

# GEOGRAPHICAL INFORMATION SYSTEMS, COLLEGE CREDIT CERTIFICATE

**Program Code:** GICC  
**Meta-Major:** STEM  
**Location(s):** Cocoa, Melbourne  
**Delivery Method(s):** On-Campus  
**Previous Degree Required:** HS Diploma  
**Eligible for Financial Aid:** Yes  
**Additional Limited Access Application Process Required:** No  
**Program Testing Requirements:**  
**Classification of Instructional Programs (CIP) Code:** 45.0702  
**Florida Department of Education CIP Code:** 0545070213

This certificate is part of the [Computer Information Technology A.S.](#) degree program.

This certificate program is designed to prepare students to acquire understanding of Geographic Information Systems (GIS), including concepts of spatial variables, scale, map projection, and map coordinate systems. Topics include displaying, managing, querying, symbolizing, and creating geospatial data. Students will learn the skills required to work on and/or build advanced Geographic Information Systems (GIS)/ Remote Sensing (RS) projects.

Students currently employed in the GIS field can supplement and upgrade their skills through a variety of offerings in this Geographic Information Systems certificate that include courses that employ the latest in GIS methods and techniques. Some credits earned in this certificate also apply to the [Associate in Science \(A.S.\) degree in Computer Information Technology](#). [Visit the program page for more details and how to apply.](#)

Refer to [course descriptions](#) to determine prerequisites.

## Certificate Requirements

Code	Title	Credit Hours
<b>Major Courses</b>		
ETDC 1540	Civil Drafting	4
ETDC 2320	AutoCAD Fundamentals	4
GIS 2040	Fundamentals of Geographic Information Systems	3
GIS 2047	Applications of GIS, GPS, and Remote Sensing	3
GIS 2060	Advanced Geographic Information Systems	3
GRAC 2150	Raster Graphics	3
GIS 2948	Service-Learning Field Studies 1	1
or SOW 1051	Human Service Experience 1	
<b>Total Credit Hours</b>		<b>21</b>

## Learning Outcomes: Geographical Information Systems, College Credit Certificate

1. Differentiate between storage devices and storage media
  - *Supports Core Ability: Process Information*
2. Identify computer viruses such as Worms, and Trojan Horses

- *Supports Core Ability: Process Information*
3. Organize data for entry into a spreadsheet application
    - *Supports Core Ability: Process Information*
  4. Create constraints enforcing data integrity in relational databases
    - *Supports Core Ability: Process Information*
  5. Code an SQL statement that selectively lists rows and columns from two or more joined tables
    - *Supports Core Ability: Think Critically and Solve Problems*
  6. Code an SQL statement that uses aggregate functions
    - *Supports Core Ability: Think Critically and Solve Problems*
  7. Install an Operating System
    - *Supports Core Ability: Think Critically and Solve Problems*
  8. Classify types, characteristics, and uses of common components on a motherboard
    - *Supports Core Ability: Process Information*
  9. Explain a scope statement framework
    - *Supports Core Ability: Process Information*
  10. Describe a project charter framework
    - *Supports Core Ability: Process Information*