Weber State University Computer Science Stackable Credentials

Step 1: High School Concurrent Enrollment Programming Essentials Certificate of Proficiency

Course Name and Number	Credits
CS 1030 - Foundations of Computer Science	4
CS 1400 - Fundamentals of Programming	4
CS 1410 - Object-Oriented Programming	4
CS 2420 - Introduction to Data Structures and Algorithms	4
Total	**16**

Step 2: Weber State University Associate of Science Degree in Computer Science

Required Computer Science Courses	Credits	Required Computer Science Courses	Credits
CS 2130 - Computational Structures	4	ENGL 2010 EN - Intermediate College Writing	3
CS 2350 - Web Development	4	PHYS 2210 PS - Physics for Scientists and Engineers I	5
CS 2450 - Software Engineering I	4	COMM 2110 HU - Interpersonal and Small Group Communication	3
CS 2705 - Network Fundamentals and Design	4	MATH 1210 - Calculus I	4
CS 2550 - Introduction to Database Design and SQL	4	MATH 1040 QL - Introduction to Statistics *OR* MATH 3410 - Probability and Statistics	3
CS 2810 - Computer Architecture/Organization	4	ENGL 3100 - Professional and Technical Writing NET 3250 - Business Communication ENGL 2250 CA - Creative Writing PHIL 1250 HU - Critical Thinking *(choose one)*	3
CS 2899 - Associate Degree Assessment	0		
Total	**24**	**Total**	**21-24**

Step 3: Weber State University Bachelor of Science Degree in Computer Science

Required Computer Science Courses (24 hours)	Credits	Required Support Courses (10-12 hours)	Credits
CS 3100 - Operating Systems	4		
CS 3230 - Object Oriented User Interface Development with Java *OR* CS 3280 - Object Oriented Windows Application Development	4	ENGL 3100 - Professional and Technical Writing NET 3250 - Business Communication ENGL 2250 CA - Creative Writing PHIL 1250 HU - Critical Thinking *(choose one)* *OR*	3
CS 3550 - Advanced Database Programming	4	MATH 1220 - Calculus II	4
CS 3750 - Software Engineering II	4	MATH 2210 - Calculus III *OR*	4
CS 4110 - Concepts of Formal Languages and Algorithms for Computing	4	PHYS 2200 - Physics for Scientists and Engineers II *OR*	5
CS 4790 - .NET Web Application Development CS 4230 - Java Application Development CS 4350 - Advanced Internet Programming CS 4450 - Advanced Software Engineering Methods CS 4650 - Advanced Game Development *(choose one)*	4	PHYS 2300 - Scientific Computing for Physical Systems MATH 2270 - Elementary Linear Algebra MATH 3160 - Number Theory MATH 3610 - Graph Theory *(choose one)*	3
CS 4899 - Bachelor's Degree Assessment	0		
Total	**24**	**Total**	**10-12**

CS Electives (8 credit hours)

Choose 2 upper division Computer Science courses (see list of suggested electives). You may not use CS 4800, CS 4850 or CS 4890 for these electives.	8

Other Electives (6 credit hours)

Choose 6 credits of any approved upper division courses from CS, IS&T, NET, EET, PHYS, BSAD, and MATH. This may include up to 4 credits maximum in any one of the following courses: CS 4800, CS 4850 , or CS 4890.	6