

# Department of Agricultural Economics Texas A&M University

2022-2023

# Graduate Student Handbook

Master of Science Master of Agribusiness Doctor of Philosophy

# GRADUATE STUDENT HANDBOOK

# **DEPARTMENT OF AGRICULTURAL ECONOMICS**

# **TEXAS A&M UNIVERSITY**

# 2022-2023 ACADEMIC YEAR

# Updated

This handbook is designed to serve as a quick reference guide for graduate students majoring in Agricultural Economics at TAMU and their advisors. Specific references are made to the Departmental Policy Manual and the <u>TAMU Graduate Catalog</u> for those who desire more details. This handbook is not meant to substitute for either of those publications. The policies covered in this handbook are subject to change without notice.

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#### GENERAL INFORMATION

#### **Admission Guidelines**

Students who meet admission requirements as defined by the College of Agriculture and Life Sciences will be admitted to graduate studies in agricultural economics. Admission to Texas A&M and any of its sponsored programs is open to qualified individuals regardless of race, color, religion, sex, age, national origin, or educationally unrelated handicaps. Prospective students should contact the Department to review the prerequisites and admission requirements for their chosen degree program. Prospective students are strongly encouraged to make contact early in their decision process.

#### **Deadlines for Admission**

Students desiring consideration for funding should apply by January for Fall admission or by June for Spring admission. Applications are processed as they are received.

#### Orientation

To acquaint the student with the many academic and social facets of graduate student life at TAMU, the University and Department conduct orientation meetings for new graduate students prior to the first full week of classes in the Fall and Spring semesters.

#### **Temporary Advisor**

The Associate Head for Graduate Programs will advise Master of Science and PhD students until the students select a committee chair. A Committee Chair must be identified before students file their degree plans (see section on Degree Plans for deadlines). The Director of the Master of Agribusiness (MAB) program will serve as advisor and Committee Chair for MAB students.

#### **Frequently Asked Questions**

- Q. Where can I get a copy of the *Graduate Catalog*?
- A. The Graduate Catalog can be found on <u>Graduate and Professional Studies website</u>
- Q. Is it important that I attend the orientation meetings?
- A. Yes! Many of your questions as a new graduate student at TAMU will be addressed. The Office of Graduate and Professional Studies at the University level will hold an orientation, and the Department of Agricultural Economics will hold its own orientation. You should attend both if you are new to Texas A&M, but if you can only attend one orientation, be sure to come to the Department orientation.
- Q. Where can I get a class schedule?
- A. The class schedule is available through the <u>Howdy Portal</u>.

# **Office Assignments**

The following discussion outlines the procedures followed in allocating office space to graduate students.

# Departmental Policy

# **Student-Requested Stations**

Office assignment decisions are made by the Program Coordinator for Graduate Programs based on the following priorities: PhD graduate assistants first, master's graduate assistants second, then non- assistant PhDs third, etc. Within each category, selection depends on assistantship status and seniority in the graduate program. In all cases, students must be making satisfactory academic progress to qualify for a student-requested station. All office assignments must be approved by the Head of Graduate Studies. Key may only be picked up after a list of students assigned to offices have been sent to the Department Heads Office.

This mixed strategy, although more complicated, gives both faculty and students more explicit roles in assigning student workstations.

#### Study Carrels

To acquire a study carrel in the Evans Library, students must be writing a thesis/dissertation and the committee chair must state this in writing on Departmental letterhead. You can get information on the study carrels by calling 845-7428. There is a \$10.00 replacement fee for a lost carrel key. Renewal is done each semester in April - May and November - December or the deposit is lost. Please see <u>Libraries Website</u> for more information on study carrels.

# **Frequently Asked Questions**

- Q. When are office assignments made?
- A. The bulk of the office assignments are made at the beginning of the Fall and Spring semesters.
- Q. Who does the office assignments?
- A. The Program Coordinator for Graduate Programs assigns student-requested office space to graduate students based on the departmental policy and must be approved by the Head of Graduate Studies.
- Q. Do all students receive office space?
- A. No because space is limited.

# Registration

The University regulations regarding registration are presented in the <u>Graduate Catalog</u> under the title "Registration". The following material represents a summary of selected aspects of the registration procedures.

