman

Fall semester

CHEM 1335 + 1135 (F,S,Su)
Engineering Chemistry + Lab
TCCNS: CHEM 1306 or 1103
Bio 1301/1131 or BIO 1331/1131

Spring semester

MATH 2393 (F,S,Su)
Calculus III
TCCNS: MATH 2313

Sophomore

Fall semester

MATH 2427 (F,S,Su)
Calculus II
TCCNS: MATH 2342

Spring semester

PHYS 2326 (F,S)
Electricity & Magnetism
TCCNS: PHYS 2326

Junior

Fall semester

PHYS 3318 (S)
Modern Physics

Spring semester

PHYS 3418 (S)
Methods in Observational Astrophysics

Senior

Fall semester

PHYS 3312 (F,S)
Modern Physics

Spring semester

PHYS 4340 (F)
Quantum Mech I

Minor and/or elective courses

Choose 1 Upper Division Lab Courses:
- PHYS 3411 (S) – Advanced Physics Lab
- PHYS 3416 (F) – Applied Electronics
- PHYS 3417 (F) – Optics

6 hours of astronomy concentration electives:
- PHYS 3311 (S) – Astrophysics
- PHYS 3318 (S) – Galaxies

4 hours of advanced physics electives:
- PHYS 3210 (F,S) – Phys Cog & Ped I
- PHYS 3315 (F) – Astrophysics
- PHYS 3318 (S) – Galaxies
- PHYS 3411 (S) – Adv Phys Lab
- PHYS 3416 (F) – Applied Elec.
- PHYS 3417 (F) – Optics
- PHYS 3418 (S) – Cond. Mat. Phys
- PHYS 4230 (F,S,Su) – Select Stud. in Phys
- PHYS 4321/4322/4321 – EG Research
- PHYS 4330 (S) – Relativity
- PHYS 4345 (S) – Biophysics
- PHYS 4350 (S) – Astronomical Spectroscopy
- PHYS 4350 (F) – Nuclear and Particle Physics
- PHYS 4360 (F,S) – Physics Cog & Ped II
- ENGR 3111 (F,S,Su) – Mech. of Mat
- ENGR 3380 (F,S) – Fluid Mechanics
- MATH 3406 (S) – Fourier Series & Bound Probs

Core courses must be completed:

- 6 credits Core 010
- 3 credits Core 020
- 6 credits Core 030
- 3 credits Core 040
- 3 credits Core 050
- 6 credits Core 060
- 6 credits Core 070
- 3 credits Core 080
- 6 credits Core 090
- 1100 may be required for some students. Consult with an advisor regarding course choices.