

**2011-13 Cal Poly Catalog****College of Agriculture, Food and  
Environmental Sciences****GEOGRAPHIC INFORMATION SYSTEMS FOR  
AGRICULTURE MINOR**

BioResource and Agricultural Engineering  
Bldg. 08, Room 101, 805 756-2378

**Coordinator: Tom Mastin**

An interdisciplinary program sponsored by three departments in CAFES: BioResource and Agricultural Engineering, Natural Resources Management, and Horticulture and Crop Science. New technologies of geographic information systems (GIS), global positioning systems (GPS), and orthophotography (uniform scale aerial photographs) are revolutionizing the management of resources. There are great employment opportunities for those who understand these technologies. Students interested in this minor may come from the following majors: forestry and natural resources, crop science, soil science, landscape architecture, agricultural systems management, bioresource and agricultural engineering, animal science or earth sciences.

**Required Courses**

BRAE 133 Intro. to Engr. Design Graphics (1) *and*  
BRAE 151 CAD for Agric. Engr. (1),

*or*

CE 112 Design Principles in Civil Engr (2) *and*

CE 113 Computer Aided Drafting in Civil Engr (2) 2/4

BRAE 239 Engineering Surveying ..... 4

BRAE 345 Aerial Photogrammetry/Remote Sensing 3

NR/LA 318 Applications in GIS ..... 3

NR 418 Applied GIS *or*

BRAE/LA/HCS 470 Selected Adv. Topics ..... 3

**Emphasis areas** (select one)..... 12

***Environmental Information Emphasis***

BRAE 447 Adv Surveying-GIS Applications (4)

NR 306 Natural Res Ecology/Habitat Mgt (4) *or*

BIO 325 General Ecology (4)

NR 416 Environmental Impact Analysis/Mgmt (4)

***Precision Agriculture Emphasis***

CRSC 244 Precision Farming (4)

Select two of the following (8):

BRAE 447; CRSC 445; HCS 410; PPSC 405, 431;

SS 433; VGSC 423

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