

## AGRICULTURE

### Master of Science in Agriculture

#### Agricultural Science Subplan (Agricultural Education)

www.csupomona.edu/agsci

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#### Agricultural Science Concentration

The Master of Science degree in Agriculture, Agricultural Science subplan provides students the opportunity to enhance knowledge and competence in a selected area of specialization and encourages individual study and research. The curriculum is designed to assist individuals employed in agricultural education to become more proficient in research methodology and design, statistical analysis, utilization of technology, and advance in a concentration area of their choice. Students desiring additional experience with industry can include as an internship in an industry sector they choose. This degree has successfully enhanced the careers of individuals employed in public schools, community colleges, universities, cooperative extension, and other agricultural career fields.

#### ADMISSION TO THE PROGRAM

An applicant for admission to the master's degree program in Agricultural Science should have a baccalaureate degree in agriculture and will complete the requirements for a Single Subject and Specialist Credential in Agriculture prior to advancing to candidacy and taking the comprehensive exam. Applicants without a baccalaureate degree in agriculture will be required to take undergraduate level courses in the College of Agriculture prior to being unconditionally admitted into the program. A cumulative undergraduate grade point average of 2.75 overall, or 2.75 in the final 90 units of coursework, is required. In addition, the Agricultural Education Program Coordinator must receive three letters of recommendation from individuals familiar with the applicant's academic qualifications and potential as a graduate student. International students seeking admission into the program must achieve a score of 550 on the TOEFL. An applicant not meeting these standards may be conditionally admitted with the approval of the program's Graduate Admissions Committee. The conditional student must comply with the requirements of admission within three quarters.

The student, along with an appointed advisory committee, will develop a program by the end of the second quarter, based on the student's interests and preparation. The student's approved program will include required basic core courses, a selection of additional courses in a specialization, electives, independent study, and a thesis or comprehensive examination. The student must have on file an approved program within two quarters of admission to the master's program. Students electing to complete additional coursework and the comprehensive examination in lieu of the thesis must be agricultural education teachers.

#### Advancement to Candidacy

Admission to the program does not admit a student to candidacy for the degree. Advancement to Candidacy is contingent upon the recommendation of the graduate coordinator. A student who has not been admitted to candidacy is not eligible to register for the thesis (AGS 696) or comprehensive examination (AGS 697). In order to advance to candidacy for the Master of Science in Agriculture, Agricultural Science subplan, a student must: (1) complete at least 12 units of graduate

coursework at Cal Poly Pomona with a GPA of 3.0 or better; (2) pass the Graduation Writing Test; and, (3) with the major professor and Graduate Coordinator, develop and file a program of study. The official program of study must be prepared and submitted for approval no later than the end of the second quarter of attendance.

#### REQUIREMENTS

1. The degree program shall include a minimum of 45 quarter units of which at least 24 units shall be in 500- or 600-level courses. Additional coursework may be required to eliminate subject matter deficiencies. At least 24 units must be within the broad field of agriculture.
2. A grade point average of 3.0 (B) or better must be maintained in all upper division undergraduate and all graduate courses. No course with a grade lower than "C" (2.0) may apply toward the fulfillment of degree requirements.
3. No more than 13 quarter units of acceptable graduate credit may be transferred from another graduate institution. No more than 13 units taken through Extended University may be used on a contract. No more than 13 units of acceptable graduate credit may be petitioned by an undergraduate student. A total limit of 13 transfer, Extended University, and/or units petitioned for graduate credit may be included on a master's contract. The stipulated time limit of 7 years applies to all of the above.
4. Graduate students enrolled in the Single Subject Credential program who have completed their undergraduate degree may complete more than 13 units of the master's program prior to admission under the following conditions: (a) The student must meet the requirements for unconditional admission into the master's program; (b) prior permission from the department Graduate Coordinator must have been obtained.
5. The student will develop a program based upon the curriculum outline that follows, in consultation with the major professor and the department Graduate Coordinator and be approved by the Graduate Studies Analyst.
6. Advancement to Candidacy is required.
7. A candidate completing thesis must submit two final copies for binding in accordance with university regulations and successfully complete a final oral examination covering the thesis and the candidate's area of specialization.
8. The candidate must be enrolled in the university during the quarter of graduation.

