

Associate of Arts in Computer Information Systems

The Computer Information Systems program covers developing and maintaining information systems that support organizations technical infrastructure. Students will learn about computer hardware and software, creating and supporting databases, building a network, configuring networks, cyber-security fundamentals, and project management which prepares students for entry-level positions as system administrators, network administrators, support technicians, and applications specialists in the computer information services industry. Graduates may enter a Baccalaureate Degree program and/or sit for the Certified Information Systems Security Professional (CISSP), Project Management Professional (PMP), and/or the Certified Cisco Network Associate (CCNA) network certification examinations.

Program learning outcomes

1. Demonstrate the ability to install, configure, and maintain end-user computer systems and software.
2. Research, interpret, and communicate technical information in written, graphic, diagrammatic, electronic and oral forms.
3. Demonstrate the ability to plan and implement both wired and wireless networks sufficient for small business use.
4. Apply project life-cycle concepts to assist in business operations.
5. Demonstrate the ability to work independently or in a group environment with sensitivity to the business and cultural needs (Himdag).
6. Create a comprehensive security plan to protect data (Synthesis Level)

Areas of focus:

Coding - Software development using programming language to accomplish tasks using a computer. Design and build executable programs and applications to solve problems.

Networking - A group of two or more computer systems linked together. Local area networks to wide area networks are configured and maintained using skills obtained in network courses.

Security - Understanding and applying layers of protection for computer systems. From firewalls to penetration testing learn how to protect your digital assets.

GIS - Geographic Information Systems (GIS), solving real world problems creating and using digital maps and layered satellite imagery to reveal patterns, trends, and relationships.

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Program of Study

	General Education Category	Course Requirement	Credits Required	Recommended courses for this degree*
General Education	Tohono O'odham Himdag	HIS 122 Tohono O'odham History and Culture (C)	3	
		THO 101 Elementary Tohono O'odham or THO 106 Conversational Tohono O'odham I	4	
	English Composition	WRT 101 Writing I	3	
		WRT 102 Writing II (I)	3	
	Mathematics	MAT 212 Topics in Calculus or higher	3	
	Humanities and Fine Arts	Choose any course from: Art General Education Selection or Humanities General Education Selection	3	
	Social and Behavioral Sciences	Choose any course from: Social and Behavioral Science General Education Selection	6	PSY 101 Introduction to Psychology, SOC 101 Introduction to Sociology
	Computer Science	CIS 100 Introduction to Computers (offered F, S, Su)	3	
Two Lab-loaded Science Course	Choose any course from: Science	8		
Total General Education Credits			36	

* Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

Core Requirements	Core Courses	
	CIS 127 Programming and Problem Solving I (Offered S)	3
	CIS 130 Fundamentals of Computer Networking (Offered S)	3
	CIS 140 Introduction to Risk Management (Offered F)	3
	CIS 210 Introduction to System Administration (Offered S)	3
	CIS 280 IT Project Management (Offered F)	3
	CIS 297 Internship/Practicum	3
	Total Core Credits	18

F= Fall
S = Spring
Su = Summer

Electives	Choose any two of the following classes:	7-8
	CIS 230N networking Fundamentals - Nt., S (Offered F, starting 2021)	
	CIS 234N Advanced Networking Routing & Switching – Nt., (Offered S, starting 2022)	
	CIS 240N Network Security – Nt., S (Offered S, starting 2022)	
	CIS 250N Coding Fundamentals – C (Offered F, starting 2021)	
	GEO 267 Introduction to GIS – G (Offered F)	
	Total Credits for Elective	7-8
Total Credits for Degree		61-62

Nt = Networking
S = Security
C = Coding
G = GIS