

Secure Software Development

Your expertise in preventing malicious attacks is needed TODAY!



WHAT YOU WILL LEARN

Secure software developers **prevent malicious attacks** by ensuring software is written securely. ACC's Secure Software Development AAS degree combines skills in **computer programming, security, and database development fundamentals**.

As a student, you will get hands-on experience and learn about:

- **Common vulnerabilities** and how to fix them
- **OWASP Top 10 vulnerabilities** and how to fix them
- **SEI CERT Oracle Coding Standard**

EMPLOYMENT

Secure Software Development is a growing field with high demand and a steady future. Your degree can provide you with a variety of job opportunities, such as:

- **Software Developer & Programmer**
- **Information Security Analyst**
- **Software Quality Assurance & Test Engineer**
- **Security Engineer**
- **Software Engineer**

TRANSFER OPTIONS

Through ACC's partnership with CSU Pueblo, you can earn both your Associate of Applied Science (AAS) degree in Secure Software Development and your BS in Computer Information Systems (Software Development Emphasis) at the Sturm Collaboration Campus in Castle Rock!



**Code and construct
your way to Moving Mountains**

For more information or accommodations:

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Program information: arapahoe.edu/secure-software

AAS SECURE SOFTWARE DEVELOPMENT (M/W)—ACC/CSU-Pueblo Transfer Pathway

Courses in black are ACC courses and those in blue are CSU courses

Year 1: Fall	
ENG 1021 English Composition I	3
Natural/Physical Science: GT-SC1 or SC2 <i>Recommended Courses:</i> GEY 1111 Physical Geology w/Lab AST 1110 Planetary Astronomy w/Lab	4
Major Elective— <i>Recommended Course:</i> CNG 1024 Networking I: Network+ (mandatory)	3
CSC 1019 Intro to Programming: Python (mandatory)	3
AAA 1001 College 101: The Student Experience (1 credit)	
Semester Credits	13

Year 3: Fall	
CIS 386 Android Application Development	3
BUSAD 360 Advanced Business Statistics	3
CIS 311 Web Development	3
CIS 350 Database Systems	3
BUSAD 270 Business Communications	3
Semester Credits	15

Year 1: Spring	
Social Behavioral Science: GT SS1-SS3 or Arts & Humanities: GT AH1-AH4 or History: H11* <i>Recommended Courses:</i> HIS 1310 Western Civilization Antiquity – 1650, HIS 1650 Western Civilization, 1650 – Present, PHI 1013 Logic	3
CSC 1060 Computer Science I: Java (mandatory) (pre-req CSC 1019) DO NOT TAKE C++	4
MAT 1340 College Algebra	4
CIS 2020 Fundamentals of Unix (Fall/Spring) (no pre-req)	3
Natural/Physical Science: GT-SC1	4
Semester Credits	18

Year 3: Spring	
MATH 220 Business Math (Calc)	4
Humanities Gen Ed	3
ECON 201 Principles of Macroeconomics	3
MGMT 201 Principles of Management	3
CIS 315 Unix	3
Semester Credits	16

Year 2: Fall	
ENG 1022 English Composition II*	3
CSC 1061 Computer Science II: Java (mandatory) (pre-req CSC 1060) DO NOT TAKE C++	4
CSC 2025 Computer Architecture (Fall only) (pre-req or co-req CSC 1061)	4
CIS 2040 Database Design & Development (Fall only)	3
CSC 1029 Intro to Secure Coding (Fall only) (co-req CSC 1060)	3
Semester Credits	17

Year 4: Fall	
CIS 359 Advanced Programming with C#	3
Open Elective 300/400 level	3
MGMT 368 Project Management	3
ECON 202 Principles of Microeconomics	3
CIS 410 Python	3
Semester Credits	15

Year 2: Spring	
CSC 2045 Secure Software Development (Spring only) (co-req CSC 1061 and pre-req CSC 1029)	3
CIS 2043 Intro to SQL (Spring only) (pre-req CIS 2040)	3
CIS 2068 Systems Analysis & Design (Spring only) (no pre-req)	3
COM 1150 Public Speaking	3
BUS 2026 Business Statistics	3
Semester Credits	15
Total Credits earned from ACC	63

Year 4: Spring	
History Gen Ed	3
CIS 411 Internet Server-side Programming	3
Open Elective 300/400 level	3
CIS 432 Senior Project	6
CIS 493 Senior Seminar	1
Semester Credits	16
Total Credits earned from CSU	62

Total credits to earn a bachelor's degree = 125 Credits

*Can be taken in Summer term.

