# **Programmer, Certificate of Completion**

The program introduces the students to basic, entry level programming.

#### **Program Requirements**

Code	Title	Credit Hours
Total Credit Hours		30
Discipline Core Requirements		21 Credits
CS 1400	Fundamentals of Programming	3
CS 1410	Object Oriented Programming	3
CS 2300	Discrete Mathematical Structures I	3
CS 2420	Introduction to Algorithms and Data Structures	3
CS 2600	Computer Networks I	3
CS 2810	Computer Organization and Architecture	3
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
Elective Requirements		9 Credits
Choose 9 credits from the following courses (Must be approved by CSE Department. See CSE adviser):		9
CS 2450	Software Engineering WE (3)	
CS 2550	Web Programming I (3)	
CS 281R	Internship (1-8) (Must be taken for 3 credits)	
CS 3060	Operating Systems Theory (3)	
CS 3250	Java Software Development (3)	
CS 3260	CsharpNET Software Development (3)	
CS 3370	C Plus Plus Software Development (3)	
CS 3520	Database Theory (3)	
IT 1510	Introduction to System AdministrationLinux/UNIX (3)	

### **Graduation Requirements**

- 1. Completion of a minimum of 30 semester credits.
- 2. Minimum grade of C- required in all courses.
- 3. Overall grade point average of 2.0 (C) or above.
- 4. Residency hours -- minimum of 10 credit hours through 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/).

	Credit Hours	9
Computer Electives		3
CS 2810	Computer Organization and Architecture	3
CS 1410	Object Oriented Programming	3
Semester 2		
	Credit Hours	9
Computer Electives		3
or ENGH 1005	or Literacies and Composition Across Contexts CC	
ENGL 1010	Introduction to Academic Writing CC	3
CS 1400	Fundamentals of Programming	3
Semester 1		Credit Hours
First Year		

	Total Credit Hours	30
	Credit Hours	12
Computer Electives		3
CS 2600	Computer Networks I	3
CS 2420	Introduction to Algorithms and Data Structures	3
CS 2300	Discrete Mathematical Structures I	3
Semester 3		
Second Year		

## **Program Learning Outcomes**

- 1. Graduates are able to develop solutions to moderately complex computing problems.
- 2. Graduates have proficiency in discrete mathematics.
- 3. Students understand the fundamentals of net-centric computing.