

GEOGRAPHIC INFORMATION SYSTEMS

Geographic Information Systems (GIS) is an integrating technology of various geospatial technologies (including digital mapping, spatial database management, remote sensing imagery, global positioning systems and route finding) that utilize cartographic, geographic, and discipline specific techniques and knowledge to support decision making and analysis in a wide array of career fields. These areas of study and employment include land surveying, crime fighting, market analysis, retail site selection, biological resource management, public works infrastructure mapping and maintenance, geological surveys, landscape architectural design, transportation planning, and any field where knowing where your assets or features are located is involved.

GIS V22 Fundamentals of Mapping and Geographic Information Systems 3 Units

Same-As: GEOG V22

In-Class Hours: 52.5 lecture

C-ID: GEOG 150

This course provides an introduction to mapping and geospatial technologies. This is the foundation course for the use of GIS software. It covers the history, structure, uses, hardware and software requirements, as well as the basic operations of GIS. It also examines the use of other geospatial technologies (paper and digital maps, aerial photography, remote sensing, and global positioning systems (GPS)). Examples will be presented for the uses of these technologies in a number of fields including business, city planning, natural resource management and scientific research. This course is recommended for anyone who is using or anticipates using any of the many types of data that can be mapped.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

GIS V26 Introduction to Geographic Information Systems Software 2 Units

Same-As: GEOG V26

In-Class Hours: 35 lecture

C-ID: GEOG 155

This course is a hands-on computer-based mapping course covering the elements and procedures of using a Geographic Information Systems (GIS) software package (ArcGIS) to learn GIS concepts. It covers all of the basic concepts and skills needed for operating GIS software including creating and editing digital maps, database access and editing, basic cartographic principles, and introductory GIS analysis. It also reviews various application areas that use GIS.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Credit Limitations: see counselor.

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

GIS V27 Intermediate Geographic Information Systems Software 2 Units

In-Class Hours: 35 lecture

This course continues the hands-on computer-based learning in Geographic Information Systems. It specifically covers more detailed methods of spatial analysis in both Raster and Vector data models utilizing tools such as ArcGIS Spatial Analyst and 3D Analyst. The main platform is Esri's ArcGIS Pro, but additional software from Esri and other providers may be covered.

Advisories/Rec Prep: GEOG V26/GIS V26 or equivalent

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

GIS V28A Geographic Information Systems (GIS): Project Development 1.5 Units

Formerly: GIS V28

Same-As: GEOG V28A

In-Class Hours: 17.50 lecture, 26.25 laboratory

This course is an exploration of various Geographic Information Systems (GIS) techniques and concepts through an active learning approach. Students will define, propose, design, and execute a project that will incorporate GIS skills and knowledge.

Advisories/Rec Prep: GIS V26 or GEOG V26 or equivalent skills

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: None

GIS V28B Geographic Information Systems (GIS): Advanced Project Development 1.5 Units

Same-As: GEOG V28B

In-Class Hours: 17.50 lecture, 26.25 laboratory

This course is follow up to the project development work done in GEOG/ GIS V28A. Various advanced Geographic Information Systems (GIS) techniques and concepts will be explored through an active learning approach. Students will define, propose, design, and execute a project which will incorporate advanced GIS skills and knowledge.

Advisories/Rec Prep: GEOG V28A or GIS V28A or significant previous GIS project work

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: None

- Geographic Information Systems (GIS), Proficiency Award (<http://catalog.vcccd.edu/ventura/programs-courses/geographic-information-systems/gis-pa/>)