# First Registration

Before registering for classes in their first semester at TAMU, students should consult the Associate Head for Graduate Programs or, if pursuing a Master of Agribusiness degree, the Director of the MAB program. They will assist students in planning and completing their first registration. A Degree Planning Guide form can be found in this handbook.

There are no formal registration forms for domestic students. Students can register via internet through the <u>Howdy Portal</u>. Incoming international students must see their advisor and clear ISS check-in before registration.

#### Course Load Requirements

A graduate student is considered a full-time student if he/she is registered for 9 credit hours during the Fall and Spring semesters, and 6 credit hours during the Summer term. Students holding an assistantship and/or fellowship must be registered full-time, including summer if the assistantship includes summer employment.

Graduate students may enroll for a maximum of 17 hours during a regular semester, 6 hours for a 5-week summer term and 12 hours for a 10-week summer semester. The college dean's office can approve/register a student for 1 additional course. A request to register for more than that should be submitted to the Office of Graduate and Professional Studies on the Petition for Waivers or Exceptions to University Requirements form and must include the course/section number and semester of registration.

All staff members (including research associates and assistants) employed full-time are limited to a maximum of 4 credit hours per semester or summer during normal working hours. To register for more than this number of hours requires prior approval from their supervisor, the Department Head, the Dean's Office, and the Office of Graduate Studies. A copy of the approved request must be given to the Ag Econ Graduate Office prior to registration.

# Continuous Registration

Students in graduate degree programs requiring a thesis, dissertation, internship, or record of study, who have completed all course work on their degree plans other than 691 or 684 are required to be in continuous registration until all requirements for the degree have been completed.

Students who are subject to In Residence registration (i.e., on campus) are required to register each subsequent fall and spring semester and each 10-week summer session for at least one credit hour. University departments and colleges may have additional or higher requirements.

Unless a student plans to take examinations or defend during the summer term, registration during the summer will not be required to fulfill the continuous registration requirement. However, the University, colleges or departments may have additional or higher requirements.

Any student who has not been enrolled for one year or more must apply for readmission.

# Pre-registration

The Department Graduate Office requests that all graduate students (MS, MAB, and PhD) pre-register in the Spring (usually April) for the following Summer and Fall semester and pre-register in the Fall (usually October) for the following Spring semester.

# **Residency Requirements**

A student "in residence" is expected to devote most of his/her time to graduate studies on the main campus under the direction of the major professor and the Advisory Committee.

The minimum time required to qualify for an advanced degree varies by degree. Doctoral students must complete on the College Station campus 9 credit hours during two consecutive regular semesters or one semester and one 10-week Summer session (see the <u>Graduate Catalog</u>). The student may be granted an exemption from this minimum time requirement if approved by the Department and the Office of Graduate Studies. Research associates, who are considered full-time staff members, are normally given an exemption from these residency requirements.

#### **Frequently Asked Questions**

- Q. Where can I get the next semester's class schedule?
- A. The class schedule is available on the <u>Howdy Portal</u>.
- Q. Do I have to register during the summer?
- A. If you are graduating in August, you have to register during at least the first summer session. You do not have to register for the summer to satisfy University continuous registration requirements. Students employed as graduate assistants must enroll full-time in every term during which they are employed (9 credit hours in fall or spring and 6 credit hours during the summer session.)
- Q. Do I have to register if I have completed my thesis?
- A. If your thesis/dissertation has been cleared by the Thesis Office prior to the beginning of the semester in which you will graduate and all other degree requirements have been satisfied, you do not have to register. Please refer to the OGAPS website for deadlines

#### Grievances

The Department has a grievance procedure available to students who feel they have a legitimate grievance. The following discussion spells out the procedures available to students in our Department.

# Departmental Grievance Committee

The Departmental Faculty and Student Grievance Committee serves in an advisory capacity to the Department Head. The Committee considers grievances referred by the Department Head, the Faculty Advisory Committee, or any faculty member or student (undergraduate or graduate). This committee provides an impartial review prior to a discussion at the departmental level or higher.

# Filing a Grievance

The Department Head, the Faculty Advisory Committee, and/or the aggrieved party present cases to the Grievance Committee. Once presented with a written grievance, the Committee makes a preliminary investigation within two weeks and then decides whether to take the case. If the Committee decides to accept the case, it shall conduct its investigation and report the results within a two-month period.

