



Department of Economics
Graduate Program
Policies and Procedures

Table of Contents

Introduction	3
Ph.D. Degree Requirements	3
Majors	3
Ph.D. Credit Requirements	3
Major Professor	3
Program of Study Committee (POSC)	4
Qualifying Examinations in Economic Theory.....	4
Field of Concentration Requirements.....	5
Third Year Paper.....	5
Preliminary Oral Examination	6
Final Oral Examination	6
Co-major Requirements.....	6
Grading of Ph.D. Graduate Courses	7
Ph.D. Course Expiration	7
Annual Review of Ph.D. Students	7
Ph.D. Normal Progress Guidelines	7
Entry.....	7
First Year	7
Second Year.....	7
Third Year.....	7
Fourth Year and Beyond	8
M.S. Economics (MSE) Degree Requirements	9
MSE Credit Requirements – Thesis Option	9
MSE Credit Requirements – Non-Thesis Option	9
Major Professor	10
Program of Study Committee (POSC)	10
Co-Major Master’s Requirements.....	11
Concurrent Master’s Degree.....	11
Grading of MSE Graduate Courses.....	11
MSE Course Expiration.....	11
Annual Review of MSE Students.....	11
Upgrade to Ph.D. program.....	11
MSE Normal Progress Guidelines	11
First Year	11
Second Year.....	11
M.S. Agricultural Economics (MSAE) Degree Requirements	12

MSAE Credit Requirements – Creative Component	12
Program of Study Committee (POSC)	13
Concurrent Master’s Degree.....	13
Grading of MSAE Graduate Courses	13
MSAE Course Expiration.....	13
Upgrade to Ph.D. program.....	13
Annual Review of MSAE Students.....	13
MSAE Normal Progress Guidelines	14
Graduate Minor in Economics	14
Funding	14
Economics Ph.D. Student Funding	15
Ph.D. Co-Major Student Funding	15
MSE Student Funding.....	15
Student Grievance Procedures	15
Leave and Absence Policy	16
Graduate Student Travel	16
Travel Policy	16
Travel Guidelines.....	17
Appendix A: Fields of Concentration	18

Introduction

The Department of Economics at Iowa State University provides a unique opportunity for students to obtain quality graduate education through course instruction, workshops, seminars, research, and interaction with world-class scholars. As a major part of graduate education, each student chooses a major professor who is a mentor and guide for graduate work. The major professor along with the Program of Study (POS) Committee provides specific direction for a student's graduate program and research. The following guidelines will help the student, in conjunction with his/her POS Committee, plan a graduate program that will lead to the desired degree and career path in a timely and efficient manner while meeting all departmental and university requirements. These guidelines are approved by the economics faculty as a whole and should be interpreted as minimum standards. Individual POS committees may choose additional coursework or other requirements to meet the needs of a given student or research topic.

The Department of Economics has implemented these policies and procedures in accordance with the policies and procedures outlined by the Graduate College Handbook. It is strongly recommended that students and faculty review the Graduate College Handbook (located on the Graduate College website) to gain a comprehensive understanding of the requirements for earning a graduate degree from Iowa State University.

Ph.D. Degree Requirements

Majors

1. Students majoring in **Economics**, in addition to completing the requirements outlined in the [Ph.D. Credit Requirements](#) section, must choose their two required fields of concentration from among the fields of a) Agricultural Economics, b) Environmental and Resource Economics, c) Financial Economics, d) Industrial Organization, e) International Economics, f) Labor/Public Economics, and g) Macroeconomics. Applied Econometrics is available as a third field.
2. Students majoring in **Agricultural Economics**, in addition to completing the requirements outlined in the [Ph.D. Credit Requirements](#) section, must choose at least one of their two required fields of concentration from either a) Agricultural Economics or b) Environmental and Resource Economics.
3. Students must choose to major in either economics or agricultural economics. They may not major in both areas. Students majoring in economics may not obtain a minor in agricultural economics. Similarly, students majoring in agricultural economics may not obtain a minor in economics.

Ph.D. Credit Requirements

1. A total of 72 credits is required. These credits must be graduate credits (500 & 600 level) except that, with POSC approval, up to 9 credits of 300 & 400 level classes at Iowa State (not undergraduate courses from other institutions) will be eligible. Undergraduate classes in Economics may not be used. At most, 3 credits at the 300-level may be used.
2. The material covered in Economics 601, 602, 603, and 604 forms a basis for the Departmental Qualifying Examinations in Economic Theory. Economics 671 and 672 (Econometrics) are also required in the first year of the program.
3. Students are required to complete at least seven field graduate courses in economics beyond the Ph.D. core (601, 602, 603, 604, 671, 672). Field courses must comprise at least two fields of concentration other than Applied Econometrics.
4. Students must successfully complete Econ 694A and Econ 694B.
5. A minimum of 21 hours must be earned as a combination of the following credits:
 - Research credits (Econ 699)
 - Credits earned in special topics courses (Economics 690)
 - Additional graduate-level coursework

Major Professor

The major professor, who must be a member of the graduate faculty in the student's declared major, serves as chair of the POS committee. The choice of a Major Professor represents an agreement between the graduate student and the professor to work together in planning academic studies and research for an advanced degree. Students should give this matter careful consideration, exploring conscientiously the available options as to major, research specialty, and research group.

Program of Study Committee (POSC)

1. **Committee appointment:** In consultation with the student's major professor, a Program of Study Committee (POS) consisting of at least five members of the graduate faculty is appointed. At least three committee members must be from the student's major. One committee member should be from outside the Economics Department.
2. **Program of Study:** In consultation with the student's Program of Study Committee (POSC), an official Program of Study (POS) is developed listing all the classes the student will complete in order to obtain the desired degree. Appointment of committee members and determination of the POS is accomplished by filing the POSC form through AccessPlus. Details regarding the process for filing this form are available on the Graduate College website. Students should approve a major professor by **October 1** of their third year in the Ph.D. program. The rest of the POS committee should be selected by **December 1** of the third year and the POSC form should be filed. The POSC form must be approved by the Graduate College at least one semester before the preliminary oral is held.

Qualifying Examinations in Economic Theory

Written qualifying examinations in microeconomic theory and macroeconomic theory are required. Each student in the Ph.D. program must pass two qualifying exams in economic theory (one in macroeconomics and one in microeconomics). Students are allowed two attempts to pass each exam. Students who have failed to pass both qualifying exams will not be admitted to candidacy and will be given the option of completing a Master's degree or leaving the program. If a student chooses not to attempt a given examination at the time it is offered, the student will be given a failing grade on the examination.

