

ARTIFICIAL INTELLIGENCE AND CLOUD COMPUTING - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

Explore More About This Program: <https://cwi.edu/program/artificial-intelligence-and-cloud-computing>

Degree Quick Facts

- **Instructional School:** Science, Technology, and Math
- **Department:** Computer Science and Information Technology
- **Program Code:** AICC.AAS
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the [Special Course Fees](#) web page.

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
<u>GEM 1 - Written Communication course</u>		3
<u>GEM 2 - Oral Communication course</u>		3
MATH 143	Precalculus I: Algebra (GEM 3) ¹	3
SCIE 102	Ethics in Science (GEM 6)	3
MATH 153	Statistical Reasoning (GE Elective)	3
Major Requirements		
AICC 110	Introduction to Artificial Intelligence	4
AICC 120	Introduction to Python Programming and the Cloud	4
AICC 130	Linux for Artificial Intelligence and Cloud Computing	4
AICC 150	Python for Artificial Intelligence	4
AICC 160	Math for Artificial Intelligence	4
AICC 170	Database, Data Mining, and Big Data	4
AICC 210	Machine Learning	4
AICC 220	Artificial Intelligence for Business	4
AICC 230	Artificial Intelligence and Cloud Computing	4
AICC 250	Computer Vision	4
AICC 260	Natural Language Processing	4
AICC 270	Artificial Intelligence for Cybersecurity and the SOC	4
Minimum Credit Hours Required		63

¹ Students who do not score high enough on the CWI Math Diagnostic exam to place directly into MATH 143 Precalculus I: Algebra have the option of completing MATH 142 Precalculus I: Algebra Plus and

MATH 143P Precalculus I: Algebra instead. While this option adds an additional two credits, it will reduce the overall time to degree completion.

Degree Plan

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this course sequence plan. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

First Year

Fall		Credit Hours
AICC 110	Introduction to Artificial Intelligence	4
AICC 120	Introduction to Python Programming and the Cloud	4
AICC 130	Linux for Artificial Intelligence and Cloud Computing	4
MATH 153	Statistical Reasoning (GE Elective)	3
<u>GEM 1 - Written Communication course</u>		3
Total Semester Credit Hours		18

Spring

AICC 150	Python for Artificial Intelligence	4
AICC 160	Math for Artificial Intelligence	4
AICC 170	Database, Data Mining, and Big Data	4
MATH 143	Precalculus I: Algebra (GEM 3) ¹	3
Total Semester Credit Hours		15

Second Year

Fall		
AICC 210	Machine Learning	4
AICC 220	Artificial Intelligence for Business	4
AICC 230	Artificial Intelligence and Cloud Computing	4
<u>GEM 2 - Oral Communication course</u>		3
Total Semester Credit Hours		15

Spring

AICC 250	Computer Vision	4
AICC 260	Natural Language Processing	4
AICC 270	Artificial Intelligence for Cybersecurity and the SOC	4
SCIE 102	Ethics in Science (GEM 6)	3
Total Semester Credit Hours		15
Minimum Credit Hours Required		63

¹ Students who do not score high enough on the CWI Math Diagnostic exam to place directly into MATH 143 Precalculus I: Algebra have the option of completing MATH 142 Precalculus I: Algebra Plus and MATH 143P Precalculus I: Algebra instead. While this option adds an additional two credits, it will reduce the overall time to degree completion.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Recommend ethical methods of implementing and employing Artificial Intelligence (AI) in cloud, business, and cybersecurity environments.
- Utilize AI-driven tools and industry-standard methods to generate actionable information from large data sets.
- Properly apply statistical analysis to guide Machine Learning (ML).
- Plan effective applications of AI to real business problems.
- Plan effective applications of AI to real cybersecurity problems.
- Integrate AI tools and concepts with cloud computing domains.