

Artificial Intelligence Technology

The Artificial Intelligence (AI) curriculum prepared graduates for employment in a variety of high demand careers, including AI engineer, AI researcher, AI consultant, AI architect, conversational AI specialist, AI automation engineer, AI software engineer, Data Analyst, entry-level Data Scientist, and Machine Learning specialists.

Course work includes the development of a student's ability to create and develop Artificial Intelligence programs, develop Generative AI/Chatbots, and program for Machine Learning to integrate with Data Analytics and Data Science. Students will also be introduced to Computer Ethics, Deep Learning, and System Design and Analysis.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies that rely on Artificial Intelligence systems to perform daily operations around Data Analysis, Financial Analysis, Data Science, Generative AI Functions, and manage information. The AI curriculum also incorporates the competencies of many industry-recognized certifications.

For specific information about potential positions and wages in Artificial Intelligence employment, visit the Central Piedmont Career Coach website.

Artificial Intelligence (A25710)

Degree Awarded

The Associate in Applied Science degree in Artificial Intelligence is awarded by the college upon completion of the degree requirements.

Admissions

- A high school diploma or equivalent is required.
- Placement tests determine placement in English (ENG) and mathematics (MAT).
- Some courses have prerequisites or co-requisites; Check the Courses section for details.

Contact Information

The Artificial Intelligence program is in the Information Technology Division. For more information, call the division office at 704.330.6549.

General Education Requirements

| | | |
|------------|---|-----|
| ENG 111 | Writing and Inquiry | 3.0 |
| ENG 112 | Writing and Research in the Disciplines | 3.0 |
| or ENG 113 | Literature-Based Research | |
| or ENG 114 | Professional Research & Reporting | |
| or COM 231 | Public Speaking | |
| MAT 152 | Statistical Methods I | 4.0 |
| ART 111 | Art Appreciation | 3.0 |
| or ART 114 | Art History Survey I | |
| or ART 115 | Art History Survey II | |
| or DRA 111 | Theatre Appreciation | |
| or HUM 120 | Cultural Studies | |
| or HUM 130 | Myth in Human Culture | |

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|------------|------------------------|
| or MUS 110 | Music Appreciation |
| or MUS 112 | Introduction to Jazz |
| or PHI 215 | Philosophical Issues |
| or PHI 240 | Introduction to Ethics |
| or REL 110 | World Religions |

| | | |
|------------|------------------------------|-----|
| ECO 251 | Principles of Microeconomics | 3.0 |
| or ECO 252 | Principles of Macroeconomics | |
| or HIS 111 | World Civilizations I | |
| or HIS 112 | World Civilizations II | |
| or HIS 131 | American History I | |
| or HIS 132 | American History II | |
| or POL 120 | American Government | |
| or PSY 150 | General Psychology | |
| or SOC 210 | Introduction to Sociology | |

Major Requirements

| | | |
|---------|--------------------------------------|-----|
| ACA 122 | College Transfer Success | 1.0 |
| CSC 121 | Python Programming | 3.0 |
| CSC 112 | Machine Learning Computation | 3.0 |
| CSC 113 | Artificial Intelligence Fundamentals | 3.0 |
| CSC 114 | Artificial Intelligence I | 3.0 |
| CSC 115 | Machine Learning I | 3.0 |
| CSC 128 | Chatbot Programming I | 3.0 |
| CSC 161 | Deep Learning | 3.0 |
| CSC 162 | Computer Vision | 3.0 |
| CSC 214 | Artificial Intelligence II | 3.0 |
| CSC 215 | Machine Learning II | 3.0 |
| CSC 221 | Advanced Python Programming | 3.0 |
| CSC 228 | Chatbot Programming II | 3.0 |
| CTS 210 | Computer Ethics | 3.0 |
| CTS 285 | Systems Analysis & Design | 3.0 |
| MAT 171 | Precalculus Algebra | 4.0 |
| MAT 263 | Brief Calculus | 4.0 |

Technical Electives

| | | |
|---------|---|-----|
| CIS 110 | Introduction to Computers | 1.0 |
| CIS 115 | Introduction to Programming and Logic | |
| CTI 141 | Cloud and Storage Concepts | |
| CTI 260 | Data Center Troubleshooting | |
| CTI 270 | Data Center Design and Problem Resolution | |
| WBL 111 | Work-Based Learning I | |

Total Credits **68**

No diplomas are offered in Artificial Intelligence.

Artificial Intelligence Certificate Specialization in AI Fundamentals (C25710-C1)

Major Requirements

| | | |
|---------|--------------------------------------|-----|
| CSC 113 | Artificial Intelligence Fundamentals | 3.0 |
| CSC 112 | Machine Learning Computation | 3.0 |
| CTS 210 | Computer Ethics | 3.0 |
| CTS 285 | Systems Analysis & Design | 3.0 |

Total Credits **12**

Artificial Intelligence Suggested Course Sequence

The following is the suggested plan for when to take each course to complete this Associate in Applied Science degree, based on the program requirements of the 2025-2026 catalog. This is only a recommendation — you may take courses in another order upon consultation with your advisor. This plan is based on you starting with college-level math and English courses, starting your program in the fall, and attending full-time. You can also follow this sequence if you attend part-time. Speak with your academic advisor about the plan and any questions. This program might also offer diplomas or certificates; visit the catalog or contact the program for details. Visit the Academic Advising page for instructions on locating your assigned advisor: <https://www.cpcc.edu/academics/academic-advising>

| Term I | | Credits |
|--|---|--------------|
| ACA 122 | College Transfer Success | 1.0 |
| CSC 113 | Artificial Intelligence Fundamentals | 3.0 |
| ECO 251 | Principles of Microeconomics | 3.0 |
| ENG 111 | Writing and Inquiry | 3.0 |
| MAT 152 | Statistical Methods I | 4.0 |
| Credits | | 14 |
| Term II | | Credits |
| ART 111 | Art Appreciation | 3.0 |
| CSC 121 | Python Programming | 3.0 |
| CTS 210 | Computer Ethics | 3.0 |
| CTS 285 | Systems Analysis & Design | 3.0 |
| MAT 171 | Precalculus Algebra | 4.0 |
| Credits | | 16 |
| Term III | | Credits |
| CSC 112 | Machine Learning Computation | 3.0 |
| ENG 112 | Writing and Research in the Disciplines | 3.0 |
| MAT 263 | Brief Calculus | 4.0 |
| You may have completed program certificate C25710-C1. Confirm eligibility with your academic advisor. | | |
| Credits | | 10 |
| Term IV | | Credits |
| CSC 114 | Artificial Intelligence I | 3.0 |
| CSC 115 | Machine Learning I | 3.0 |
| CSC 128 | Chatbot Programming I | 3.0 |
| CSC 162 | Computer Vision | 3.0 |
| CSC 221 | Advanced Python Programming | 3.0 |
| Credits | | 15 |
| Term V | | Credits |
| CSC 161 | Deep Learning | 3.0 |
| CSC 214 | Artificial Intelligence II | 3.0 |
| CSC 215 | Machine Learning II | 3.0 |
| CSC 228 | Chatbot Programming II | 3.0 |
| Technical Elective | | 1.0-3.0 |
| Credits | | 13-15 |
| Total Credits | | 68-70 |