# Computer Science, A.S.

The CS Associate degree is a transfer degree used when a student is contemplating changing schools. Because it includes all general education classes, attempting to earn this degree four semesters will necessarily lengthen the time to earn a BS degree.

#### **Program Requirements**

Code	Title	Credit Hours
Total Credit Hours		61
General Education Requirements		40 Credits
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
ENGL 2010	Intermediate Academic Writing CC	3
MATH 1210	Calculus I QL	4
Complete one of the following:		3
HIST 2700 & HIST 2710	US History to 1877 AS and US History since 1877 AS (6)	
HIST 1700	American Civilization AS (3)	
HIST 1740	US Economic History AS (3)	
POLS 1000	American Heritage AS (3)	
POLS 1100	American National Government AS (3)	
Complete the following:		
PHIL 2050	Ethics and Values IH	3
HLTH 1100	Personal Health and Wellness TE	2
or EXSC 1097	Fitness for Life TE	
Distribution Courses:		
Humanities:		
COMM 1020	Public Speaking HH (recommended)	3
Social Science:		
COMM 2110	Interpersonal Communication SS (recommended)	3
Physical Science:		
PHYS 2210	Physics for Scientists and Engineers I PP <sup>1</sup>	4
PHYS 2215	Physics for Scientists and Engineers I Lab <sup>1</sup>	1
Additional Distribution Courses:		
Biology		3
Fine Arts		3
Complete one of the following addition	ional GE course/lab combinations:	5
BIOL 1610 & BIOL 1615	College Biology I BB and College Biology I Laboratory (5)	
CHEM 1210	Principles of Chemistry I PP	
& CHEM 1215	and Principles of Chemistry I Laboratory (5)	
PHYS 2020 & PHYS 2025	College Physics II PP and College Physics II Lab (5)	
PHYS 2220	Physics for Scientists and Engineers II PP	
& PHYS 2225	and Physics for Scientists and Engineers II Lab (5)	
GEO 1010	Introduction to Geology PP	
& GEO 1015 & GEO 202R	and Introduction to Geology Laboratory and Science Excursion (5)	
Discipline Core Requirements		21 Credits
CS 1400	Fundamentals of Programming <sup>1</sup>	3
CS 1410	Object Oriented Programming <sup>1</sup>	3

CS 2300	Discrete Mathematical Structures I <sup>1</sup>	3
CS 2370	C Plus Plus Programming <sup>1</sup>	3
CS 2420	Introduction to Algorithms and Data Structures <sup>1</sup>	3
CS 2550	Web Programming I <sup>1</sup>	3
CS 2810	Computer Organization and Architecture <sup>1</sup>	3

Minimum grade of C- required

### **Graduation Requirements**

- 1. Completion of a minimum of 61 semester credits.
- 2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in Discipline Core courses.
- 3. Residency hours-- minimum of 20 credit hours though course attendance at UVU.
- 4. Completion of GE and specified departmental requirements.

#### **Graduation Plan**

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/ or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

First Year		
Semester 1		Credit Hours
CS 1400	Fundamentals of Programming	3
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	or Literacies and Composition Across Contexts CC	
American Institutions		3
MATH 1210	Calculus I QL	4
HLTH 1100	Personal Health and Wellness TE	2
or EXSC 1097	or Fitness for Life TE	
	Credit Hours	15
Semester 2		
CS 1410	Object Oriented Programming	3
CS 2810	Computer Organization and Architecture	3
ENGL 2010	Intermediate Academic Writing CC	3
Biology Distribution		3
COMM 1020	Public Speaking HH	3
	Credit Hours	15
Second Year		
Semester 3		
CS 2300	Discrete Mathematical Structures I	3
CS 2370	C Plus Plus Programming	3
CS 2420	Introduction to Algorithms and Data Structures	3
PHIL 2050	Ethics and Values IH	3
	Credit Hours	12
Semester 4		
PHYS 2210	Physics for Scientists and Engineers I PP	4
PHYS 2215	Physics for Scientists and Engineers I Lab	1
CS 2550	Web Programming I	3
	Credit Hours	8
Third Year		
Semester 5		
PHYS 2220	Physics for Scientists and Engineers II PP	4
PHYS 2225	Physics for Scientists and Engineers II Lab	1
Fine Arts Distribution		3
COMM 2110	Interpersonal Communication SS	3
	Credit Hours	11
	Total Credit Hours	61
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## **Program Learning Outcomes**

- 1. Analyze a simple computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- 2. Design, implement, and evaluate a simple computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- 3. Communicate effectively in a variety of contexts.
- 4. Apply computer science theory and software development fundamentals to produce computing-based solutions.