Programmer/Cyber Security Analyst
Associate of Applied Science
Applied Programming Focus

Full-Time, Fall Start

www.pima.edu/programmer-aas

In the 21st century, the ability to instruct a computer in a language the computer understands rivals reading, writing and arithmetic in importance. In this degree program, you will learn to design and write software programs and applications while developing your problem-solving skills.

Title IV Financial Aid eligibility: Yes

What can I do with this degree?

Career options: Completing this program can lead to employment in a variety of different careers. Here are some examples of occupations related to this program with associated Pima County-based annual median wages. Some careers may require additional education or training. Source: EMSI

Academic options: Cyber Operations focus: This focus area is designed to transfer to the University of Arizona South's Cyber Operations Engineering Track.

Applied Programming focus: This focus area may apply toward a Bachelor of Applied Science (BAS). See an advisor

CHOOSE YOUR COURSES WITH YOUR COLLEGE ADVISOR

Placement

Students must meet prerequisite standards before taking WRT 101 and to meet the Math Competency, required in the pathway below. If you are not prepared for these courses based on placement results you will need to take courses to build your skills prior to taking them. The sequence of courses follows.

Math: ICS 081 > MAT 092

Reading: ICS 079 > REA 081 > REA 091

Writing: ICS 079 > WRT 090 > WRT 101 (or WRT 101S can replace both WRT 090 and WRT 101)

If BUS 151, GTM 105, or a MAT course higher than MAT 106 is chosen additional coursework may be needed.

Semester Pathway

This pathway is a suggested sequence of courses for your program of study. Work with an advisor to develop a unique pathway for you based on your placement recommendations, any prior college courses and your specific situation.

General Education Note: When General Education (Gen. Ed.) credits are listed below, select from the appropriate General Education course list linked from the program website. Some programs recommend specific courses.

For this pathway, ensure that one Gen. Ed. course fulfills the C or G requirement.

Fall 1 (Semester Total: 15 credits)
CIS 129: Programming and Problem Solving I (4 credits)
CIS 162: Database Design and Development (3 credits)
MAT 151: College Algebra (4 credits)   or **MAT 188** Precalculus I (4 credits)
WRT 101: English Composition (3 credits)
STU 100: College Study Skills (1 credit)

Spring 1 (Semester Total: 16 credits)

BUS 125: eCommerce (3 credits)

ECN 150: An Economic Perspective (3 credits)

CIS 131: Programming and Problem Solving II (4 credits)

CIS 141: Introduction to VB.NET (3 credits)

MAT 172: Finite Mathematics (3 credits)

Fall 2 (Semester Total: 17 credits)

CIS 185: Introduction to Python (3 credits)

CIS 278: C++ and Object-Oriented Programming (4 credits)

CIS 279: Java Programming (4 credits)

CIS 280: Systems Analysis and Design: Concepts and Tools (3 credits)

Gen. Ed.: CTE Arts & Humanities List (3 credits)

Spring 2 (Semester Total: 14 credits)

CIS 250: Introduction to Assembly Language (3 credits)

CIS 269: Data Structures (4 credits)

CIS 281: Systems Analysis and Design: Applications Capstone (3 credits)

CIS 283: Advanced Python (4 credits)

PROGRAM TOTAL: 62 credits

Program/Major/Concentration Codes: **AASCPM/CPM1**

Find more information about this program at:
www.pima.edu/programmer-aas