1. **The Examining Committee:** Each qualifying examination committee shall be composed of three members, at least one of whom shall be from the relevant theory teaching core. Each committee will be appointed by the Department Chair and will serve for one year.
2. **Purposes and Goals of the Examinations:** The purposes and goals of the written qualifying examinations are to help ensure that each student who receives a Ph.D. from the department is thoroughly trained in the basic core of economic theory and to provide an incentive for the student to review, integrate, and apply his/her economic theory training.
3. **Scheduling of the Examinations:** Students must take the examinations at the times outlined. The examinations are administered during the summer session following the first year on the Ph.D. track. The first attempt of the microeconomics examination will be given on the third Friday after classes end for the spring semester in odd numbered calendar years and the Tuesday following the third Friday after classes end for the spring semester in even numbered calendar years. The first attempt of the macroeconomics examination will be given on the third Friday after classes end for the spring semester in even numbered calendar years and the Tuesday following the third Friday after classes end for the spring semester in odd numbered calendar years.

The second attempt, should it be needed, of the microeconomics examination will be given on the Monday one week before classes begin for the fall semester in odd numbered calendar years and on the Friday immediately before classes begin for the fall semester in even numbered calendar years. The second attempt of the macroeconomics examination will be given on the Friday immediately before classes begin for the fall semester in odd numbered calendar years and on the Monday one week before classes begin for the fall semester in even numbered calendar years.

4. **Form of the examinations:** For each examination, students will be allowed a total of six hours. These hours will be divided into two blocks: a four-hour morning session and a two-hour afternoon session. In the morning session, students will be asked to answer two out of at least three questions. In the afternoon session, students will be asked to answer one out of one or more questions. Questions that appear in the morning session cannot be used in the afternoon session.
5. **Material to be covered in the examinations:** Questions on the qualifying examinations will cover material from the current topic outlines in economic theory. This outline encompasses the general subject matter of microeconomic and macroeconomic theory appropriate for study by beginning Ph.D. students. The graduate courses, Econ 601, Econ 602, Econ 603, and Econ 604 will cover the majority of topics on this outline and the syllabi for these courses are a useful reference for the examinations. Students will be provided information regarding their ability to pass the theory qualifying examinations through their performance in the relevant theory courses. Specifically, instructors of the relevant theory courses should assign grades of B+ or higher only to those students who have done work of sufficient quality to suggest that they will be able to pass the corresponding examination.
6. **Grading of the examinations:** Each examination will be evaluated separately, and a grade of "Pass with Distinction," "Pass," or "Fail" will be assigned. The examining committee will complete the grading of the examinations as soon as possible. In no case will the results of the first round of examinations be returned later

than June 30. Should June 30 fall on a weekend, results will be returned no later than the Friday preceding June 30. In no case will the results of the second round of the examinations be returned more than four weeks after the examination is given. The Director of Graduate Education will present the overall results of the examinations to the earliest possible faculty meeting. An answer outline for each qualifying examination shall be available to students no later than four weeks after the date of the examination.

6. **Appeal Process:** If asked to do so, the chair of the examining committee will meet on an individualized basis with students after the examination results are released to discuss the examinations. If, after these meetings and within two weeks of the date the results of the examination are returned, a student is dissatisfied with the grading of his/her examination, the student may notify the Department Chair that he/she wishes to appeal the results of the examination. The student's written arguments in defense of the examination paper must accompany this notification.

The student's written defense will then be given to the original examining committee for its consideration. If the original examining committee judges that the student's arguments are reasonable, the committee may reverse its original decision and change the grade from failing to passing. If the original examining committee does not reverse its original decision, it will write a defense of its original decision and will present this to the student and the Department Chair.

If the student still feels that he/she has a grievance after the examining committee has reconsidered its original decision, a further appeal procedure is available in the Graduate College, as described in the Graduate College Handbook: <https://www.grad-college.iastate.edu/handbook/>.

8. **Petition Process:** A student who has failed to pass either the Microeconomics or Macroeconomics Qualifying examination in two attempts will have the option of petitioning the Chair to allow him/her to take the examination in question one additional time. The student will have 2 weeks from the time that the examination result is returned to initiate the process. If the student has appealed the decision and lost that appeal, he/she will have 2 weeks from the date of the appeal decision to start the petition process. Within 4 weeks from the time the petition is filed, the Chair will then make one of the following decisions:

- The student will be removed from the Ph.D. program; or
- The student will be permitted to take the next offering of the relevant qualifying examination. No further petition will be allowed.

The Chair will grant the petition only under exceptional circumstances that were responsible for the student's substandard performance on the relevant qualifying exam.

Field of Concentration Requirements

Mastery of two fields of concentration is required. Mastery in each field of concentration in the Department of Economics is demonstrated by completion of coursework requirements for that field. Fields of Concentration in the Department of Economics are chosen from: Agricultural Economics, Environmental and Resource Economics, Financial Economics, Industrial Organization, International Economics, Labor and Public Economics, Macroeconomics, and Applied Econometrics (available as a 3rd field only). [See Appendix A.](#)

Third Year Paper

A formal sole-authored research paper under the direction of the major professor is required during the third year of the Ph.D. track. The purpose of the third year paper is to help ensure that each student who receives a Ph.D. from the department is thoroughly familiar with the research process. This paper must be approved by the student's major professor and a second member of the POSC before the preliminary oral examination may be held. The second reader is chosen by the student and approved by the major professor.

1. **Timing Evaluation of the Paper:** The paper should be submitted to the major professor and second reader by **May 1** of the third year on the Ph.D. track. By **June 1** the two readers must either submit a passing grade or ask the student to revise and resubmit the paper. A revision must be submitted by **July 15**. The readers will determine the final grade satisfactory / not satisfactory by **August 1**.

Failure to meet this requirement will result in a loss of funding for the fall semester. Funding can be reinstated in the spring semester contingent upon successfully completing the third year paper by **December 1**. Once students have satisfactorily completed the third year paper, they will receive an increase in their assistantship stipend.

2. **Focus of the Paper:** In general, the paper should address a topic/problem in the student's major field of study that is likely to emerge as a component of the student's Ph.D. dissertation. However, the paper may be in a related area. While it is expected that the major professor, along with other POS members and Econ 694 instructors, will provide substantial guidance, the paper should reflect the student's own independent work. The two faculty members who evaluate the paper will determine whether the paper is satisfactory.

Preliminary Oral Examination

A preliminary oral examination is required of all Ph.D. students and is administered by the student's POSC.

