

Computer Science - Computing and Networking Sciences Emphasis, A.A.S.

The program introduces the student to a wide range of networking and data communications technologies and entry level programming.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		63
Computer Science Requirements		22
		Credits
Complete the requirements		22
Emphasis Requirements		25
		Credits
Complete the following:		
CS 1410	Object Oriented Programming	3
CS 2300	Discrete Mathematical Structures I	3
CS 2420	Introduction to Algorithms and Data Structures	3
CS 2370	C Plus Plus Programming	3
CS 2450	Software Engineering WE	3
CS 2550	Web Programming I	3
CS 2690	Computer Networks II	3
MATH 1210	Calculus I QL	4
Emphasis Elective Requirements		16
		Credits
Complete 16 credits from the following courses (minimum grade of C- required).		16
(Must be approved by CS Department. See CS Advisor):		
CS 1030	Foundations of Computer Science (3)	
CS 281R	Internship (1-8) (3 credits max)	
ECE 2700 & ECE 2705	Digital Design I and Digital Design I Lab (4)	
IT 1510	Introduction to System Administration--Linux/UNIX (3)	
MATH 1220	Calculus II (4)	
PHYS 2215	Physics for Scientists and Engineers I Lab (1)	

Core Requirements

Code	Title	Credit Hours
Total Credit Hours		22
General Education Requirements:		13
		Credits
A minimum of 16 credits of General Education requirements are required for graduation. Not all GE requirements are listed in this section (see Specialty Core requirements for more details).		
ENGL 1010 or ENGH 1005	Introduction to Academic Writing CC Literacies and Composition Across Contexts CC	3
HUMANITIES/FINE ARTS/FOREIGN LANGUAGE ¹		3
COMM 2110	Interpersonal Communication SS (Minimum grade of C- required)	3
Choose one of the following:		3
BIOLOGY		
PHYS 2210	Physics for Scientists and Engineers I PP (4) (Minimum grade of C- required)	
PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT ²		1

Discipline Core Requirements:	9 Credits
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Complete the following:

CS 1400	Fundamentals of Programming (Minimum grade of C- required)	3
CS 2600	Computer Networks I (Minimum grade of C- required)	3
CS 2810	Computer Organization and Architecture (Minimum grade of C- required)	3

1

COMM 1020 Public Speaking HH recommended

2

HLTH 1100 Personal Health and Wellness TE or EXSC 1097 Fitness for Life TE recommended

Graduation Requirements

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours-- minimum of 20 credit hours though course attendance at UVU.

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
ENGL 1010 or ENGH 1005	3
MATH 1210	4
COMM 2110	3
Biology or Physical Science Distribution	3
CS 1400	3
Credit Hours	16

Semester 2

PE/HLTH (HLTH 1100 recommended)	1
Humanities or Fine Arts (COMM 1020 recommended)	3
CS 1410	3
CS 2810	3
Emphasis Elective	3
Emphasis Elective	3
Credit Hours	16

Second Year

Semester 3	Credit Hours
CS 2300	3
CS 2420	3
CS 2370	3
CS 2550	3
CS 2600	3
Credit Hours	15

Semester 4

CS 2450	3
CS 2690	3
Emphasis Elective	3
Emphasis Elective	3
Emphasis Elective	3
Emphasis Elective	1
Credit Hours	16

Total Credit Hours	63
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Program Learning Outcomes

1. Graduates are proficient in using data structures and algorithms.
2. Graduates understand the foundations of computer architecture.
3. Graduates are able to develop solutions to significant computing problems.
4. Graduates will have a thorough understanding of the theory and constructs of programming languages.
5. Graduates understand the theoretical foundations of computation.
6. Graduates understand the principles and components of operating systems.
7. Graduates have proficiency in the mathematical skills needed in computer science (viz. discrete mathematics, basic probability and statistics, basic differential and integral calculus)
8. Students understand the fundamentals of net-centric computing