The Committee reports its recommendations in writing to the Department Head, with a copy to the aggrieved and the accused. Decisions made at the Departmental level may be appealed to the appropriate unit within the Texas A&M University System. The Department Head, as to the appropriate appeals route to take will inform both parties.

The Department's procedures for handling grievances are spelled out in more detail in section IV of the Policy Manual. Additional University procedures are in the <u>Texas A&M Student Rules</u>.

A student who wishes to learn more about these procedures should contact the Chair of the Grievance Committee or the Associate Head for Graduate Programs.

#### **Travel Policies**

#### If you are traveling domestically

- With a recognized student organization
- With a class on a fieldtrip
- On individual student travel including internships, research or to a conference)or
- With a university-affiliated group

You must sign up with Student Activities BEFORE you leave

#### If you are traveling internationally,

- With a recognized student organization
- With a class on a fieldtrip
- On individual student travel including internships, research or to a conference)or
- With a university-affiliated group

You must sign up with the Study Abroad Office BEFORE you leave

#### **Confidentiality of Student Records**

Under the Family Educational Rights and Privacy Act (FERPA) of 1974, the following directory information may be made public unless the student desires to withhold any or all of this information:

Student's name, address (local and permanent), telephone listing, place of birth, sex, nationality, race, major, classification, dates of attendance, class schedule, degree awarded, awards or honors, class standing, previous institutions or educational agency attended by the student, parent's name and address, sports participation, weight and height of athletic team members, parking permit information, and photograph.

Currently enrolled students may submit a Hold Directory Information request via the <u>Howdy Portal</u>. Go to the "My Record" tab and select "Withhold Directory Information" from the "My Information" menu. Please be sure to read all information and instructions carefully. This instruction remains in effect until the student advises in writing that they no longer want the information withheld or after they complete their degree and are no longer enrolled.

Faculty or staff may release directory information about students for legitimate educational purposes. Before doing so, however, Howdy should be checked to be sure that there is no block on this information.

Present and past students have the right to personally review their own educational records for information and to determine the accuracy of these records. Parents of dependent students have these same rights. Students do not have access to personal notes, confidential letters of recommendation where the student has waived the right to access, medical records, and records concerning admission to a program in which the student has not enrolled.

TAMU administrative, supervisory, and instructional staff have access to student educational records for legitimate educational purposes related to their proper functions in educating students. Except for directory information, the University will only release information from or permit access to a student's educational records if the student gives his/her prior written consent for the disclosure. The written consent must include what records are to be released, the reasons for the disclosure, to whom the disclosure is to be made, the student's signature, the date of request, and if appropriate, the date when consent is terminated.

# ACADEMIC STATUS

The University has several classifications for students based upon their academic achievements to date. These classifications and related subjects are summarized in this section.

#### **Student Status**

#### Class 6 Students

This classification is for students who want to take graduate courses but are not seeking a graduate degree. No courses taken as a G6 can be used to satisfy GPR requirements for admission to degree-seeking graduate status. Admission to G6 status does not establish eligibility for admission to degree-seeking status. Students desiring admission to a degree program must submit an application and all other documents required for admission. A maximum of 12 credit hours taken as a G6 may be transferred for use toward satisfaction of degree requirements and is subject to approval by the department.

#### Class 7 Students

This classification applies to students who have completed their baccalaureate degree and have applied for and been granted admission to graduate studies. If the student has been admitted for a Master's degree, he/she will be classified as G7 until all requirements for the degree have been completed.

If the student has been admitted for a straight-through (96-hour) PhD degree, thereby by-passing the Master's degree, he/she will be classified as G7 until 30 hours of course work applicable to the doctoral degree have been completed, after which his/her classification will be changed to G8.

#### Class 8 Students

The G8 classification applies to students who have completed the requirements for the Master's degree and have gained admission to study for the PhD degree. Students who have completed requirements for the baccalaureate degree, have gained admission for a straight-through (96-hour) PhD degree, and have completed a minimum of 30 hours applicable to the PhD degree will also be classified as G8students. If a student has completed a Master's degree at TAMU and intends to undertake PhD studies at TAMU, he/she must submit a "Letter of Intent" signed by the Head of the Department (or his/her designated

he/she must submit a "Letter of Intent" signed by the Head of the Department (or his/her designated representative) in which the student will be pursuing doctoral studies. The "Letter of Intent" form is available on the Office of Graduate and Professional Studies website. The "Letter of Intent" must be submitted to the Office of Graduate Studies in advance of the 12th class day of the regular semester or 4th class day of the summer session to be effective in that term.

