## **COMPUTER SCIENCE (B.S.) - CYBER SECURITY**

## **Student Learning Outcomes**

- a. Students will demonstrate knowledge of Computer Science-specific content (programming in a higher-level language; computer's internal organization).
- b. Students will demonstrate critical thinking in Computer Science.
- c. Students will demonstrate communication skills reflective of professional standards in Computer Science.
- d. Students will demonstrate Computer Science-specific calculationbased skills (ability to work with different bases, internal data representations, digital logic).
- e. 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	
Computer Science: Cyber Security Required Courses			
CS 108	Found of Computer Science I	3	
CS 111	Intro to Obj-Oriented Program	3	
CS 112	Introduction to Networking	3	
or ICT 112	Introduction to Networking		
CS 114	Introduction to Cybersecurity	3	
CS 210	Understanding UNIX/LINUX	3	
or ICT 210	Understanding UNIX/LINUX		
CS 212	Intro Object-Oriented Prg II	3	
CS 221	Database Techniques	3	
CS 251	Web Publishing	3	
CS 298	Computer Sci Career Seminar I	1	
or ICT 298	Comp Science Career Seminar I		
CS 385	Computer Science Internship	1-6	
CS 387	Advanced Cybersecurity	3	
ICT 303	Wireless and Mobile Computing	3	
ICT 410	Intru Detect & Incid Response	3	
ICT 411	Digital Forensic Analysis	3	
ICT 412	Ethical Hacking & Sys Defense	3	
CS 498	CS Career Seminar II	1	
Computer Science: Cyber Security Elective Courses			
Select six credit hours from the following:			
ICT 301	Advanced Networking	3	
ICT 302	Telecommunication Networking	3	

ICT 402	Virtual, Cloud Comp & Secur	3
<b>Total Hours</b>		48-53

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