

COMPUTER PROGRAMMING, COMPUTER INFORMATION TECHNOLOGY, AAS

Program Code: Computer Programming- AAS

Program Description

The AAS, Computer Information Technology, Computer Programming provides students with entry level programming skills. Computer programming professionals must also have a broad knowledge of computer systems and technologies, as well as strong problem solving and analysis skills. They must be able to think logically and have strong verbal and written communication skills.

Recommended Course Schedule

| 1st semester | | Units |
|--|------------------------------|-----------|
| CIT 114 | IT Essentials | 4 |
| CIT 112 | Network + | 3 |
| English/Communications ³ | | 3 |
| Elective ⁴ | | 3 |
| Mathematics ⁴ | | 3 |
| Semester Total | | 16 |
| 2nd semester | | Units |
| CIT 148 | Beginning Python Programming | 3 |
| CIT 173 | Introduction to Linux | 3 |
| CIT 151 | Beginning Web Development | 3 |
| English/Communications ³ | | 3 |
| Human Relations ³ | | 3 |
| Semester Total | | 15 |
| 3rd semester | | Units |
| CIT 180 | Database Concepts and SQL | 3 |
| or Introduction to SQL for Data Science | | |
| DATA 210 | | |
| Electives ⁴ | | 3 |
| CIT 130 | Beginning Java | 3 |
| or CIT 134 or Beginning C# Programming | | |
| Fine Arts/Humanities/Social Science/U.S. & Nevada Constitutions ³ | | 3 |
| Diversity ³ | | 3 |
| Semester Total | | 15 |
| 4th semester | | Units |
| CIT 263 | Project Management | 3 |
| CIT 230 | Advanced Java | 3 |
| or CIT 234 or Advanced C# Programming | | |
| or CIT 248 or Advanced Python Programming | | |
| Electives ⁴ | | 5 |
| Science ³ | | 3 |
| Semester Total | | 14 |
| Total Units | | 60 |

³ See approved General Education list for the AAS Degree. (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

⁴ See program recommendations or requirements.

Program Requirements

AAS degrees are generally non-transfer degrees designed for students to enter the workforce.

To earn an AAS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AAS (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

| Code | Title | Units |
|---|------------------------------|-----------|
| GENERAL EDUCATION REQUIREMENTS | | |
| <i>English/Communications</i> ¹ | | 6 |
| <i>Fine Arts/Humanities/Social Science</i> ¹ | | 3 |
| Recommended: Choose a course that satisfies U.S. and Nevada Constitutions | | |
| <i>Human Relations</i> ¹ | | 3 |
| <i>Mathematics</i> | | 3 |
| Recommended: | | |
| MATH 124 | College Algebra (or higher) | |
| <i>Science</i> ¹ | | 3 |
| <i>Additional College Requirements</i> | | |
| <i>Diversity</i> ¹ | | 3 |
| <i>U.S. and Nevada Constitutions</i> ² | | (3) |
| Course also will satisfy Fine Arts/Humanities/Social Science. | | |
| Degree Requirements | | |
| CIT 271 | Cyber Threat Intelligence | 3 |
| CIT 112 | Network + | 3 |
| CIT 114 | IT Essentials | 4 |
| CIT 148 | Beginning Python Programming | 3 |
| CIT 173 | Introduction to Linux | 3 |
| CIT 180 | Database Concepts and SQL | 3 |
| or DATA 210 Introduction to SQL for Data Science | | |
| CIT 263 | Project Management | 3 |
| CIT 151 | Beginning Web Development | 3 |
| <i>Beginning Programming Language</i> | | 3 |
| CIT 130 Beginning Java | | |
| CIT 134 Beginning C# Programming | | |
| <i>Advanced Programming Language</i> | | |
| CIT 230 Advanced Java | | |
| CIT 234 Advanced C# Programming | | |
| CIT 248 Advanced Python Programming | | |
| <i>Electives</i> | | 8 |
| Select 8 units from any college-level courses. | | |
| Total Units | | 60 |

¹ See Approved General Education List for the AAS Degree (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).

² May also count toward degree requirements. Please consult with Academic Advising.

Program Outcomes

Students completing the degree will:

- PSLO1: Have the technical proficiency required to design and program a solution to a stated problem.
- PSLO2: Demonstrate the ability to work with dynamic data structures and generic methods, which are methods that can operate with different data types while maintaining type safety.
- PSLO3: Have the ability to communicate and work effectively with members of a team and members of external groups.