# Class 9 Students

This classification denotes conditional admission to a graduate program. When the required documents have been received, the student's classification will be changed. Approval of the Dean of Graduate Studies is required to change a student from G9 to another graduate classification. If the graduate student does not meet his/her conditional admission requirements, the student is dismissed from the University.

#### **Scholastic Dishonesty**

The Aggie Honor Code is a cherished tradition we all strive to uphold within this academic community. The Aggie Honor System Office (AHSO) has been established to administer the Texas A&M University Honor System. The AHSO is the central office responsible for maintaining records and for coordinating communication, prevention, training, remediation, and adjudication efforts for the Texas A&M University Honor Code. For more information, visit the Aggie Honor Code Website. Any evidence of plagiarism or other scholastic dishonesty in violation of the Code will be the basis for disciplinary action, which could include a failing grade and/or loss of assistantship.

Plagiarism, as commonly defined, consists of passing off as one's own ideas, the ideas, words, writings, etc., belonging to another. Writing is considered intellectual property! In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own without citing the source in writing, even if you have the verbal permission of that person.

If you have any questions regarding scholastic dishonesty or plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the <u>Section 20: "Scholastic Dishonesty"</u>. More information is available through the <u>Aggie Honor System Office</u>.

#### **Probation New Students**

Students who do not meet the minimum requirements for admission (see "Admission Guidelines") may be able to enter the graduate program on Departmental probation. The probationary program includes a minimum of 9 hours of specified course work, which must be completed at TAMU in a single semester or 10-week summer semester. Directed studies and seminar courses cannot be used. Any subsequent modification to the program must have prior approval. To continue in the graduate program, the student must achieve a minimum GPR of 3.0 for the prescribed course work, with no grade being less than a C.

#### **Current Students**

GPR Requirements. Graduate students must maintain a cumulative grade point ratio (GPR) of 3.0 or greater both on courses defined on his/her degree plan and on all graduate and upper-level undergraduate courses taken at TAMU. The cumulative GPR is calculated from all eligible graduate and undergraduate courses taken after reclassification by the Office of Graduate and Professional Studies to the current degree program. Students who are admitted to a graduate degree-seeking program (G7 or G8), but who's cumulative or degree plan GPR falls below the specified minimum of 3.0, will be placed on scholastic probation. Students on Scholastic Probation will be given the next two semesters to raise the GPR to at least 3.0. A student may be dismissed from the graduate program after two semesters of GPR below 3.0 while on probation whether the probation semesters are consecutive or not. Any student on probation is permitted to register only for courses on his/her degree plan or for required courses if no degree plan has been filed. Probation will be removed when the student's GPR is above the required 3.0. For students on assistantships or fellowships who fail to maintain the required 3.0 GPR, funds will be terminated immediately because graduate students on probationary status are not eligible for graduate assistantships, scholarships, or fellowships. When the student's GPR returns to the required 3.0, they will be re-eligible for funding.

Lack of Academic Progress. Students who also fail to make reasonable progress toward their degree (lack of progress in completing coursework, delay in taking preliminary examinations, not turning in thesis/dissertation proposal within a reasonable time of passing written preliminary examination, and not making reasonable progress in completing the dissertation) will be placed on scholastic probation (see "Scholastic Requirements" in the *Graduate Catalog*). Students that are placed on Scholastic Probation due to not making reasonable progress toward their degree (as stated above) will also be required to meet with the Chair of their Graduate Advisory Committee and prepare an action plan on how to make and maintain appropriate progress toward completing their degree. The action plan will include expected completion dates measuring academic progress. This document must be signed by both the Student and the Chair of their Graduate Advisory Committee and be turned into the Departmental Graduate Office before being permitted

to register for courses for the next semester. A student may be dismissed from the graduate program if after two semesters of probation (the semesters do not need to be consecutive) it is determined by the Chair of the student's Advisory Committee in consultation with the Department's Associate Head for Graduate Programs that reasonable progress was not made towards their degree, and completion dates listed in the action plan have not been met. You may also be dismissed from the program if you fail to register for classes in any of the terms that you are on probation.

