

Computer Science Artificial Intelligence (AI) for Cybersecurity



Why Computer Science Artificial Intelligence (AI) for Cybersecurity?

This Artificial Intelligence Associates program will allow students to prepare for three external Amazon Web Service (AWS) Certification exams while earning the associate degree.

Beginning with the origins and history of AI, Machine learning and computer vision, the focus of the program examines AI as it affects Cybersecurity, teaching students the security implications of AI as well as the benefits for Cybersecurity investigations.

Program Goal

Students are presented with a personalized, student-centered learning program focused on the impact of AI as it relates to Cybersecurity. In the process the program focuses on aspects of AI common to many current AI applications allowing students to use the program materials presented as a platform in many AI related fields.

Admission Requirements

The Computer Science Artificial Intelligence for Cybersecurity program has no additional requirements.

Technical Standards

Most physical requirements necessary for this program can be accommodated with appropriate documentation.

Potential Jobs

- Artificial Intelligence (AI) Specialist
- Software Engineer
- Mobile App Developer
- IoT Developer

Potential Salary

Computer Science remains one of the fastest growing fields, with a projected shortage of qualified job candidates for programmers, networkers, web designers and AI, XR or database professionals.

There is a wide range of jobs in the computer science and innovation industry. See below for the average annual salary range in NH for a **Software or App Developer**.

ENTRY LEVEL	MID-RANGE	EXPERIENCED
\$72,051	\$112,590	\$132,891

**New Hampshire Occupational Employment & Wages 2021, published by the NH Economic + Labor Market Information Bureau — Salaries are based on 40 hours of work, not including overtime.*

“Studies have shown in just the first half of 2023, job listings that feature AI as a skillset have jumped tenfold, meaning these career paths will soon be broadly available.”

*Peter LaMonica,
Computer Science, Dept. Chair*

Degree Requirements

Computer Science Artificial Intelligence (AI) For Cybersecurity

Degree Program - First Year

First Year	Fall Semester	TH	LAB	CR
CSI105M	Introduction to Computer Science	2	2	3
CIS110M	Microsoft® Computer Applications I	2	2	3
CSAI100M	Introduction to Artificial Intelligence (AI)	2	2	3
ENGL110XM or ENGL110M	College Composition I with Corequisite or College Composition I	4	0	4
FYE100M	MCC Essentials	1	0	1
	Apps Elective (<i>CIS107M</i> or <i>CIS108M</i>)	2	2	3
	Total	13	8	17

First Year	Spring Semester	TH	LAB	CR
CSI126M	Introduction to Python	2	2	3
CSAI120M	Machine Learning	2	2	3
MATH155M	College Algebra with Trigonometry	4	0	4
	Physics Elective (<i>PHYS135M</i> or <i>PHYS210M</i>)	3	3	4
	Technical Elective	2	2	3
	Total	13	9	17

Degree Program - Second Year

Second Year	Fall Semester	TH	LAB	CR
CSAI130M	Natural Language Programming	3	3	4
CSAI240M	Artificial Intelligence for Computer Vision	3	3	4
MATH170M	Discrete Mathematics	4	0	4
MATH202M	Probability and Statistics	4	0	4
	Total	14	6	16

Second Year	Spring Semester	TH	LAB	CR
CIS291M	Capstone Senior Seminar	2	2	3
CSAI260M	Artificial Intelligence for Cybersecurity	3	3	4
	English Literature / Philosophy Elective - (3 credits; <i>ENGL213M</i> , <i>ENGL214M</i> or <i>PHIL240M</i>)	3	0	3
	Social Science Elective - (3 credits; <i>ANTH</i> , <i>ECON</i> , <i>GEOG</i> , <i>HIST</i> , <i>POLS</i> , <i>PSYC</i> , <i>SOCI</i>)	3	0	3
	Total	11	5	13
	Total Credits - 63			

Some training in this program is affiliated with Amazon Web Service (AWS) Academy.



More information about this program program is available on our website: [www.https://www.mccnh.edu/academics/programs/computer-science-artificial-intelligence-for-cybersecurity](https://www.mccnh.edu/academics/programs/computer-science-artificial-intelligence-for-cybersecurity)



All courses and degree requirements are subject to change. For the most current information on MCC programs, visit [mccnh.edu](https://www.mccnh.edu).

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