1. **Timing of the Exam:** The preliminary oral examination requires prior approval by the Graduate College. Students should file the electronic Preliminary or Final Oral Request form (available on the Graduate College website) at least two weeks before the date of the examination. **The examination should be held no later than June 1 of the student's fourth year to be eligible for fall funding.** Ideally, it should be held early enough in the student's research program that significant faculty input into the process can be obtained. Students are required to provide a copy of the proposal to each committee member at least two weeks before the preliminary oral examination. The preliminary oral must be completed at least six months prior to the final oral exam. Students are required to be registered for at least one graduate credit during the semester in which they complete their preliminary exam.
2. **Evaluation of the Exam:** While the exact nature of the preliminary oral examination depends on the POSC and the particular area of research, some general departmental guidelines apply. In all cases the student should be given clear direction regarding expectations well before preparing the dissertation proposal. The purpose of the examination is to rigorously test the student's knowledge of major, minor, and supporting subject areas relevant to the proposed dissertation topic, as well as the student's ability to analyze, organize, and present subject matter relevant to the field. The means of doing so is to consider the student's proposal for the economic research that will lead to the dissertation. While the committee may question over general issues, the bulk of the examination will concentrate on the dissertation topic.
3. **Format of the Exam:** The student should prepare a specific and well-documented proposal for research. The dissertation proposal consists of a statement of the problems to be considered, a review of the relevant literature, a consideration of theoretical models to analyze the problems, and a discussion of potential data and quantitative methods to be used in addressing the topic. If a three essay approach is chosen, the preliminary oral should consider the specific topic of each essay, along with basic models, data issues and quantitative methods to be used in addressing these topics. The first of the three essays should be complete or nearly complete before taking the preliminary oral examination. An appropriate literature review for the entire dissertation should be prepared.

Final Oral Examination

The final oral examination requires prior approval by the Graduate College. Students should file the electronic Preliminary or Final Oral Request form (available on the Graduate College website) at least three weeks before the date of the examination. Students are required to provide a copy of the dissertation to each member of the POSC at least two weeks before the final oral examination. The first hour of a student's final oral exam is open to the public. Students are required to be registered for at least one graduate credit during the semester in which they complete their final oral exam. Deadlines for graduation are stipulated by the Graduate College and should be considered when scheduling the final oral exam.

Co-major Requirements

A co-major, at the Ph.D. level, in economics or agricultural economics and another discipline requires the approval of the Director of Graduate Education. Students pursuing a co-major at the Ph.D. level must complete 72 credits. These credits must be graduate credits (500 & 600 level) except that, with POSC approval, up to 9 credits of 300 & 400 level classes at Iowa State (not undergraduate courses from other institutions) will be eligible. Undergraduate classes in economics may not be used. At most, 3 credits at the 300-level may be used.

1. Students are required to complete the Ph.D. core (Econ 601, 602, 603, 604, 671, 672) and pass the written qualifying examinations in microeconomic theory and macroeconomic theory.
2. Students are required to complete three graduate courses in economics beyond the Ph.D. core, comprising at least one field of concentration other than Applied Econometrics. These courses shall be at the 600 level, other than 690 or 699, or shall be 500 level courses that are acceptable as part of a Ph.D. Field of Concentration. The student must demonstrate mastery of the elective field by completion of coursework requirements for that field.
3. A minimum of 9 of the 72 credits must be earned as research credits (699-numbered courses, with the "Econ" or other designator) in connection with the preparation of a Ph.D. dissertation deemed, by the POSC, to be acceptable as a Ph.D. dissertation in the discipline of economics. A maximum of 21 credits of 699-numbered courses may count toward the required 72.
4. Co-major students face the same credit hour restrictions that are detailed under the [Ph.D. Credit Requirements](#).
5. Co-major students face the same [preliminary oral examination](#) and [final oral examination](#) requirements.

Grading of Ph.D. Graduate Courses

Graduate courses are usually graded on a letter grade basis (A-F). In all but exceptional cases, a grade of B- will serve as an adequate signal of unsatisfactory performance. Only grades of satisfactory/fail are given in the following classes: Econ 590, 599, 690, 694A/B, and 699.

Ph.D. Course Expiration

Courses completed toward a Ph.D. in Economics or Agricultural Economics are valid for seven years. This aligns with the Graduate College's policy for course time-to-degree limits. Requests to honor courses past the seven-year limit will be decided on a case-by-case basis by the Graduate College and the Economics Director of Graduate Education. If any courses older than seven years are included on a student's POSC, the student must submit the Expired Course Petition to the Graduate College for approval.

Annual Review of Ph.D. Students

Academic progress reports are issued to graduate students during the fall semester. Students should review the progress reports carefully to ensure that they are making normal academic progress and to prepare for upcoming academic deadlines.

Ph.D. Normal Progress Guidelines

Entry

All Ph.D. programs begin in the fall. The rare student who enters during the spring term will be officially entered into the Ph.D. program in the fall term of that calendar year and will face the same requirements for normal progress as the fall Ph.D. entrants of that year. Most students will enter the Ph.D. track in their first fall semester in the program. Some students will be advised to start with the 500-level core and postpone their entry to the Ph.D. track 600-level courses until fall of the second year. Students who start the Ph.D. program with the 500-level core will, for the first year, face the same normal progress requirements as students in the first year of the M.S. program. Assuming normal progress is maintained, the student may continue on with the 600-level core courses the following year (no reapplication to the Ph.D. program is necessary).

First Year

Ph.D. students complete the microeconomic theory (Econ 601 and Econ 603), macroeconomic theory (Econ 602 and Econ 604) and econometrics (Econ 671 and Econ 672) courses in the first year of the program. The normal load is three courses per semester. These students must take the microeconomics and macroeconomics qualifying examinations for the first time shortly following the spring semester of the first year. Should it be needed, the second attempt will be completed in August preceding the second year. These students will complete 24 credits by the end of the first year in the program. Normal progress requires a cumulative grade point average of at least 3.0 in these courses.

Second Year

Students will take a total of at least nine credits of formal coursework in the fall semester, and at least nine credits of formal coursework in the spring semester. Students will have completed at least 18 of the required 21 hours of field courses and a minimum of 42 total credits by the end of the second year. Normal progress requires a cumulative grade point average of at least 3.0 in all courses to this point.

