

COMPUTER SCIENCE, MINOR

The CS minor program provides students with the opportunity to gain foundational knowledge and also explore subareas of the interdisciplinary field that is computer science. This will enable them to advance their computing skills and discover applications to their major field of interest. The requirements are comprised of core, upper-level, and elective computer science courses.

Students whose primary major is in the Whiting School may use the same courses to satisfy the requirements of the primary major and also those of a computer science minor where applicable. Students who plan to fulfill the requirements for a minor must submit an online declaration request form before senior year through SIS, create a completion plan, and meet with a departmental representative to have the plan approved before their declaration request is approved.

The information below describes the academic requirements for students entering JHU as degree-seeking students in Fall 2025. Students who entered JHU as degree-seeking students prior to Fall 2025 should view the appropriate archived catalogue (<https://e-catalogue.jhu.edu/archive/>).

MINOR REQUIREMENTS

The minor in CS requires 7 courses and 23 credits. A grade of C- or higher is required for all courses except Gateway Computing where students must earn at least a C+ grade. No Satisfactory/Unsatisfactory (S/U) grade is accepted. Details of these requirements are as follows:

- Three core courses to provide the student with a foundation
- One elective CS course (200-level and above)
- Three upper-level CS courses (300-level and above) to allow the student to pursue an advanced area in depth
- At most one 3-credit Customized Academic Learning (CAL) course (EN.601.5xx) may be used towards the CS minor requirements as either the elective course or an upper-level course, not both

CORE COURSES

Code	Title	Credits
EN.500.112	Gateway Computing: JAVA ^{1, 2}	3
or EN.500.113	Gateway Computing: Python	
EN.601.220	Intermediate Programming	4
EN.601.226	Data Structures	4
Total Credits		11

¹ A grade of C+ or higher is required for Gateway Computing.

² Students who are approved to skip Gateway Computing without equivalent AP exam credit may substitute another CS course (3 credits) or one Bootcamp course (1 credit) plus 2 additional CS elective credits for this requirement to ensure the 23 credit minimum is met. Students with Gateway Computing (or AP equivalent) credit may not count Bootcamp computing courses towards their CS credits.

ELECTIVE COURSE

Code **Title** **Credits**

One CS course that is 200-level or higher (EN.601.2xx - EN.601.7xx) and at least 3 credits, or a course with one of the POS tags: CSCI-APPL, CSCI-RSNG, CSCI-SOFT, CSCI-SYST, CSCI-THRY. Recommended courses:

EN.601.229	Computer System Fundamentals
EN.601.230	Mathematical Foundations for Computer Science
EN.601.280	Full-Stack JavaScript
EN.601.290	User Interfaces and Mobile Applications
Total Credits	3-4

UPPER-LEVEL COURSES

Code	Title	Credits
Three CS courses that are 300-level or higher (EN.601.3xx - EN.601.7xx) and at least 3 credits each, and/or courses with one of the POS tags below. Students may consider choosing at least two courses from the same classification area for cohesiveness. ^{1, 2}		
Applications - POS Tag CSCI-APPL		
Reasoning - POS Tag CSCI-RSNG		
Software - POS Tag CSCI-SOFT		
Systems - POS Tag CSCI-SYST		
Theory - POS Tag CSCI-THRY		
Total Credits		9

¹ At most one 3-credit CS course in customized academic learning (EN.601.5xx) may be counted, only if not applied towards the Elective requirement.

² Some upper-level courses may have Calculus III, Probability/Statistics, or Linear Algebra as prerequisites, so plan accordingly.