

MASTER OF SCIENCE IN AGRICULTURAL AND RESOURCE ECONOMICS, PLAN A

The Master of Science in Agricultural and Resource Economics, Plan A, offered by the Department of Agricultural and Resource Economics, is a program of study consisting of 30 credit hours, including the preparation and defense of an original M.S. research thesis (up to 6 credits of research work). Completion of this degree implies a mastery of fundamental microeconomic theory and econometrics, with an ability to conduct applied economic research under supervision. Graduates are competitive for employment in the public and private sectors as analysts, consultants, researchers, and other occupations involving analytical skills. Our students have gone on to rewarding careers in federal agencies, NGOs, and the private sector. The program provides a solid foundation in microeconomics and quantitative methods, coupled with direct experience in applied economic research. This course of study represents an excellent basis for those inclined to pursue doctoral degrees, and many of our students have entered our own Ph.D. program or other top-level institutions across the country.

[Students interested in graduate work should refer to the Graduate and Professional Bulletin.](#)

Learning Objectives

Upon successful completion, students will be able to:

1. Conduct impactful economic analysis and use quantitative tools to solve problems relevant to agricultural and environmental and natural resource economics.
2. Demonstrate competency in the theoretical and quantitative foundations of economics to successfully enter and complete a PhD program in applied economics.
3. Communicate economic concepts, analysis, and findings in both oral and written forms across a wide range of professional settings.
4. Support the dissemination of economic theory and methods as applied to topics in agricultural and natural resource economics.

Requirements Effective Fall 2026

Code	Title	Credits
Core Courses		
AREC 506/ECON 506	Applied Microeconomic Theory	3
AREC 507	Applied Welfare and Policy Analysis	3
AREC 535/ECON 535	Applied Econometrics	3
ECON 501	Quantitative Methods for Economists	3
Methods Courses		
Select one from the following:		3
AREC 615	Optimization Methods for Applied Economics	
AREC 635/ ECON 635	Econometric Theory I	
Field Courses		

Select one group from the following: 3-6

Group A:	
AREC 540/ ECON 540	Environmental and Natural Resource Economics
Group B:	
AREC 605	Agricultural Production and Cost Analysis
AREC 610	Agricultural Marketing and Demand Analysis

Electives

Elective courses can come from any course at the 300-level or higher, cannot be considered prerequisites to enter the MS program, and should be agreed upon by the student's advisor. The most commonly taken elective courses have AREC and ECON prefixes. Additionally, courses from the Statistics, Applied Statistics, and Mathematics departments as well as with GRAD prefix are commonly taken. 3-6

Thesis

AREC 699	Thesis ¹	6
----------	---------------------	---

Program Total Credits: 30

A minimum of 30 credits are required to complete this program.

¹ Thesis/Defense: Students must pass the final Oral Examination. Details concerning defense procedures can be found in the Department Graduate Handbook (<https://agsci.colostate.edu/dare/wp-content/uploads/sites/141/2025/07/Graduate-Student-Handbook-Fall-2024-1.pdf>).

Requirements for All Graduate Degrees

For more information, please visit Requirements for All Graduate Degrees (<https://catalog.colostate.edu/general-catalog/graduate-bulletin/graduate-study/procedures-requirements-all-degrees/>) in the Graduate and Professional Bulletin (<https://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

Summary of Procedures for the Master's and Doctoral Degrees

NOTE: Each semester the Graduate School publishes a schedule of deadlines. Deadlines are available on the Graduate School website (<https://graduateschool.colostate.edu/deadline-dates/>). Students should consult this schedule whenever they approach important steps in their careers.

Forms (<https://graduateschool.colostate.edu/forms/>) are available online.

Step	Due Date
1. Application for admission (online)	Six months before first registration
2. Diagnostic examination when required	Before first registration
3. Appointment of advisor	Before first registration
4. Selection of graduate committee	Before the time of fourth regular semester registration
5. Filing of program of study (GS Form 6)	Before the time of fourth regular semester registration
6. Preliminary examination (Ph.D. and PD)	Two terms prior to final examination

7. Report of preliminary examination (GS Form 16) - (Ph.D. and PD)	Within two working days after results are known
8. Changes in committee (GS Form 9A)	When change is made
9. Application for Graduation (GS Form 25)	Refer to published deadlines from the Graduate School Website
9a. Reapplication for Graduation (online)	Failure to graduate requires Reapplication for Graduation (online) for the next time term for which you are applying
10. Submit thesis or dissertation to committee	At least two weeks prior to the examination or at the discretion of the graduate committee
11. Final examination	Refer to published deadlines from the Graduate School Website
12. Report of final examination (GS Form 24)	Within two working days after results are known; refer to published deadlines from the Graduate School website
13. Submit a signed Thesis/ Dissertation Submission Form (GS Form 30) to the Graduate School and Submit the Survey of Earned Doctorates (Ph.D. only) prior to submitting the electronic thesis/ dissertation	Refer to published deadlines from the Graduate School website.
14. Submit the thesis/dissertation electronically	Refer to published deadlines from the Graduate School website
15. Graduation	Ceremony information is available from the Graduate School website