Third Year

Students take the third year workshop courses, Econ 694A in the fall semester and Econ 694B in the spring semester of their third year. Students who have not completed all field course requirements take the number of credits needed to do so during the fall or spring semester of the third year. Students must complete and submit the [third year paper](#) by May 1 the summer after their third year. To make normal progress, they must receive a passing grade on the third year paper before the beginning of the fall semester of their fourth year. Students spend most of their time on dissertation research and register for an appropriate number of research credits (Econ 699) each semester. Students should choose a major professor by **October 1** and the rest of the POS committee by **December 1**. The POSC will be electronically filed through AccessPlus by **December 1**. Students making normal progress complete all field requirements by the end of the fall semester of the third year. Normal progress requires a cumulative grade point average of at least 3.0.

Fourth Year and Beyond

Ph.D. students must complete the preliminary oral exam by **June 1** of their fourth year in the Ph.D. program in order to be eligible for funding for the fall semester of the fifth year. A cumulative grade point average of at least 3.0 is required in order to graduate.

Year 1	Coursework	Credits	Comments
Fall	Econ 601 Microeconomic Analysis I	4 cr	Year 1 normal progress consists of 24 credits completed and a cumulative GPA \geq 3.0
	Econ 602 Macroeconomic Analysis I	4 cr	
Econ 671 Econometrics I	4 cr		
Spring	Econ 603 Adv. Microeconomic Analysis	4 cr	
	Econ 604 Adv. Macroeconomic Analysis	4 cr	
	Econ 672 Econometrics II	4 cr	
Summer	Micro and Macro qualifying exams		First qualifying exam takes place in late May or early June. Second attempts, if necessary, take place in August.

Year 2	Coursework	Credits	Comments
Fall	Econ Field course	3 cr	Complete two fields of concentration**
	Econ Field course	3 cr	
	Econ Field course	3 cr	
Spring	Econ Field course	3 cr	
	Econ Field course	3 cr	
	Econ Field course	3 cr	
Summer	Econ 699 (dissertation research)*	1 cr	

Year 3	Coursework	Credits	Comments
Fall	Econ Field Course	3 cr	Choose major professor by October 1
	Econ 694A	3 cr	Choose full POS committee and file POSC form by December 1
Spring	Econ 694B	3 cr	3 rd year paper due to major professor and a second committee member by May 1
	Econ 699 (dissertation research)	1-6 cr	
Summer	Econ 699 (dissertation research)*	1 cr	3 rd year paper requested revisions received by June 1; final version submitted by July 15; final grade (S/NS) due by August 1

Year 4	Coursework	Credits	Comments
Fall	Econ 699 (dissertation research)	1-6 cr	
Spring	Econ 699 (dissertation research)	1-6 cr	File request for preliminary oral exam. Successfully complete prelim oral no later than June 1
Summer	Econ 699 (dissertation research)*	1-6 cr	

Year 5	Coursework	Credits	Comments
	Econ 699 (dissertation research)	1-6 cr	Application for Graduation File request for Final Oral Exam (must be scheduled at least 6 months after passing preliminary oral) Pass final oral exam

Summary of Ph.D. Requirements

Ph.D. core courses (Econ 601, 602, 603, 604, 671, 672)	24 credits
Field coursework	Minimum of 21 credits and at least two separate fields must be completed
Third Year Research Workshop (Econ 694A, 694B)	6 credits with grade of 'Satisfactory'
Research (Econ 699) and/or Special Topics (Econ 690) and/or Additional Graduate-level Coursework	Combined minimum of 21 credits
Total Graduate Credits Required	Minimum of 72. All coursework must be completed with a 3.0 GPA or higher in order to graduate.

* Summer credits for Econ 699 are optional. Students should be engaged in research activities during summer months regardless of whether they are enrolled in Econ 699.

** Occasionally due to scheduling constraints, students require an additional semester of coursework in order to complete two fields of concentration.

M.S. Economics (MSE) Degree Requirements

MSE Credit Requirements – Thesis Option

- The degree requires 31 credits. These credits must be graduate credits (500 & 600 level) except that, with POSC approval, up to 9 credits of 300 & 400 level classes at Iowa State (not undergraduate courses from other institutions) will be eligible. Undergraduate courses in Economics may not be used. At most, 3 credits at the 300 level may be used.
- A minimum of 28 credits is earned in formal coursework. Of these 28 hours, at least 21 hours must be in graduate level economics courses (i.e., 500 & 600 level economics courses excluding Econ 532, 590, 599, 690, and 699).
- The remaining required hours are earned in either formal coursework or research credits (Economics 699) in connection with the preparation of a master's thesis. A minimum of three semester hours of research is required by the Graduate College.
- Econ 500 (Quantitative Methods in Economics Analysis I), Econ 501 (Microeconomics), Econ 502 (Macroeconomics), and Econ 571 (Intermediate Econometrics) are required. These requirements must constitute 16 of the 21 hours of required formal coursework in economics.
- A final oral examination is required. Students should file the electronic Preliminary or Final Oral Request form (available on the Graduate College website) at least three weeks before the date of the examination. Students are required to provide a copy of their thesis to each member of the POSC at least two weeks before the final oral examination. The first hour of a student's final oral exam is open to the public. Students are required to be registered for at least one graduate credit during the semester in which they complete their final oral exam. Deadlines for graduation are stipulated by the Graduate College and should be considered when scheduling the final oral exam.

MSE Credit Requirements – Non-Thesis Option

- The degree requires 33 credits. These credits must be graduate credits (500 & 600 level) except that, with POSC approval, up to 9 credits of 300 & 400 level classes at Iowa State (not undergraduate courses from other

institutions) will be eligible. Undergraduate courses in Economics may not be used. At most, 3 credits at the 300 level may be used.

2. A minimum of 31 credits is earned in formal coursework. Of these 31 hours, at least 21 hours must be in graduate level economics courses (i.e., 500 & 600 level economics courses excluding Econ 532, 590, 599, 690, and 699).
3. The remaining required hours are earned in either formal coursework or research credits (Economics 599) in connection with the preparation of a creative component. A minimum of two semester hours of research is required by the Graduate College. A creative component does **not** need to meet the Graduate College's requirement for a thesis.
4. Econ 500 (Quantitative Methods in Economics Analysis I), Econ 501 (Microeconomics), Econ 502 (Macroeconomics), and Econ 571 (Intermediate Econometrics) are required. These requirements must constitute 16 of the 21 hours of required formal coursework in economics.
5. A final oral examination is required. Students should file the electronic Preliminary or Final Oral Request form (available on the Graduate College website) at least three weeks before the date of the examination. Students are required to provide a copy of the creative component paper to each member of the POSC at least two weeks before the final oral examination. The first hour of a student's final oral exam is open to the public. Students are required to be registered for at least one graduate credit during the semester in which they complete their final oral exam. Deadlines for graduation are stipulated by the Graduate College and should be considered when scheduling the final oral exam.
6. Guidelines for the creative component:
 - a. Work equivalent to at least two hours of graduate credit may be reflected in either one or more separate creative reports as determined by the Program of Study Committee.
 - b. The creative component requirement may be satisfied with one or more of the following:
 - i. a theoretical or empirical economic analysis of some problem or issue,
 - ii. an essay or commentary on some economic concept, analytical or research method, or policy issue or problem,
 - iii. a feasibility study of some economic enterprise or activity,
 - iv. a comprehensive literature review and critical analysis of some economic issue or problem,
 - v. the presentation and testing of a relatively simple statistical problem or econometric model.
 - c. The length of the creative component may vary, depending upon the extent of statistical analysis or modeling and of supporting data and graphics. A creative component that includes significant statistical or econometric analysis, for example, could be shorter in length than a report that is essentially an essay or commentary on some issue or problem. A creative component is not expected to reflect the depth of analysis normally found in an M.S. thesis, nor the detailed discussion of theory, methodology, or related work on the subject.

