

Sample schedule for BS in physics (applied and engineering physics concentration) for transfer students

Assumes that the student has the AA/AS waiver and has completed 60 total credits, including MATH 113, 114, 213, and PHYS 160, 161, 260, 261.

PHYS 251 can be waived if the student has taken an appropriate python programming course (e.g. CSC 201 at V.C.C.S.).

Number of credits in parentheses.

Courses designated “Elective” are entirely at the student's discretion.

Students who complete a second major can omit two of the following courses: PHYS 308, STAT 344, ECE 331, 332.

ASTR 124 is not required. It is included to bring the total credit number to 120.

Fall of Year 1 (15)

PHYS 251	(3)	Intro to Computer Techniques in Physics
PHYS 301	(3)	Analytical Methods of Physics
PHYS 303	(3)	Classical Mechanics
PHYS 305	(3)	Electromagnetic Theory
PHYS 311	(3)	Instrumentation

Spring of Year 1 (16)

PHYS 306	(3)	Wave Motion and Electromagnetic Radiation
PHYS 307	(3)	Thermal Physics
PHYS 312	(3)	Waves and Optics
PHYS 402	(3)	Introduction to Quantum Mechanics and Atomic Physics
ENGH 302	(3)	Advanced Composition
ASTR 124	(1)	Introduction to Observational Astronomy

Fall of Year 2 (14)

PHYS 403	(3)	Quantum Mechanics II
PHYS 407	(4)	Senior Laboratory
PHYS 408 or 409	(3)	Senior Research or Physics Internship
PHYS 410	(3)	Computational Physics I
PHYS 416	(1)	Special Topics in Modern Physics

Spring of Year 2 (15)

PHYS 308	(3)	Modern Physics
PHYS 412	(3)	Solid State Physics and Applications
STAT 344	(3)	Probability and Statistics for Engineers and Scientists I
ECE 331	(3)	Digital System Design
ECE 332	(3)	Digital Electronics and Logic Design Lab