

Industry Sector: Information Technology

Pathway: AS Degree - Geographic Information Systems



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
	10	English	Math	World History	Science		Physical Education Visual/Performing Arts or Foreign Language	
	11	English		US History				Occupations requiring some post-secondary <ul style="list-style-type: none"> ➤ GIS Intern ➤ Mapping Intern ➤ Surveying Intern
	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)								
High School	13	Fall Year 1		Spring Year 1	Summer	Fall Year 2	Spring Year 2	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
	14	CCTIS 60 -or- GEOGR 60 Introduction to ArcGIS (3)		CMPS 70 -or- GEOGR 70 Introduction to Raster-Based GIS (3)	GE (3)	CCTIS 65 -or- GEOGR 65 GIS Applications (3)	CCTIS 75 -or- GEOGR 75 GIS Applications in Resource Management (3)	
		FNR 60 Intro to Maps and Remote (2)		FORTC 153 Forest Surveying (1.5 -3)	MATH101 or higher(5)	CCTIS 4 Windows Operating Systems Essentials (1)	FNR 1 Environmental Conservation (3) (GE AREA D)	
		ESC 5 or 10 or 12 or 22 or 33 or 42 or GEOG 15 (3) (GE B.1)		CCTIS 10 Computer Concept & Information Systems (4)	Physical Education Activity Course(1)		Physical Education Activity Course (1)	
		ENGL 1A Reading & Comp: Beginning (3) (GE A.2)		GE (3)		GE (3)		
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.)								