

## Sample schedule for BS in physics (computational 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, 214 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.

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

Students who complete a second major can omit two of the following courses from this sample schedule: ASTR 210, PHYS 306, 412.

### 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 (15)

MATH 203	(3)	Linear Algebra
PHYS 306	(3)	Wave Motion and Electromagnetic Radiation
PHYS 307	(3)	Thermal Physics
PHYS 402	(3)	Introduction to Quantum Mechanics and Atomic Physics
ASTR 210	(3)	Introduction to Astrophysics

### Fall of Year 2 (15)

PHYS 407	(4)	Senior Laboratory
PHYS 410	(3)	Computational Physics I
PHYS 416	(1)	Special Topics in Modern Physics
CDS 303	(3)	Scientific Data Mining
Elective	(3)	
ASTR 124	(1)	Introduction to Observational Astronomy

**Spring of Year 2 (15)**

PHYS 308	(3)	Modern Physics
PHYS 412	(3)	Solid State Physics and Applications
PHYS 408 or 409	(3)	Senior Research or Physics Internship
ENGH 302	(3)	Advanced Composition
CDS 302	(3)	Scientific Data and Databases