# Separation, Dismissal or Termination from the University

A department/program or graduate advisory committee may RECOMMEND separation (suspension, dismissal, or termination) from the university of a graduate student for scholastic deficiency by submitting a request in writing through the Dean of the College to the Associate Provost for Graduate and Professional Studies. The separation action could entail suspension (separation from the university for a definite period), dismissal (separation from the university for an indefinite period), or termination (permanent separation from the university).

The letter will include justification and supporting documentation of previous communications with the student discussing his/her scholastic deficiency. This could include items such as a probationary memo and/or emails. The letter needs to clearly specify the reason(s) for separation and the recommended separation action (suspension, dismissal, or termination).

Upon approval by OGAPS, a letter will be sent to the student via certified mail and email and department via email, and the student will be blocked from registration for the approved period/condition of separation by OGAPS. If the student is registered for classes in a future term, the department should cancel the student's enrollment for the future term.

# Separation, Dismissal or Termination from the Department

If a department/program or graduate advisory committee wishes to recommend separation from the department/program only and allow the student the opportunity to find another department/program that is willing to admit her/him, this action is considered a dismissal — separation from the university for an indefinite period (until and if the student finds another academic home).

The letter from the department/ program or advisory committee should provide the same information as stated above for separation from the university. OGAPS should be copied on this letter and sent a copy for the student's permanent record. The department will place a block from registration on the student's account. The department will remove the registration block ONLY if the student is accepted by another department/program. If the student is registered for classes in a future term, the department should cancel the student's enrollment for the future term.

Scholastic Warnings and Probation actions are facilitated within the department/program. Please see <u>Rule</u> 12 for further details

# **Frequently Asked Questions**

- Q. If I wish to go on for a PhD degree after my master's, what forms do I need to complete?
- A student completing a graduate degree who want to continue for another graduate degree may request to do so by submitting a "Letter of Intent" if there is no break in enrollment, or if the break is less than one calendar year. You must also submit a Current Resume/CV, a Statement of Purpose, GRE Scores and three Letters of Recommendation to Departmental Graduate Office.
- Q. What happens if I do not take the courses listed on my probationary program?
- A. Any changes to your probationary program must be approved <u>before</u> you can register for classes. If you do not obtain approval for changes, your registration will be canceled, and you may be dismissed from the program.

# **MASTER'S DEGREE**

Students entering the Master's program in agricultural economics have three options. Master of Science students have the choice of the thesis option (recommended for those students who plan to go on for further graduate studies) or the non-thesis option. The third option is the Master of Agribusiness program. Each option is described below. Students who plan to pursue a PhD degree should be sure that prerequisites to the PhD program are included in their MS degree program.

## **Prerequisites**

Students undertaking a program of study leading to the Master's degree must have completed an accepted baccalaureate degree program, including the following or equivalent courses:

ECON 323	Microeconomic Theory
ECON 410, 311 or AGEC 430	Macroeconomic Theory
MATH 142, 152, or 172	Calculus
STAT 303	Statistical Methods

If, in the judgment of the Associate Head for Graduate Programs or the student's graduate advisor, the student is deficient in other subject areas important to his/her graduate program, the student may be required to satisfy additional prerequisites.

#### **Master of Science - Thesis Option**

A minimum of 32 credit hours is required for the Agricultural Economics MS - thesis option degree.

#### Requirements

The following courses or their equivalent must be included in this program of study:

Microeconomic Theory	—Choose one of two courses:	
	ions of Microeconomic Theory, or onomic Theory I	
Macroeconomic Theory	y—Choose one of two courses:	
	ions of Macroeconomic Theory, or conomic Theory I	
Quantitative Methods:		
AGEC 661 Applied AGEC 622 Agribus AGEC 641 Operation	etrics for Agribusiness, or Econometric Methods in Agriculture	
Field Requirement—Six hours of 600-level graduate Agricultural Economic courses		
(Excluding AGEC 681, 684, 685, and 693)		
Research:		
	h Methodology	
Electives		
Total credits	32 Credits	

Any course taken as AGEC 685 Directed Studies will require the completion of a <u>commitment form</u>. Each AGEC 685 course taken must have a completed commitment form on file in the Graduate Office, which will include an outline of objectives, and a syllabus with grading criteria.