Major Professor

The major professor, who must be a member of the graduate faculty in the student's declared major, serves as chair of the POS committee. The choice of a Major Professor represents an agreement between the graduate student and the professor to work together in planning academic studies and research for an advanced degree. Students should give this matter careful consideration, exploring conscientiously the available options as to major, research specialty and research group.

Program of Study Committee (POSC)

1. **Committee appointment:** In consultation with the student's major professor, a Program of Study Committee (POS) consisting of at least three members of the graduate faculty is appointed. At least two committee members must be from the student's major. The student is encouraged to choose one committee member from outside the Economics Department.
2. **Program of Study:** In consultation with the student's Program of Study Committee (POSC), an official Program of Study (POS) is developed listing all the classes the student will complete in order to obtain the desired degree. Appointment of committee members and determination of the POS is accomplished by filing the POSC form through AccessPlus. Details regarding the process for filing this form are available on the Graduate College website. Students should approve a major professor by **February 1** of their first year in the MSE program. The rest of the POS committee should be selected by **May 1** of the first year and the POSC form should be filed. The POSC form must be approved by the Graduate College at least one semester before the final oral is held.

Co-Major Master's Requirements

A co-major in economics at the M.S. level requires the approval of the Director of Graduate Education. Students pursuing a co-major at the M.S. level in the Department of Economics must complete 19 hours of formal graduate level coursework in Economics (i.e., 500 & 600 level courses exclusive of 532, 590, 599, 690, 691 699). Of this requirement, 16 hours must be the core classes of Economics 500 (Quantitative Methods in Economic Analysis I), Economics 501 (Microeconomics), Economics 502 (Macroeconomics), and Economics 571 (Intermediate Econometrics).

Concurrent Master's Degree

Students pursuing concurrent M.S. degrees are required by the Graduate College to complete at least 22 hours of non-overlapping credits. The Economics Department requires that, of these 22 hours, at least 19 must be in graduate level economics courses. The core course requirements of Econ 500 (Quantitative Methods in Economic Analysis I), Econ 501 (Microeconomics), Econ 502 (Macroeconomics), and Econ 571 (Intermediate Econometrics) must be met. Students planning to pursue concurrent graduate degrees should contact the Economics Department Graduate Studies Office for additional details.

Grading of MSE Graduate Courses

Graduate courses are usually graded on a letter grade basis (A-F). In all but exceptional cases, a grade of B- will serve as an adequate signal of unsatisfactory performance. Only grades of satisfactory/fail are given in the following classes: Econ 590, 599, 690, 694A/B, 699.

MSE Course Expiration

Courses completed toward a M.S. in Economics are valid for seven years. This aligns with the Graduate College's policy for course time-to-degree limits. Requests to honor courses past the seven-year limit will be decided on a case-by-case basis by the Graduate College and the Economics Director of Graduate Education. If any courses older than seven years are included on a student's POSC, the student must submit the Expired Course Petition to the Graduate College for approval.

Annual Review of MSE Students

Academic progress reports are issued to graduate students during the fall semester. Students should review the progress reports carefully to ensure that they are making normal academic progress and to prepare for upcoming academic deadlines.

Upgrade to Ph.D. program

MSE students interested in upgrading to the Iowa State Economics Ph.D. prior to graduating, should inform the Director of Graduate Education by **February 1** of their first year in the MSE program.

MSE Normal Progress Guidelines

First Year

MSE students complete quantitative methods (Econ 500), microeconomics (Econ 501), macroeconomics (Econ 502), econometrics (Econ 571), and three field courses in economics or other disciplines in the first year of the program. The normal course load is three regular courses during the fall semester and four regular courses during the second semester. A student making normal progress will complete a minimum of 25 credits by the end of the first year in the program. Normal progress requires a cumulative grade point average of at least 3.0 in these courses. Students in the thesis option complete all course requirements by the end of the spring semester. Students making normal progress file the POSC form by the end of the spring semester in the program.

Second Year

M.S. students take no more than six credits of regular (non-research) classes in the fall semester. Students complete all course requirements by the end of the fall semester of the second year. A cumulative grade point average of at least 3.0 is required in order to graduate.

Year 1	Coursework	Credits	Comments
Fall	Econ 500 Quant Methods in Econ Analysis I	4 cr	
	Econ 501 Microeconomics	4 cr	
	Graduate Level Economics Course or supporting coursework in another discipline	3 cr	
Spring	Econ 502 Macroeconomics	4 cr	Choose major professor by February 1 File Program of Study and Committee (POSC) form by May 1
	Econ 571 Intermediate Econometrics	4 cr	
	Graduate level Economics course	3 cr	
	Graduate level Economics course or supporting coursework in another discipline	3 cr	
	Normal progress consists of 25 credits completed and a cumulative GPA \geq 3.0	25	

Year 2	Coursework	Credits	Comments
Fall	Graduate level Economics course or supporting coursework in another discipline	3-6 cr	File Graduation Application File Request for Final Oral Examination Pass Final Oral Exam
	Econ 699 thesis research (thesis track)	3 cr	
	OR		
	Econ 599 Creative Comp (non-thesis track)	2 cr	

Summary of MSE Requirements

Thesis	31 Credits
Econ 500, 501, 502, and 571	16 credits
4 courses (12 credits) that meet economic graduate course requirements	12 credits
Research credits in connection with the preparation of a thesis (Econ 699)	3 credits
Non-Thesis	33 Credits
Econ 500, 501, 502, and 571	16 credits
5 courses (15 credits) that meet economic graduate course requirements	15 credits
Research credits in connection with the preparation of a thesis (Econ 699)	2 credits

M.S. Agricultural Economics (MSAE) Degree Requirements

MSAE Credit Requirements – Creative Component

1. The degree requires 32 credits. These credits will be a combination of graduate credits (500 & 600 level) and up to 9 credits of undergraduate courses, with the following restrictions: 300 & 400 level classes at Iowa State (not undergraduate courses from other institutions) outside of the Economics department, and 400 level courses in Economics may be used. At most, 3 credits at the 300 level may be used. In accordance with Graduate College policies, up to 6.0 credits of coursework used toward your undergraduate degree can be used to fulfill MSAE coursework requirements.
2. The MSAE Program Director (MSPD) is responsible for approving students' course selections, particularly those in undergraduate courses and outside of the Economics department. The intent is that students select courses and

make use of undergraduate courses to the extent that, in combination, they form a cohesive and compelling set of courses based on the students' focus area and interests.

