



## Tohono O'odham Community College

### Associate of Arts in Computer Information Systems



NAME:	TOCC ID:
TOCC EMAIL:	PHONE NUMBER:
TERM OF ADMISSION:	EXPECTED GRADUATION YEAR/TERM:
ADVISOR:	REQUIRED CREDITS FOR DEGREE: 58-62

### I. General Education Courses (36 cr):

- Tohono O'odham Himdag: HIS 122 (3 cr) and select one from the following: THO 101, THO 106 (4 cr)
- MAT 212 Topics in Calculus or higher
- Humanities and Fine Arts (6 cr): Any courses from the General Education selection (Catalog p. 188)
- Social and Behavioral Sciences (6 cr). Recommended: PSY 101, SOC 101
- Lab-loaded Science course (courses with N in the prefix; 8 cr): Any course with prefix ANR, AST, BIO, CHM, PHY

Note: MAT 142H and courses ending in N (e.g., BIO 100N) are 4 cr. hrs unless otherwise indicated. The rest of the courses are 3 cr. hrs unless otherwise indicated.

COURSE PREFIX	COURSE NAME	SUBSTITUTE COURSE	SEMESTER	YEAR	CREDITS	GRADE
HIS 122	Tohono O'odham History and Culture					
THO						
WRT 101	Writing I					
WRT 102	Writing II					
MAT						
Humanities and Fine Arts						
Social and Behavioral Sciences						
CIS 100						
Two Lab-loaded Science course						

### II. Core Requirements (18 cr):

COURSE PREFIX	COURSE NAME	SUBSTITUTE COURSE	SEMESTER	YEAR	CREDITS	GRADE
CIS 127	Programming and Problem Solving I					
CIS 130	Fundamentals of Computer Networking					
CIS 140	Introduction to Risk Management					
CIS 210	Introduction to System Administration					
CIS 280	IT Project Management					
CIS 297	Internship/Practicum					

### III. Electives (3 - 8 cr):

Choose courses according to desired concentration area:

COURSE PREFIX	COURSE NAME	SUBSTITUTE COURSE	SEMESTER	YEAR	CREDITS	GRADE
CIS 230N	Networking Fundamentals – Nt., S					
CIS 240N	Network Security – Nt., S					
CIS 250 N	Coding Fundamentals-C					
GEO 267	Introduction to GIS - G					

### 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.

#### Areas of Focus

**Coding (C)** - Software development using programming language to accomplish tasks using a computer. Design and build executable programs and applications to solve problems. Program total: 59 cr hr

**Networking (Nt)** - 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. Program total: 63 cr hr

**Security (S)** - Understanding and applying layers of protection for computer systems. From firewalls to penetration testing learn how to protect your digital assets. Program total: 63 cr hr

**GIS (G)** - Geographic Information Systems (GIS), solving real world problems creating and using digital maps and layered satellite imagery to reveal patterns, trends, and relationships. Program total: 58 cr hrs

#### 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)

#### Students:

You must secure official approval by your advisor(s) before submitting the **final** Program of Study. By signing or entering your name below, you agree to the following statement: "Students are responsible for complete knowledge of Academic Catalog requirements in their degree plan and for adhering to all policies in Academic Catalog and Student Handbook."

**Signature Panel:**

Please indicate approval of the curriculum on the Program of Study by placing your signature (formal electronic signatures are permitted) in the space provided.

Student:	Date:
Faculty Advisor:	Date:
Academic Advisor	Date:
Registrar:	Date:
Dean of Academics:	Date: