



# Tohono O'odham Community College

## Certificate in Geographic Information Science



NAME:	TOCC ID:
TOCC EMAIL:	PHONE NUMBER:
TERM OF ADMISSION:	EXPECTED GRADUATION YEAR/TERM:
ACADEMIC ADVISOR:	FACULTY ADVISOR:

**General Education Courses:**

- Tohono O'odham Himdag (7 cr): HIS 122 (3 cr) and select one from the following: THO 101, THO 106 (4 cr)
- Mathematics: MAT 142H or higher

Note: All courses are 3 cr hrs unless otherwise indicated

COURSE PREFIX	COURSE NAME	REPLACEMENT COURSE	SEMESTER	YEAR	CREDITS	GRADE	MET
HIS 122	Tohono O'odham History and Culture						
THO							
WRT 101	Writing I						
MAT 142H	College Mathematics						
CIS 100	Introduction to Computers						
<b>Total General Education Credits Needed: 17</b>				<b>Total Earned Credits:</b>			

**Core Requirements:**

COURSE PREFIX	COURSE NAME	REPLACEMENT COURSE	SEMESTER	YEAR	CREDITS	GRADE	MET
GEO 170	Introduction to Geospatial Technology (Prerequisite: CIS 100 (or equivalent). Completion of GEO 101N or GEO 103 preferred)						
GEO 217	Introduction to Global Positioning System (2 cr)						
GEO 267	Introduction to GIS (Prerequisite: : CIS 100 (or equivalent) or instructor permission)						
GEO 270	Remote Sensing (Prerequisite: GEO 267 and CIS 100 (or equivalent), or instructor approval)						
GEO 280	GIS Applications (Prerequisite: GEO 267 and GEO 270 or equivalent course, or						

	permission of instructor)						
<b>Total Core Credits Needed: 14</b>				<b>Total Earned Credits:</b>			
<b>Total Program Credits Needed: 31</b>				<b>Total Earned Credits:</b>			

### Certificate in Geographic Information Science

The GIS certificate program consists of 31 credit hours. This certificate is designed to be flexible in that it can provide students with the essential entry level skills to obtain direct employment with the Tohono O’odham Nation and surrounding agencies while also allowing degree-seeking students and community members to gain valuable, practical skills in an emerging technical sector.

#### Program Learning Outcomes:

1. Learn and apply Field Mapping and GNSS Survey Skills
2. Use instrumentation to acquiring Data
3. Develop Maps
4. Think Critically and Spatially
5. Be prepared for a Career in GIS
6. Analyze Patterns in Data

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