

GEOGRAPHIC INFORMATION SYSTEMS (GIS) SPECIALIZATION - COMPUTER INFORMATION TECHNOLOGY, ASSOCIATE IN SCIENCE

Program Code: CIASGIS
Meta-Major: STEM
Location(s): Cocoa, Melbourne, Palm Bay, Titusville, Online
Delivery Method(s): On-Campus, Hybrid
Previous Degree Required: HS Diploma
Eligible for Financial Aid: Yes
Additional Limited Access Application Process Required: No
Program Testing Requirements: CPT - Common Placement Test (PERT, ACCUPLACER, SAT, ACT)
Classification of Instructional Programs (CIP) Code: 11.0103
Florida Department of Education CIP Code: '1511010307

Students can only select one major and one specialization. Students may receive a specific A.S./B.A.S. degree only one time. While students may take courses from multiple specializations, however, the degree will be awarded only once.

The Geographic Information Systems (GIS) specialization provides students the skills required to work on and/or build advanced Geographic Information Systems (GIS)/ Remote Sensing (RS) projects. Program topics include displaying, managing, querying, symbolizing, and creating geospatial data using concepts that include spatial variables, scale, map projection, and map coordinate systems. [Visit the program page for more details and how to apply.](#)

Specialization Requirements

Code	Title	Credit Hours
General Education Courses		
ENC 1101	Composition 1	3
	Humanities Core Requirement	3
	Mathematics Core Requirement	3
	Natural Science Core Requirement	3
	Social/Behavioral Science/Core-Civic Literacy Requirement	3
Computer Programs - Core Courses		
CET 1176	Computer Maintenance and Repair	3
CGS 1000	Exploring Digital Technology	3
CGS 2100	Microcomputer Applications	3
COP 1000	Principles of Programming	3
COP 2700	Database Techniques	3
CTS 1142	Information Technology Project Management	3
CTS 1329	Microsoft Client O/S	3
CTSC 1134	Network+	3
Geographic Information Systems (GIS) Specialization		
COP 2047	Python Programming	3
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
Technical Electives		2
CGS 2571	Microcomputer Applications-Advanced	
CGS 2941	Internship	
CGS 2948	Service-Learning Field Studies 1	
CIS 2321	Systems Analysis and Design	
COP 2822	Web Page Authoring	
CTS 1321	Linux Networking and System Administration	
CTSC 2120	Network Security Fundamentals	
ENC 2210	Technical Writing	
GIS 2948	Service-Learning Field Studies 1	
MAT 1033	Intermediate Algebra	
Total Credit Hours		60

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Students may choose to add GIS 2948 Service-Learning Field Studies 1 as a 4th quarter credit

Learning Outcomes: Computer Information Technology A.S.

- Differentiate between storage devices and storage media
 - Supports Core Ability: Process Information
- Identify computer viruses such as Worms, and Trojan Horses
 - Supports Core Ability: Process Information
- Organize data for entry into a spreadsheet application
 - Supports Core Ability: Process Information
- Create constraints enforcing data integrity in relational databases
 - Supports Core Ability: Process Information
- Code an SQL statement that selectively lists rows and columns from two or more joined tables
 - Supports Core Ability: Think Critically and Solve Problems
- Code an SQL statement that uses aggregate functions
 - Supports Core Ability: Think Critically and Solve Problems
- Install an Operating System
 - Supports Core Ability: Think Critically and Solve Problems
- Classify types, characteristics, and uses of common components on a motherboard
 - Supports Core Ability: Process Information
- Explain a scope statement framework
 - Supports Core Ability: Process Information
- Describe a project charter framework
 - Supports Core Ability: Process Information