

CS & Physics Plan of Study

This is meant to be followed loosely as the Physics/Computer Science has many possible course combinations. Please refer to the course bulletin for a full list of courses that students can take. Reach out to your advisor if you have questions!

**indicates that choice is dependent on whether students have an AP Calculus or AP CS credit.*

FALL

SPRING

FRESHMAN

MA 123: Calculus 1 **or*** MA 124: Calculus II

PY 252: Principles of Physics 2 **or** PY 212: General Physics II

CS 111: Intro to CS 1

CS 112: Intro to CS 2

PY 251: Principles of Physics 1 **or** PY 211: General Physics I

Second Semester Writing Course - WR 151, WR 152 or WR 153

WR 120: First-Year Writing Seminar

MA 124 or Foreign Language/Hub Course

SOPHOMORE

CS 131: Combinatoric Structures

CS 235: Algebraic Algorithms **or** CS 237: Probability in Comp

PY 351: Modern Physics 1 **or** PY 313: Waves & Modern Physics

PY 355: Methods of Theoretical Physics

Hub Course

Hub Course

Foreign Language Course/Hub Course

Foreign Language Course/Hub Course

JUNIOR

CS 210: Computer Systems

CS330: Intro to Analysis of Algorithms

CS course 300 or above

PY421: Intro to Computational Physics

Hub Course

Hub Course

Foreign Language Course/Hub Course

Hub Course

SENIOR

CS course 300 or above

CS course 300 or above

PY 536: Quantum Computing

PY 410: Statistical Thermodynamics

Hub Course

PY 400/500s elective course **or** PY 371 Lab Electronics

Hub Course

Hub Course

Graduation Requirement Breakdown

CAS Requirements

- CAS Programs require a minimum of 128 credits, excluding PDP, ROTC, and CASFY and CASSY courses.
- 4th semester foreign language or demonstration of equivalent proficiency.

CS & Physics Joint Major Requirements

CS Foundational Courses

- CS111 & CS112
- CS 210
- CS330

Math Background Courses

- MA123 & MA124
- CS131
- CS235 or CS237

Physics Pre-Req Courses

- PY251 & PY252 **or** PY211 & PY212
- PY351 **or** PY313
- PY355

Principle Required Courses

- PY 421 & PY 410
- PY 536
- 1 other CS course at the 300 level
- 2 CS classes at level 300 or above
- 1 PY 400/500s course **or** PY 371

Hub Requirements

The HUB is a set of 26 requirements for all BU undergraduate students. They can be completed in ~10-12 courses. Hub courses can count toward majors & minors. Below are the list of Hub requirements that are **not** already included in the CS major courses

- 1 Philosophical Inquiry & Life's Meanings
- 1 Aesthetic Exploration
- 1 Social Inquiry I
- 1 The Individual in Community
- 2 Global Citizenship and Intercultural Literacy
- 1 Ethical Reasoning
- 2 Research and Information Literacy
- 2 Teamwork/Collaboration
- 1 First-Year Writing Seminar
- 1 Writing, Research, and Inquiry
- 2 Writing-Intensive Course
- 1 Oral and/or Signed Communication