

Industry Sector: Information Technology

Pathway: Geographic Information Systems AS



California Program of Study

Level	Grade	English Language Arts	Math	Social Studies	Science	Career Technical Education Course	Other Required Courses or Recommended Electives		Sample Occupations relating to this pathway (Including SOC Code)
High School	9	English	Math	Social Science	Science		Physical Education		Occupations requiring a high school diploma <ul style="list-style-type: none"> ➤ GIS Intern ➤ Mapping Intern ➤ Surveying Intern Occupations requiring some post-secondary <ul style="list-style-type: none"> ➤ GIS Intern ➤ Mapping Intern ➤ Surveying Intern
	10	English	Math	World History	Science		Physical Education	Visual/Performing Arts or Foreign Language	
	11	English		US History					
	12	English (Recommended)		Civics and American Government					
(High School courses listed in the light green and yellow areas are the Minimum State High School Graduation requirements)									Occupations requiring a 2 year Degree <ul style="list-style-type: none"> ➤ GIS Technician ➤ Mapping Technician ➤ Surveying Technician Occupations requiring a BA/BS Degree <ul style="list-style-type: none"> ➤ GIS Analyst ➤ GIS Manager ➤ Cartographer ➤ Photogrammetrist ➤ Land Surveyor Industry recognized certifications, licenses, credentials or apprenticeships related to this pathway. <ul style="list-style-type: none"> ➤ Columbia College GIS Micro Credential ➤ Columbia College GIS Certificate ➤ Columbia College GIS ASOE Degree ➤ GIS BA/BS Degree ➤ GIS MA/MS Degree ➤ GIS PhD Degree ➤ GISP Professional Certification ➤ ESRI Technical Certification
13		Fall Year 1	Spring Year 1	Summer	Fall Year 2	Spring Year 2			
14		GEOGR 59 Intro to GPS/GIS (3)	GEOGR 60 Introduction to ArcGIS (3)	GE (3)	GEOGR 70 Introduction to Raster GIS (3)	GEOGR 68 Introduction to UAV/Drone Mapping (3)			
		GEOGR 66 Webmapping (1)	GEOGR 61 Introduction to GIS Incident Mapping (1)	GE (3)	CCTIS 4 Windows Operating Systems Essentials (1.5)	GEOGR 75 Intro to Remote Sensing (3)			
		FNR 60 Intro to Maps and Remote (2)	FNR 53 Forest Surveying (3)		MATH 101 Algebra I (5)	MATH 104 Algebra II (5)			
		Complete one course: ESC 5 Physical Geology (4) ESC 10 Environmental Geology (3) ESC 23 Historical Geology (4) ESC 33 Intro to the Earth (4) ESC 42 Natural Hazards (3) GEOG 15 Physical Geography (3) <i>GE B.1</i>	CCTIS 10 Computer Concept & Information Systems (4)		Physical Education Activity (1)	FNR 1 Environmental Conservation (3) <i>GE - AREA D</i>			
	ENGL 1A Reading & Comp: Beginning (3) <i>GE - Area A.2</i>	GE (3)		GE (3)	Physical Education Activity (1)				
GE requirements – One each from the following areas: (A.1 or A.3, A.2, B.1 or B.2, Math 104, C.1 or C.2, one course from DO-D9, one course E, plus 1 Physical Education activity courses and one additional unit of activity.)									