

MINOR IN INTERDISCIPLINARY GIS APPLICATIONS

GEOGRAPHICAL INFORMATION SYSTEMS

GIS was initially created to geographically pinpoint events or information relative to their position in space. Since its beginning, GIS has revolutionized the way we extract information from data, and has had direct impact on how humanity solves problems and intervenes in the community.

GIS technology offers new and powerful ways of combining data, mapping and spatial analysis to support research, management and policy-making. GIS users are trained in spatial modeling and know how to manipulate digital data, create databases, and develop software. Currently, GIS is used in a broad range of fields, including social sciences, humanities, history, engineering, business, and management.

GIS AT CAL POLY POMONA

An interdisciplinary GIS Minor was created for Cal Poly Pomona students whose majors include civil engineering, business, design, science, urban planning, education, agriculture and geography, in an effort to create a GIS-literate campus. The minor serves students who are interested in the application of GIS to their area of knowledge, or who seek to develop their skills in GIS-related areas

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The minor provides students with the knowledge and skills required to utilize GIS applications in their respective fields. Components of the program include:

- data acquisition and manipulation
- development of spatial thinking and visualization skills
- creation of models and use of analytic methods
- programming
- problem solving using applied GIS technology
- learning to create effective output
- process management
- GIS theory and ethics
- interdisciplinary focus

The GIS minor provides fundamentals of GIS for students without previous work in GIS, but allows for modifications to the core for students with prior experience.

REQUIRED COURSES FOR THE MINOR

During first year, students take introductory and core courses. The second year is dedicated to application and capstone courses in the student's specific area of interest. The following table summarizes the course elements and sequence. The 4 unit elective can be chosen from several departments, with the approval of the GIS Minor coordinator and the GIS advisor for the student's department.

First Year			Second Year		
FALL	GEO 240 (4)	EGR/ENV/GEO 215 (2)	FALL	One 4 unit elective	EGR/ENV/GEO 494 (2)
WINTER	GEO 442 (4)	EGR/ENV/GEO 499 (4)	WINTER		EGR/ENV/GEO 495 (2)
SPRING	GEO 443 (4)		SPRING		EGR/ENV/GEO 496 (2)

For more information about the Cal Poly Pomona GIS Minor Program, please contact:

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