

GEOGRAPHIC INFORMATION SYSTEMS, CERTIFICATE

UGCT-AS GIS

Geography and Planning

Classroom Building A213
(716) 878-6216

In today's world of computers, tablets, and smartphones there is an abundance of spatial data available that is applicable to many disciplines and careers. Spatial data identifies the geographic location of features and boundaries on Earth and is usually stored as geographic coordinates. The Geographic Information Systems (GIS) certificate will provide students with a background in spatial thinking, analysis, and mapping skills that will allow them to understand the application of geospatial technology to their discipline or career path. The geospatial skills and technology emphasized in the GIS certificate will enrich analysis and improve decision-making across disciplines.

GEG 390	QUANTITATIVE METHODS IN GEOGRAPHY AND PLANNING
HEW 326	INTRODUCTION TO HEALTH DATA VISUALIZATION AND ANALYTICS
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS
PSC 204	POLITICAL STATISTICS
PSY 306	STATISTICS IN PSYCHOLOGICAL RESEARCH
SOC 299	SOCIAL STATISTICS
Total Credit Hours	

15

Code	Title	Credit Hours
Required Courses (6 credit hours)		
GEG/PLN 325	MAPS AND MAPMAKING USING GIS	3
GEG 425	FUNDAMENTALS OF GIS	3
Elective Courses (9 credit hours)		
<i>Select two courses from the following (6 credit hours):</i>		6
GEG 418	REMOTE SENSING	
GEG 429	ADVANCED TOPICS IN GIS	
GEG 485	INTERACTIVE AND WEB-BASED MAPPING	
<i>Select one course from the following (3 credit hours):</i>		3
Any course not selected to fulfill the above requirements		
GEG 405	URBAN ANALYSIS USING GIS	
GEG 427	CORPORATE APPLICATIONS IN GIS	
GEG 428	ENVIRONMENTAL ASSESSMENT AND PLANNING APPLICATIONS IN GIS	
BIO 300	BIOSTATISTICS	
CIS 151	COMPUTER-BASED INFORMATION PROCESSING I	
CRJ 310	STATISTICS IN CRIMINAL JUSTICE	
ECO 305	STATISTICS FOR ECONOMICS	