

# COMPUTER SCIENCE (B.S.) – PROGRAMMING

CS 405	Operating Systems	3
<b>Total Hours</b>		<b>66-71</b>

*Students must pass each course with a "C-" grade or higher for the major.*

## Student Learning Outcomes

- Students will demonstrate knowledge of Computer Science-specific content (programming in a higher-level language; computer's internal organization).
- Students will demonstrate critical thinking in Computer Science.
- Students will demonstrate communication skills reflective of professional standards in Computer Science.
- Students will demonstrate Computer Science-specific calculation-based skills (ability to work with different bases, internal data representations, digital logic).
- Students will demonstrate readiness for post-baccalaureate entry into workforce or advancement (entrance) into graduate or professional programs.

## Recommended

- A Global Learning (GL) experience (<http://catalog.walsh.edu/undergraduate/academic-services/#globallearning>)

## Required

- General Education Requirements (<http://catalog.walsh.edu/undergraduate/general-education-curriculum/>)
- Internship

Code	Title	Hours
<b>Computer Science: Programming Required Courses</b>		
CS 108	Found of Computer Science I	3
CS 111	Intro to Obj-Oriented Program	3
CS 112	Introduction to Networking	3
CS 114	Introduction to Cybersecurity	3
CS 212	Intro Object-Oriented Prg II	3
CS 221	Database Techniques	3
CS 298	Computer Sci Career Seminar I	1
CS 306	Computer Organization	3
CS 385	Computer Science Internship	1-6
CS 387	Advanced Cybersecurity	3
CS 425	Software Engineering I	3
CS 426	Software Engineering II	3
CS 498	CS Career Seminar II	1
<b>Math</b>		
MATH 155	Elementary Functions I	3
MATH 230	Discrete Patterns I	3
<b>Computer Science: Programming Elective Courses</b>		
Select nine credit hours from the following:		6
CS 201	Visual Basic I	3
CS 210	Understanding UNIX/LINUX	3
CS 303	Introduction to Data Science	3
CS 314	Functional Programming	3
CS 402	Modular Projects	3
CS 403	Object Oriented Prog w/C++	3