

AGRICULTURE, SPECIALIZATION IN IRRIGATION (MS)

Offered at: San Luis Obispo Campus

The MS in Agriculture program provides students with advanced knowledge and skills in their areas of interest to succeed in their future endeavors. The MS in Agriculture with an Irrigation specialization provides graduates with a solid foundation in irrigation theory and design, combined with a pragmatic approach to water management. Professors work closely with students to develop and complete an appropriate course of study. Graduates hold positions such as water conservation specialists, manufacturing representatives, farm managers, and irrigation system designers. The Cal Poly irrigation teaching program is widely recognized and respected throughout the agricultural community and irrigation industry worldwide.

Requirements for Admission

Students apply via Cal State Apply (<https://www.calstate.edu/apply/>) and must submit a transcript, a personal statement addressing motivation for pursuing a Master's in Agriculture at Cal Poly, and two letters of recommendation. In addition, applicants who did not obtain their undergraduate degree at Cal Poly are also required to submit scores from the GRE General test. Communicating with the Graduate Program Coordinator before applying is strongly recommended.

International Students must meet all the standard eligibility criteria and demonstrate proficiency in English (English Proficiency Exam Requirements)

Prerequisites: A surveying course and fluid dynamics/hydraulics course.

Minimum GPA: Must have attained a minimum grade point average of 2.75 in the last 60 semester units attempted.

Application due date: Applications are accepted for Fall and Spring semesters. Please see Graduate Student Dates and Deadlines (<https://www.calpoly.edu/admissions/graduate-student/dates-and-deadlines/>) for application deadlines.

Advancement to Candidacy

Turn in the Working Formal Study Plan and the CAFES Graduate Committee Form by the end of the first term.

Culminating Experience

Thesis: Along with a faculty advisor, students will work on a specific research topic, preparing a written thesis, and present it to the public as a 45-minute thesis seminar, after which the thesis committee will have the opportunity to privately ask related questions as the student defends the thesis.

Program Learning Objectives

1. Demonstrate expertise in designing and managing irrigation systems.
2. Develop, test or select the appropriate technology used for irrigation management and agricultural water distribution based on current conditions and future needs.
3. Demonstrate effective communication skills.
4. Formulate decisions utilizing professional ethics within their respective disciplines.
5. Examine the value and role of diversity of people and ideas when developing agricultural system solutions.
6. Investigate problems using critical thinking and derive appropriate solutions to properly irrigated crops and manage water resources.

Code	Title	Units
REQUIRED COURSES		
AG 5581	Graduate Seminar	1
or FSN 5505	Orientation to Graduate Studies	
BRAE 4414	Irrigation Engineering	3
BRAE 5532	Water Pumps and Wells	3
BRAE 5533	Irrigation Project Design	3
BRAE 5599	Thesis	6
ESCI 5501	Research Planning	3
STAT 5110	Introductory Statistics for Graduate Students	3
STAT 5120	Intermediate Statistics for Graduate Students	3
Approved Electives		
Select from the following:		5
BRAE 4440	Agricultural Irrigation Systems	
BRAE 5405	Chemigation	
BRAE 5435	Hydrology and Drainage	
BRAE 5500	Individual Study	

NR 4408

Water Resource Law and Policy

Total Units**30**