

Industry Sector: Agriculture and Natural Resources

Pathway: Water Resources Management - Certificate



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"> ➤ Tree Planter ➤ Truck Driver ➤ Mill Laborer 	
	10	English	Math	World History	Science		Physical Education	Visual/Performing Arts or Foreign Language		
High School	11	English		US History					Occupations requiring some post-secondary <ul style="list-style-type: none"> ➤ Interpretive Guide ➤ Recreation Tech ➤ Biology Crew Member 	
	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)										
As Degree	As Degree Suggested Course Sequence Years 1 & 2									
	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"> ➤ Utility Forester ➤ Wilderness Ranger ➤ Land Surveyor Occupations requiring a BA/BS Degree <ul style="list-style-type: none"> ➤ Wildlife Biologist ➤ Forester ➤ Watershed Manager ➤ Resource Officer Industry recognized certifications, licenses, credentials or apprenticeships related to this pathway. <ul style="list-style-type: none"> ➤ Applicators License ➤ Registered Professional Forester ➤ Certified Arborist
	14	FNR 1 Environmental Conservation (3) <i>Meets GE – AREA D</i>	Complete one course: CCTIS 59 / GEOGR 59 Geographic Information/Global Positioning (1-3) CCTIS 60 GEOGR 60 Introduction to Arc GIS (3) <i>Offered Spring only</i>			Complete two courses: BIOL 24 General Ecology BIOL 65 Microbiology BIOL 179 Fishing/Fishery Biology				
		FNR 60 Introduction to Maps and Remote Sensing (2)	Complete three courses: FNR 30 Intro to Watershed Manage (3) FNR 63 Water for Consumption (3) FNR 64 Water Infrastructure in CA (3) FNR 65 Rural Wastewater Strategies (3) FNR 66 Decentralized Wastewater Mange (3) FNR 67 Operation of Wastewater Treatment 1 (3) FNR 69 Operation of Wastewater Treatment 2 (3) FNR 71 Water Use Efficiency (1)			ESC 5 Physical Geology ESC 35TR Geology of the Tuolumne River ESC 50 Oceanography ESC 62 Meteorology				
		FNR 61 Introduction to Water Resources Management (3)				FNR 3 Natural Resources Law/Policy FNR 6 Soil Resources FNR 11 Natural Resources Field Camp FNR 53 Forest Surveying FNR 183 Ecological Restoration <i>Meets Area B.1 GE (3)</i>				