2024-25 Cyber Security AAS Map

Course Sequencing		
Year	**Quarter**	**Subject**
First Year	Fall	CS 101 (Intro to Computers & Info Tech) MATH& 141 (Precalculus 1), 142 (Precalculus 2), 144 (Precalculus 1 & 2), 146 (Intro to Stats), &148 (Business Calculus) OR &151 (Calculus 1) HDEV 101 OR 102 (Creating Academic Success OR College Connections) FYI 101 (First Year Introduction)
	Winter	ENGL& 101 (English Comp 1) CS 102 (Programming Fundamentals) OR 131 (Computer Science I C++) CS 106 (Database Systems)
	Spring	CS 202 (Programming Fundamentals 2) OR 162 (C++2) CS 206 (Database Design) CS 150 (Computer Security)
	Summer	CS 117 (Computer Ethics) CS 118 (Customer Service) OR CS 217 (Internship)
Second Year	Fall	CS 228 (Windows Server) PSYC& 100 (General Psychology), SOC& 101 (Intro to Sociology) or &201 (Social Problems) CMST 104 (Speech Essentials), 110 (Communication Behavior), &210 (Interpersonal Communication), &220 (Public Speaking) or 260 (Multicultural Communication)
	Winter	CS 223 (Unix/Linus) CS 231 (Network Infrastructure) CS 232 (Network Security)
	Spring	CSIA 200 (Computer Forensics Fundamentals) CS 221 (SQL Server Administration) CS 135 (Cloud Fundamentals)

The plan above is only a sample. If you want to see all of the courses we offer, please visit our online catalog here!

BEFORE YOU START

Ready to get started? To begin working towards the AAS degree, you simply need to apply and be accepted to CBC. You can apply online at www.columbiabasin.edu.

ABOUT THE PROGRAM

The study of Cyber Security provides students with limitless opportunities in the Information Technology (IT) workforce. With current technologies integrated into the Cyber Security curriculum, connections with area employers and skills gained from cyber competitions, the CS program prepares students like you for success!

You may be interested in a career in Cyber Security if you:

- Enjoy playing games and writing code
- Enjoy solving complex problems and designing solutions
- Express creativity through use of an ever-expanding set of tools
- Are interested in finding a solution to fight against hackers and to mitigate everyday cyber vulnerabilities

Our connections extend beyond the classroom and facilitate internships as well as contests where students can earn awards of recognition, and volunteer work in the community to enhance your holistic growth. Students can also build new connections of their own within our thriving extra-curricular clubs run by students like you. Start your path at CBC with the fundamental skills you'll need to accomplish your career goals of doing what you love and increasing your income potential by joining this growing industry.

Program Level Outcomes for Computer Science

Program learning outcomes are the knowledge, skills and abilities that students will achieve before they graduate. The outcomes below were developed by the faculty in the Computer Science program at CBC with input from accrediting bodies, advisory committees, employers, etc. This collaboration ensures that the outcomes are relevant for careers that this degree leads to.

Throughout the Computer Science program, students will accomplish the following Program Level Outcomes (PLOs):

1. Solve a problem using appropriate computing algorithms and techniques.
2. Analyze impact of computer systems on organizations, society and the individual.
3. Apply concepts relating to computer systems (database systems, security, hardware, software, programming languages and networks).
4. Perform the basics of computer and network security.
5. Discuss the professional, ethical and societal issues and responsibility.
6. Communicate with customers, supervisors and co-workers.
7. Identify risks, assess threats and develop solutions to protect computer assets and data.

OUT OF CLASS TO DO'S

- Contact your instructors and/or the CBC Career Services Center to find an internship, observation/shadowing experience, or a job in the cyber security field.
- Visit the Academic Success Center for quiet study space, small group study, supplemental instruction and tutoring assistance.

FAQs

Class Times/Delivery Format
Classes are offered in a variety of formats, including in-person, online and hybrid.

Length of Program
Full-time students can complete the AAS in two years.

Which Quarter Can I Begin?
You can begin any quarter!

CAREER OPPORTUNITIES

There are many opportunities for students to start and advance their careers within cyber security.

Cyber Security Specialist/Technician
Cyber Security Specialists/Technicians apply knowledge of cyber security fundamentals to administer, test, implement and coordinate changes to organization network architectures, as well as implement and manage security measures to safeguard them. These jobs lead to Cyber Security Analysts, Cyber Security Consultants and Penetration & Vulnerability Testers.

Cyber Crime Analyst/Investigator
Cyber Crime Analyst/Investigators apply or develop actionable intelligence on advanced cyber threats to our services and our customers. Individuals collect data from a variety of internal and external sources and use it to develop an understanding of high-grade actors and their tools, techniques and procedures. They then leverage that understanding to proactively identify and mitigate malicious activity.

Incident Analyst/Responder
Incident Analyst/Responders work closely with key stakeholders and various engineering disciplines during analysis activities in response to changing security threats and requirements. Generally, this position focuses on risk management and threat modeling, providing tangible and meaningful products that describe the threat landscape to the organization based on input, which supports informal documented risk assessments.

APPLY FOR FINANCIAL AID OR OTHER FUNDING

Please complete:
The FAFSA application: The Free Application for Federal Student Aid (FAFSA) provides financial aid for U.S. citizens and eligible non-citizens, such as permanent residents. Visit the FAFSA website to create your FSA ID and to complete your application.
OR
The WASFA application: The Washington Application for State Financial Aid (WASFA) is for DACA or HB 1079 undocumented students. Visit the Washington Student Achievement Council website to complete your WASFA application.

Did you know??? You can apply for CBC scholarships two times every year! Click here for more information!

PLEASE NOTE: This document represents a sample plan for degree completion with this program of study. Actual course selection and sequence may vary and should be discussed individually with your Completion Coach. Completion Coaches can also help you plan other experiences to enrich your education such as internships, research, learning communities, and campus involvement and community-based learning.

Office Hours: Monday to Thursday 7 am to 4:30 pm; Friday 7 am to noon

LEARN MORE | computerscience@columbiabasin.edu | 509.544.2262 | 2600 N. 20th Ave., Pasco, WA 99301

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