

AI FOR CYBERSECURITY, ASSOCIATE OF SCIENCE DEGREE

This Associate of Science in AI for Cybersecurity degree prepares students to meet the growing demand for cybersecurity professionals who are skilled in using artificial intelligence (AI) to combat increasingly sophisticated cyber threats. The program is structured to provide students with a strong foundation in cybersecurity, computer science, and mathematics, while also introducing critical AI concepts and tools essential for modern defense strategies. Offering a robust technical foundation, practical hands-on experience, and pathways to a rewarding career in the dynamic field of cybersecurity, the program also prepares students for industry certifications like CompTIA Security+ and PenTest+.

Program Level Student Learning Outcomes

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

1. Demonstrate understanding of AI concepts and their applications in detecting and mitigating cybersecurity threats.
2. Apply foundational cybersecurity principles to safeguard systems and networks.
3. Utilize artificial intelligence (AI) powered tools for threat detection, intrusion prevention, and security analysis.
4. Understand the ethical and legal considerations surrounding the use of AI in cybersecurity.

Review the Associate in Science and Associate in Arts Graduation Requirements (<https://catalog.cccd.edu/coastline/graduation-requirements/associate-degree/>) and General Education (<https://catalog.cccd.edu/coastline/general-education/>) requirements.

Course	Title	Units
Required Core		
Complete all of the following courses:		
CYBR C101	Introduction to Cybersecurity	3
CIS C157	Introduction to Python Programming	3
CYBR C170	Cybercrime and CSIRT Coordination	3
ICS C165	Foundations of Data Science and Artificial Intelligence	3
ICS C265	Artificial Intelligence	3
CYBR C210	AI Applications in Cybersecurity	3
CYBR C230	Network Security (Security+)	3
CYBR C242	Ethical Hacking & AI Driven Penetration Testing (PenTest+)	3
CYBR C280	Emerging Trends in Cybersecurity	3
<i>Units Required for Major</i>		27
Local General Education or CalGETC pattern		Varies
Electives to Satisfy Unit Requirement		Varies
Total Units		60