

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 69 credit hours and a minimum of 30 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

69 credits

| Code | Title | Hours |
|--|--|-------|
| General Education Requirements | | 6 |
| Required Courses | | |
| ENGL 1010 or ENGL 1010D | Introduction to Writing (EN) | 3-4 |
| CS 1030 or MATH 1010 | Problem Solving with Computers Intermediate Algebra | 3-4 |
| CS 1400 | Fundamentals of Programming | 3 |
| CS 1410 | Object Oriented Programming | 3 |
| CS 2100 | Discrete Structures | 3 |
| CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| CS 2450 | Software Engineering | 3 |
| CS 2810 | Computer Organization and Architecture | 3 |
| MATH 1100 or MATH 1210 | Business Calculus (MA) Calculus I (MA) | 3-4 |
| SET 1000 | Graduation Planning & Career Prep I | 0 |
| Elective Courses | | 24 |
| It is recommended that students choose 8 elective courses based on their intended program of study | | |

Select one of the following tracks.

| Code | Title | Hours |
|---|--|-------|
| Software Engineering Track | | |
| ENGL 2100 | Technical Writing (ALCS) | 3 |
| MATH 2050 | Applied Statistics with Programming | 3 |
| SE 1400 | Web Design Fundamentals (ALCS) | 3 |
| IT 1100 | Introduction to Unix/Linux | 3 |
| Computer Science Track | | |
| BIOL 1610 or CHEM 1210 or PHYS 2210 | Principles of Biology I (LS) Principles of Chemistry I (PS) Physics/Scientists Engineers I (PS) | 4 |
| BIOL 1615 or CHEM 1215 or PHYS 2215 | Principles of Biology I Lab (LAB) Principles of Chemistry I Lab (LAB) Physics/Scientists Engineers I Lab (LAB) | 1 |
| Data Science Track | | |
| CS 2500 | Data Wrangling | 3 |

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|-----------|--------------------|---|
| IT 1500 | Cloud Fundamentals | 1 |
| MATH 1220 | Calculus II (MA) | 4 |

Graduation Requirements

1. Complete a minimum of 69 college-level credits (1000 and above).
2. Complete at least 20 lower-division credits at Utah Tech for institutional residency.
3. Cumulative GPA 2.0 or higher.
4. Grade C or higher in all Math and Science Requirements, Programming Requirements, and Programming Elective Requirements.