3. A minimum of 30 credits is earned in formal coursework, Of these 30 hours, at least 18 hours must be in graduate level economics courses (i.e., 500 & 600 level economics courses excluding Econ 532, 590, 599, 690, and 699).
4. The remaining required hours are earned in research credits (Economics 599) in connection with the preparation of a creative component.
5. Econ 500 (Quantitative Methods in Economics Analysis I), Econ 501 (Microeconomics), and Econ 571 (Intermediate Econometrics) are required. These requirements constitute 12 of the 18 hours of required formal graduate level coursework in economics. Econ 502 (Macroeconomics) is not required but may be taken as one of the electives.
6. A final oral examination is required. Students should file the electronic Preliminary or Final Oral Request form (available on the Graduate College website) at least three weeks before the date of the examination. Students are required to provide a copy of the Creative Component to members of their POSC at least two weeks before the final oral examination. The first hour of a student's final oral exam is open to the public. Students are required to be registered for at least one graduate credit during the semester in which they complete their final oral exam. Deadlines for graduation are stipulated by the Graduate College and should be considered when scheduling the final oral exam.

Program of Study Committee (POSC)

Program of Study: In accordance with Graduate College policies (Graduate College Handbook, 6.2.5 Master's POS Committee Makeup), the MSAE student's POSC consists of at least one member of the graduate faculty as the major professor. Appointment of committee members and determination of the POS is accomplished by filing the POSC form through AccessPlus. Details regarding the process for filing this form are available on the Graduate College website. Students should choose their major professor by **February 1** of their first year in the MSAE program. The rest of the POS committee, if any, should be selected no later than **May 1** of the first year, and the POSC form should be filed. The POSC form must be approved by the Graduate College at least one semester before the final oral is held.

Concurrent Master's Degree

Students pursuing concurrent M.S. degrees are required by the Graduate College to complete at least 22 hours of non-overlapping credits. The Economics Department requires that, of these 22 hours, at least 17 must be in graduate level economics courses. The core course requirements of Econ 500 (Quantitative Methods in Economic Analysis I), Econ 501 (Microeconomics), Econ 502 (Macroeconomics) and Econ 571 (Intermediate Econometrics) must be met. Students planning to pursue concurrent graduate degrees should contact the Economics Department Graduate Studies Office for additional details.

Grading of MSAE Graduate Courses

Graduate courses are usually graded on a letter grade basis (A-F). In all but exceptional cases, a grade of B- will serve as an adequate signal of unsatisfactory performance. Only grades of satisfactory/fail are given in the following classes: Econ 590, 599, 690, 694A/B, 699.

MSAE Course Expiration

Courses completed toward a M.S. in Agricultural Economics are valid for seven years. This aligns with the Graduate College's policy for course time-to-degree limits. Requests to honor courses past the seven-year limit will be decided on a case-by-case basis by the Graduate College and the Economics Director of Graduate Education. If any courses older than seven years are included on a student's POSC, the student must submit the Expired Course Petition to the Graduate College for approval.

Upgrade to Ph.D. program

MSAE students interested in upgrading to the Iowa State Economics Ph.D. prior to graduating, should inform the Director of Graduate Education by **February 1** of their first year in the MSE program.

Annual Review of MSAE Students

Academic progress reports are issued to graduate students following the fall semester. Students should review the progress reports carefully to ensure that they are making normal academic progress and to prepare for upcoming academic deadlines.

MSAE Normal Progress Guidelines

Fulltime MSAE students complete quantitative methods (Econ 500), microeconomics (Econ 501), econometrics (Econ 571), and field courses in economics or other disciplines in the first two semesters the program.

Assuming no previously taken courses are used to fulfill the requirements of the MSAE (e.g., undergraduate courses taken at ISU), the normal course load is four regular courses plus Econ 594X Research Methods in Economics I during the fall semester and four regular courses plus Econ 595X Research Methods in Economics II and 596X Research Methods in Economics III during the spring semester.

A student making normal progress will complete the 30 credits by the end of the spring semester in the program. Normal progress requires a cumulative grade point average of at least 3.0 in these courses. Students making normal progress file the POSC form by the end of the spring semester in the program.

Year 1	Coursework	Credits	Comments
Fall	Econ 500 Quant Methods in Econ Analysis I	4 cr	
	Econ 501 Microeconomics	4 cr	
	Econ 594X Res Methods in Econ I*	1 cr	
	Electives	6 cr	
Spring	Econ 571 Intermediate Econometrics	4 cr	Choose major professor by February 1 File Program of Study and Committee (POSC) form by May 1
	Econ 595X Res Methods in Econ II*	1 cr	
	Econ 596X Res Methods in Econ III*	1 cr	
	Electives	9 cr	
	Graduate Level Economics Course or supporting coursework in another discipline		
Summer	Econ 599 Creative Component	2 cr	File graduation paperwork and conduct oral presentation according to Graduate College deadlines.

*Note, Econ 594X, Econ 595X, and Econ 596X are not currently required courses in the MSAE degree; however, students are strongly encouraged to take them.

Graduate Minor in Economics

Students wishing to complete a graduate minor in Economics are required to have at least 9 hours of formal coursework in economics courses. These courses must be at the 300-level or above, excluding Econ 313, 334, 336, 337, 353, 362, 364, 370, 378, 380, 398, 490, 492, 495, 496, and 498. It is required that one of the courses be in microeconomic theory (Econ 301, Econ 401, or Econ 501). Per the Graduate College policy, there is a limit of 9 credits at the undergraduate level allowed on a student's POS (including both major and minor courses). Of these 9, only 3 can be at the 300-level.

