

Industry Sector: Agriculture and Natural Resources

Pathway: Natural Resources 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 ➤ Ditch Tender ➤ Utility Worker ➤ Meter Reader ➤ River Guide		
	10	English	Math	World History	Science		Physical Education	Visual/Performing Arts or Foreign Language			
High School	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 some post-secondary ➤ Wastewater Treatment Plant Operator ➤ Drinking Water Treatment Plant Operator ➤ Water Use Efficiency Practitioner Occupations requiring a 2 year Degree ➤ Watershed Manager ➤ Utility Foreman ➤ Lab Technician Occupations requiring a BA/BS Degree ➤ Utility District Manger ➤ Fisheries Biologist ➤ Regulatory Inspector Industry recognized certifications, licenses, credentials or apprenticeships related to this pathway.	
13	As Degree Suggested Course Sequence Years 1&2										
		Fall Year 1			Spring Year 1			Summer	Fall Year 2		Spring Year 2
	14	FNR 1 Environmental Conservation (3) <i>Meets GE – AREA D</i>			Complete one course: FNR 30 Intro Watershed Management (3) FNR 61 Intro Water Resources Management (3) FNR 63 Water for Consumption (3) FNR 64 Water Infrastructure in CA FNR 65 Rural Wastewater (3) FNR 66 Decentralized Wastewater (3) FNR 67 Operation of Wastewater Treatment (3)						
		FNR 60 Introduction to Maps and Remote Sensing (2)			Complete one course: CCTIS 59 / GEOGR 59 Geographic Info/Global Positioning (1-3) CCTIS 60 / GEOGR 60 Introduction to Arc GIS (3) (Offered Spring only)						
		Complete three courses (3-9 units): BIOL 39 Field Biology (1-2) BIOL 40 Field Biology: Ecosystems (1) BIOL 158 Birds of Central CA (1) BIOL 159 Wildflowers (1.5) BIOL 160 Mushrooms and Other Fungi (1) ESC 35 Field Geology (1-2) FNR 11 Natural Resources Field Camp (3) FNR 12 Tallest, Oldest, Largest (3) FNR 50 Natural History and Ecology (2) FNR 71 Water Use Efficiency (1) FNR 86 CA Naturalist Certification (3) FNR 172 Nature Photography (1.5) FNR 173 Drawing Nature (1.5) FNR 182 Techniques of Surveying Sierra Nevada Wildlife (2) FNR 183 Ecological Restoration (1) FNR 185 Intro Nat'l Wilderness Preservation Systems (1)			Complete two courses (4-8 units): BIOL 24 General Ecology (4) ESC 5 Physical Geology (4) FNR 2 Intro to Forestry (3) FNR 10 Dendrology (3) FNR 22 Ecology and Use of Fire in Forest Ecosystems (2) FNR 24 Fire-Fuels Management (3) FNR 53 Forest Surveying (3) FNR 62 Applied Forest Inventory and Management (2) FNR 81 CA Wildlife (3)						
	FNR 3 Natural Resources Law and Policy (3)										