

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	

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 (Machine Learning Computation)	3.0
CSC 113	Artificial Intelligence Fundamentals (AI Fundamentals)	3.0
CSC 114	Artificial Intelligence I (Artificial Intelligence I)	3.0
CSC 115	Machine Learning I (Machine Learning I)	3.0
CSC 128	Chatbot Programming I (Chatbot Programming I)	3.0
CSC 161	Deep Learning (Deep Learning)	3.0
CSC 162	Computer Vision (Computer Vision)	3.0
CSC 214	Artificial Intelligence II (Artificial Intelligence II)	3.0
CSC 215	Machine Learning II (Machine Learning II)	3.0
CSC 221	Advanced Python Programming	3.0
CSC 228	Chatbot Programming II (Chatbot Programming II)	3.0
CTS 210	Computer Ethics (Computer Ethics)	3.0
CTS 285	Systems Analysis & Design (Systems Analysis & Design)	3.0
MAT 171	Precalculus Algebra	4.0
MAT 263	Brief Calculus	4.0

Technical Electives

CIS 115	Introduction to Programming and Logic	1.0
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.

No certificates are offered in Artificial Intelligence.

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 2024-2025 catalog. This is only a recommendation — you may take courses in another order upon consultation with your

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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
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