Funding

Students who obtain university support for their graduate education in the form of teaching or research assistantships receive direct and indirect benefits from the university. The most important indirect benefit is the Graduate College tuition scholarship. Other benefits may include better access to equipment and research materials. Thus, those on assistantship are subject to additional requirements. The Department policy concerning reappointment eligibility for teaching or research assistantships requires that the following criteria be met:

1. Satisfactory completion of the prior appointment duties and responsibilities;
2. Satisfactory academic performance as defined in this document is achieved;
3. Satisfactory academic progress (normal progress as defined in this document) is accomplished;
4. Satisfactory behavior in compliance with the ISU Student Disciplinary Regulations is maintained;
5. The maximum length of time on appointment as defined by the Department in this document has not expired;
6. Continuation is always contingent on the availability of funding.

Economics Ph.D. Student Funding

Graduate assistantship appointments are administered by the Economics Graduate Studies Office. Determination of the specific assistantship appointment is based upon a number of factors including departmental needs, faculty needs, student interests, and funding availability. Requests for changes in assistantship appointments should be initiated through the Director of Graduate Education.

1. Students admitted to the Ph.D. program with funding will be given priority for assistantship support for a total of five academic years from initial registration. Students who have completed two or more years in the program will almost never be continued on assistantship support unless they are meeting normal progress requirements. Support for a sixth year may be available in rare cases and is dependent on a number of factors including exemplary performance of duties, availability of funding for a specific project, department needs, and normal progress toward the degree. Any student who has not completed a preliminary oral examination will not be supported beyond four years.
2. A student who does not satisfactorily complete a third year paper by **August 1** entering the fourth year in the Ph.D. program will not be funded for that fall semester. Funding can be reinstated for subsequent semesters if the third year paper is successfully completed by **December 1** of the fourth year. Ph.D. students receive a stipend raise following the completion of their third year paper. Students who do not complete the third-year paper by this date will generally no longer be considered a Ph.D. program candidate and will be given the option to complete the M.S. degree program.
3. A student who does not satisfactorily complete a preliminary oral examination by **June 1** after the fourth year in the Ph.D. program will not be funded for the fall semester. Funding can be reinstated for subsequent semesters if the preliminary oral is successfully completed by **December 1** of the fifth year. Ph.D. students receive a stipend raise following the completion of their preliminary oral.
4. Students initially admitted to the Ph.D. program who start with the M.S. core will be required to achieve a GPA of 3.0 or better in Econ 500, 501, 502, and 571 in order to be eligible for renewal of funding beyond the first year.
5. Ph.D. students who receive funding from the department are discouraged from seeking additional employment outside the assistantship. Such outside commitments can hinder normal academic progress and can affect the performance of assistantship responsibilities. Students who find jobs in addition to their assistantship are still required to meet normal progress requirements in order to qualify for departmental support.

Ph.D. Co-Major Student Funding

In the case of students pursuing a Ph.D. with a co-major in economics or agricultural economics and another field, it is the expectation that the Economics Department and the co-major department or program will both contribute to the teaching or research assistantship funding of the student. The co-major Ph.D. student will be given priority for assistantship support from the Economics Department for the equivalent of three academic years with the possibility of a fourth. Support for the fourth year is dependent on a number of factors including exemplary performance of duties, availability of funding for a specific project, and normal progress toward the degree. For a co-major student, normal progress requirements (for renewal of assistantship) will be determined by the Director of Graduate Education on a case-by-case basis and will be communicated to the student in writing.

MSE Student Funding

1. Funding is prioritized toward Ph.D. students. Occasionally, funding might be available to a M.S. student depending on the needs of the department and the student's academic performance. Any renewal of funding is contingent on meeting the normal progress requirements and the availability of resources.
2. M.S. students will not be funded as graduate assistants, regardless of funding source, beyond the equivalent of one and one-half academic years of 1/2-time assistantship support. Any ISU funding would come from a source other than that reserved for Department of Economic graduate assistants.

Student Grievance Procedures

The Department of Economics strives to be a welcoming place for students and faculty with different backgrounds and diverse opinions. If there is ever a time when a graduate student feels that his or her personal, academic, or professional integrity is not being respected fairly, the student is encouraged to first speak to their adviser or major professor(s). If the issue is not resolved or involves the major professor(s), all efforts should be made to contact the Economics Department Director of Graduate Education. Pursuant to these actions, the Graduate College Handbook outlines a student grievance procedure that offers several options for conflict resolution.

Leave and Absence Policy

Graduate Assistants have an important role in the work of Iowa State University, and their campus presence is important to the operation of the department. Absence from campus must be discussed in advance with the instructor of the course to which they are assigned (TAs), the help room coordinator (TAs - if applicable), and/or faculty members for whom they are working (RAs). Graduate Assistants who are absent without prior approval risk loss of pay and potential loss of eligibility for future funding, at the discretion of the Director of Graduate Education. Additional penalties (including possible loss of eligibility of future funding) may be incurred depending on the circumstances.

1. **Fall semester:** Teaching assistants will be available for duties beginning on the Wednesday prior to the start of classes for fall semester. At the end of the semester, TAs are available through grading of final examinations and submission of grades. TAs who are not available during these times will generally have their salary reduced at least in proportion to the time they are absent.
2. **Spring semester:** Teaching assistants will be available for duties on the Thursday prior to the start of classes for spring semester. At the end of the semester, TAs are to be available through grading of final examinations and submission of grades. TAs who are not available during these times will generally have their salary reduced in proportion to the time they are absent.
3. **Research assistants:** Research assistants will be available for duties throughout the duration of their appointment. Research assistants need to check with their supervisors for their responsibilities, if any, during semester breaks. RAs who are not available during these times will generally have their salary reduced at least in proportion to the time they are absent.
4. **All graduate students:** Any graduate student planning to be away from campus in excess of one week while school is in session, regardless of appointment status or assignment, must notify Amy Emmett (abainum@iastate.edu) and provide contact information for the period of leave. This information should be provided as soon as leave arrangements are made and approved by the instructor, help room supervisor, or RA supervisor.