#### CURRICULUM

##### NON-THESIS

*(Open to Agriculture Teachers or Agriculture Credential Candidates Only)*

##### Required Courses

Statistics for Agriculture	AG	545	(4)
Introduction to Graduate Research	AG	500	(2)
Youth and Adult Programs and Adult Leadership	AGS	505/505L	(2/1)
Internship	AGS	560	(3)
Directed Study	AGS	591	(3)
Educational Computer Technology	GED	507/507L	(4)

Choose one from the following: (4)  
Seminar in Animal Science AVS 598 (4)

Seminar in Agricultural Biology	AGB	550	(3)
Seminar in Agronomy	AGR	550	(3)
Seminar in Horticulture	HOR	550	(3)
Comprehensive Examination	AGS	697	(1)
Total Required units			(18)

**Elective Courses**

Units to be selected with consent of the student's major professor and graduate committee			(21)
Total Elective units			(21)

**Program total**

Total units in program			(45)
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**THESIS****Required Ag Core Courses**

Intro to Graduate Research	AG	500	(3)
Design and Analysis of Experimental Research I	AG	545	(4)
Design and Analysis of Experimental Research II	AG	575	(4)
New Research Proposal	AG	594	(3)
Total Core			(16)

**Required Courses**

Directed Study	AGS	591	(3)
Special Topics	AGS	599	(4)

Choose one from the following: (3-4)

Seminar in Animal Science	AVS	598	(4)
Seminar in Agricultural Biology	AGB	550	(3)
Seminar in Agronomy	AGR	550	(3)
Seminar in Food Science	FN	570	(4)
Seminar in Horticulture	HOR	550	(3)

Thesis Research	AGS	694	(6)
Master's Degree Thesis	AGS	696	(6)
Total Required units			(22-23)

**Elective Courses**

Units to be selected with consent of the student's major professor and graduate committee			(6-7)
Total Elective units			(6-7)

**Program total**

Total units in program			(45)
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**GRADUATE COURSE DESCRIPTIONS****AGS 505/505A Young and Adult Programs and Adult Leadership (2/1)**

Organization, history, philosophy, administration and procedures in advising of the Future Farmers Association (FFA) chapters and conducting classes for out-of-school youth and adults. Surveys and plans for development of rural and urban adult programs, FFA and Young Farmer programs, techniques and methods. 2 lecture discussions; 1 two-hour activity. Concurrent enrollment required.

**AGS 560 Internship (1-3)**

On-the-job experience with public and private agencies for graduate students. Professional experience new to the student to enhance the level of competence in agriculture. One unit credit for each 40 hours of experience. Written reports necessary. Approval required before enrolling. Students are permitted to take only 1-3 units per quarter.

**FMA 575 Statistics for Agriculture (4)**

A summary of statistical tools and techniques used in agriculture. Application of computers to selected statistical techniques. Open to graduate students only. 4 lectures.

**AGS 591 Directed Study (1-3)**

Individualized study, research, or readings in a specialized area under the direction of a faculty member. May be repeated for a maximum of 4 units. Students are permitted to take only 1-3 units per quarter.

**AGS 599/599A/599L Special Topics for Graduate Students (1-4)**

Group study of selected topics, the title to be specified in advance. Instruction by lecture, activity, laboratory or a combination. Prerequisite: permission of major professor and graduate committee.

**AGS 692 Independent Study (1-2)**

Individualized study, research, or readings in a specialized area proposed by the student and conducted under the direction of a faculty member. May be repeated for a maximum of 4 units. Students are permitted to take only 1-2 units per quarter. Unconditional standing required.

**AGS 694 Thesis Research (1-3)**

Research conducted in area of specialization under the direction of a faculty member as part of the preparation for writing a thesis. May be repeated for a maximum of 6 units. Students are permitted to take only 1-3 units per quarter. Unconditional standing required.

**AGS 696 Master's Degree Thesis (1-3) (Credit/No credit)**

Compilation, evaluation, interpretation, and presentation in thesis form of supervised research. May be repeated for a maximum of 6 units. Students are permitted to take only 1-3 units per quarter. Advancement to Candidacy required.

**AGS 697 Comprehensive Examination (1) (Credit/No credit)**

Preparation for and completion of the written comprehensive examination. The examination may be taken no more than two times. Failure to complete it satisfactorily the second time will result in termination from the program. Advancement to Candidacy required.

**AGS 699 Master's Degree Continuation (0)**

Enrollment in this course allows candidates that have enrolled in the maximum number of thesis or project units to maintain resident status in order to receive university services. Approval of graduate program coordinator is required to register for this class. Advancement to candidacy is required. This course is graded on a mandatory credit/no credit basis.