Associate of Programming, AP

Program Description

The Programming degree prepares students for a Bachelor of Science degree in Computer Science, Data Science, or Software Engineering. It includes foundational courses needed in computing disciplines. To earn the degree, students will complete focused coursework in Software Engineering, Computer Science, or Data Science, with fewer general education requirements. This degree includes a minimum of 68 credit hours and a minimum of 39 credits of preparatory, specialized coursework. Students interested in pursuing Computer Science, Data Science, or Software Engineering can earn the Associate of Programming as a milestone to their chosen degree.

Program Curriculum

68 credits

Code	Title	Hours
General Education Requirements [1]		**6**
Complete 6 credits of General Education from the following:		
ENGL 2010	Interm Writing Selected Topics: (EN)	
American Institutions		
Life Sciences		
Physical Sciences		
Fine Arts		
Literature & Humanities		
Social & Behavioral Sciences		
Core Programming Requirements [1]		**24-26**
ENGL 1010	Introduction to Writing (EN)	
or ENGL 1010D	Introduction to Writing (EN)	
CS 1400	Fundamentals of Programming	
CS 1410	Object Oriented Programming	
CS 2100	Discrete Structures	
CS 2420	Introduction to Algorithms and Data Structures	
CS 2450	Software Engineering	
CS 2810	Computer Organization and Architecture	
MATH 1100	Business Calculus (MA)	
or MATH 1210	Calculus I (MA)	
SET 1000	Graduation Planning & Career Prep I	
Computing, Math, & Science Electives [1]		**15**
Complete at least 15 credits of of the following toward intended program of study:		
Any CS prefix course except CS 2320		
Any SE prefix course		
BIOL 1610	Principles of Biology I (LS)	
or CHEM 1210	Principles of Chemistry I (PS)	
or PHYS 2210	Physics/Scientists Engineers I (PS)	
BIOL 1615	Principles of Biology I Lab (LAB)	
or CHEM 1215	Principles of Chemistry I Lab (LAB)	
or PHYS 2215	Physics/Scientists Engineers I Lab	
DES 2100	Design Thinking	
ENGL 2100	Technical Writing (ALCS)	
IT 1100	Introduction to Unix/Linux	

IT 1500	Cloud Fundamentals
MATH 1010	Intermediate Algebra
MATH 1050	College Algebra / Pre-Calculus (MA)
MATH 1060	Trigonometry (MA)
MATH 1080	Pre-Calculus with Trigonometry (MA)
MATH 1220	Calculus II (MA)
MATH 2050	Applied Statistics with Programming
MATH 2210	Multivariable Calculus (MA)
MATH 2250	Differential Equations and Linear Algebra
MATH 2270	Linear Algebra
MATH 2280	Ordinary Differential Equations

[1]**NOTE:** *A course may only be used to fulfill one program requirement. Daul-listed courses may only be used once to fulfill requirements. Consult course descriptions in the current catalog to verify dual-listed courses.*

Graduation Requirements

1. Complete a minimum of 68 college-level credits (1000 and above).
2. Complete at least 20 credits at Utah Tech for institutional residency.
3. Cumulative GPA 2.0 or higher.
4. Grade C or higher in all Core Programming Requirements and Computing, Math, & Science Electives