Graduate Student Travel

Travel Policy

1. Ph.D. students will be reimbursed travel expenses for a total of up to six approved professional meetings or workshops during their Ph.D. program. Travel should be conducted with the intention of furthering a student's program of study and enhancing his or her education. In rare cases, additional trip funding may be granted for students who have exceeded the six-trip funding allotment. All exceptions will need to be approved by the DOGE and the Graduate Student Programs and Policy Committee (GPPC) BEFORE travel is undertaken.
2. MS student travel reimbursement is rare. Applications for MS travel funding will be considered on a case-by-case basis.
3. Requests for funds must be submitted using the [Department of Economics Graduate Student Travel Form](#) BEFORE travel is undertaken. Post trip requests are subject to denial or to lower rates of reimbursement.
4. Students who attend an approved professional meeting, workshop, or other approved event will be reimbursed up to \$375.
5. Students presenting original research (may be co-authored) at an approved meeting, workshop, or other approved event will be reimbursed up to \$750. Poster presentations do not qualify for this additional funding.
6. Students applying for a Professional Advancement Grant (PAG) should follow the instructions on the Graduate and Professional Student Senate (GPSS) website. Link to the PAG application: <https://www.gpss.iastate.edu/pag>.
7. All trip receipts, including proof of conference or meeting registration, must be submitted to finance_delivery@iastate.edu when you return from your trip to receive reimbursement up to the preapproved amount. This includes funding from all sources – Economics, CARD, Professional Advancement Grants (PAG).
8. For international travel, it is strongly recommended that students enroll in International Health Insurance and Emergency Service (<https://www.riskmanagement.iastate.edu/insurance/international>). This is provided by the university at no cost to the student.
9. If you have questions, contact Amy Emmett, 294-2702, abainum@iastate.edu or finance_delivery@iastate.edu before you travel.

Travel Guidelines

To simplify and expedite the travel reimbursement process, following are some guidelines to help you with travel planning. **Paying expenses on behalf of another traveler is strongly discouraged**. It is preferable to have each student pay for and claim their expenses separately. If you do submit shared expenses, no one will be reimbursed until receipts from all students involved have been received and payment to each other has been proven by way of a copy of your credit card statement, cancelled check or bank transfer. If lodging/airfare is purchased through Hotwire, Priceline, or a similar vendor, you will need to prove payment from one student to another. **The Economics Department has the right to refuse payment to any student submitting suspicious documentation or students who are uncooperative regarding the implementation of these rules.**

1. **Lodging:** If you share a hotel room with another student(s), have the charges split at the hotel desk and submit your individual itemized receipts. If you do not, ISU Accounting will require proof of payment to the hotel or to the other student(s) as described above.
2. **Car Rental:** As with lodging, if you share the cost of car rental, ISU Accounting will require proof of payment to the other student(s) or to the rental car company by way of a copy of your credit card statement, cancelled check or bank transfer. Gas for rental cars can be reimbursed only if receipts are submitted (this is department policy.) ISU has contracts with Enterprise and National which include coverage for CDW/LDW insurance. If you use other agencies, you should purchase the CDW/LDW coverage. Not all insurance is reimbursable. Rent the vehicle "to Iowa State University, by ... (your name)." See the [Procurement Services](#) and [Risk Management](#) websites for additional information.
3. **Mileage:** If you choose to drive your personal vehicle, a per mile reimbursement can be requested by the vehicle owner. You cannot claim mileage and car rental/gas for the same portion of the trip. If the mileage claimed is greater than 400 miles one way, a fly versus drive comparison must be completed prior to the trip.
4. **Meals:** Department policy requires that graduate students submit individual **itemized** meal receipts which show what was purchased. Receipts which only list the total dollar amount without details will not be reimbursed. If meals are part of the registration fee, you will not be reimbursed if you choose to eat that meal somewhere else. The university's maximum domestic meal reimbursement is \$40 per day.
5. **Airfare:** If you elect to travel from an airport other than Des Moines, you must print and retain a price comparison from Des Moines dated the day of purchase. You must be able to verify that there was a cost savings when including any additional lodging, meals, and mileage to/from the alternate airport.
6. **Combing Business and Personal Travel:** When vacation or personal travel requires an air ticket that does not have a direct route to your business destination, you must obtain a comparison on the date you purchase your ticket. The comparison must be submitted with your reimbursement request. Reimbursement is capped at the lower of the two quotes.
7. Link to allowable expenses table at Controller's website:
<http://www.controller.iastate.edu/travelinformation/allowableexpenses.htm>

Appendix A: Fields of Concentration

I. **Agricultural Economics** (Choi, Crespi, DePaula, Gallagher, Hallam, Hart, Hayes, Lawrence, Lence, Moschini, Plastina, Schulz, Zhang)

Required: Econ 641 Agricultural Economics I
Econ 642 Agricultural Economics II

II. **Applied Econometrics**: Available as a third field only. (Bartalotti, Bunzel, Crespi, DePaula, Kedagni, Kreider, Zhylyevskyy)

Choose Two: Econ 673 Microeconometrics
Econ 674 Macroeconometrics
Econ 675 Advanced Topics in Econometrics

To fulfill the requirement for this field, students must complete 2 of 3 courses listed above.

III. **Environmental and Resource Economics** (Hoffman, Moschini, Weninger, Zhang)

Required: Econ 581 Advanced Environmental Economics
Econ 680 Advanced Resource Economics

IV. **Financial Economics** (Hayes, Lence, Li, Singh, Zhylyevskyy)

Required: Econ 653 Financial Economics

Choose One: Econ 537 Commodity Markets: Analysis and Strategy
Econ 657 International Finance

To fulfill the requirement for this field, students must complete Econ 653 and one course from the others listed.

V. **Industrial Organization** (Crespi, Hallam, Kim, Li, Moschini, Turhan, Weninger)

Required: Econ 615 Theoretical Industrial Organization

Choose One: Econ 616 Empirical Methods in Industrial Organization
Econ 618 Game Theory
Econ 642 Agricultural Economics II

To fulfill the requirement for this field, students must complete Econ 615 and one course from the others listed.

VI. **International Economics** (Choi, Hayes, Lence, Lyn, Moschini, Singh)

Required: Econ 655 International Trade
Econ 657 International Finance

VII. **Labor/Public Economics** (Bartalotti, Harris-Lagoudakis, Hoffman, Kim, Kreider, Orazem, Rosenbloom, Turhan, Winters, Zhylyevskyy)

Required: Econ 520 Labor Supply and Human Capital Formation

Choose One: Econ 510 Experimental Economics
Econ 521 Labor Markets
Econ 545 Public Economics
Econ 576 Spatial Economics

Recommended: Econ 673 Microeconometrics

To fulfill the requirement for this field, students must complete Econ 520 and one course from the others listed.

VIII. **Macroeconomics** (Bhattacharya, Bunzel, Cordoba, Singh)

Choose Two: Econ 606 Advanced Topics in Macroeconomics
Econ 657 International Finance
Econ 674 Macroeconometrics

To fulfill the requirement for this field, students must complete 2 of the 3 courses listed above.