A thesis based upon original research work is required under this option. A thesis proposal must be filed with the Office of Graduate Studies at least 15 working days prior to submission of the "Request and Announcement of the Final Examination" form. A copy of the "Thesis Manual" should be consulted to make sure required procedures are followed. This manual is available from the Texas A&M Bookstore or can be downloaded from the Thesis Office homepage at

Normally 8 hours of AGEC 691 are taken to satisfy the research credits associated with the thesis. It is possible to register for more than 8 hours of AGEC 691 if the student has met all other course requirements for the degree, but no more than 8 hours may appear on the degree plan. It is also possible to take fewer than 8 hours of AGEC 691 as long as (1) the student's Advisory Committee approves and (2) the student completes a degree plan of 32 or more credit hours.

Master of Science-thesis students may choose to replace AGEC 691 Research hours with AGEC 684 Internship hours on their degree plans not to exceed a total of 8 credit hours. For information about the Internship program, consult the *Procedural Manual for the Master of Science Internship Program*.

The final examination, which is taken after students have completed all other requirements for the degree, covers both course work and thesis. Thesis-option candidates may petition to be exempted from their final examination provided their GPR is 3.5 or better. Approval of their Advisory Committee, the Associate Head for Graduate Programs, and the Office of Graduate Studies is required.

Permission to administer the final exam must be sought at least two weeks prior to the desired exam date. The committee chair should make this request to the Office of Graduate and Professional Studies through the Associate Head for Graduate Programs. The official "Request and Announcement of the Final Examination" form is found on the OGAPS website. Copies of the abstract (not to exceed 350 words) must be distributed to the faculty, along with an announcement of the scheduled time and location of the exam.

#### Planning Schedules

The three figures that follow have been prepared to assist the student in planning the MS thesis option program. Figure 1 summarizes the degree requirements. Figure 2 provides information to help sequence the courses. Figure 3 provides a typical schedule for a MS thesis student.

Figure 1. Master of Science – Thesis Option: Degree Planning Guide (32 hours) (Revised 1/18/2022)

			Semester Offered	Year
Course	Course Description	Credits		Taken
PREREQUISI'	ΓES OR EQUIVALENT			
ECON 323	Microeconomic Theory	Credit 3	F,S,SSI	
ECON 410 <sup>a</sup>	Macroeconomic Theory	Credit 3	F,S,SSII	
MATH 142 <sup>b</sup>	Business Mathematics II (Multivariate Calculus)	Credit 3	F,S,SSI,SSII	
STAT 303	Statistical Methods	Credit 3	F,S,SSI,SSII	
REQUIRED C	OURSES			
<b>Economic The</b>	eory:			
ECON 607°	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611 <sup>d</sup>	Foundations of Macroeconomic Theory	Credit 3	Spring	
Quantitative I	Methods:			
AGEC 621 <sup>e</sup>	Econometrics for Agribusiness	Credit 3	Fall	
AGEC 622 <sup>f</sup>	Agribusiness Analysis and Forecasting	Credit 3	Spring	
Field Require	ments (6 credits of AGEC Field Courses):			
Research Req	uirements:			
AGEC 607	Research Methodology	Credit 3	Spring	
AGEC 691g	Research	Credit 3	All	
<b>Elective Cour</b>	ses (3 credits required):			
Student's Adv	risory Committee:			
Chair	Member		Outside Member	

Minimum Credit Required: 32. Departures from courses listed above require written justification and approval by the student's proposed Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> Or ECON 311 or AGEC 430.

<sup>&</sup>lt;sup>b</sup> Or Math 152 or 172.

<sup>&</sup>lt;sup>c</sup> Or ECON 629 Microeconomic Theory I (Fall).

d Or ECON 636 Macroeconomic Theory I (Spring).

<sup>&</sup>lt;sup>e</sup> Or AGEC 661 Applied Econometric Methods in Agriculture (Spring).

f Or AGEC 641 Operations Research Methods in Agricultural Economics (Fall)

Or AGEC 643 Applied Simulation in Agricultural Economics (Fall).

g Research credits may be replaced by course credits

Figure 2. Master of Science – Thesis Option: Scheduling of Curriculum

Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Field Electives
ECON 607 (3) Microeconomic Theory	AGEC 622 (3) Agribusiness Analysis & Forecasting	Optional
AGEC 621 (3) Econometrics for Agribusiness	AGEC 607 (3) Research Methodology	AGEC 691 Research
Field Electives	ECON 611 (3) Macroeconomic Theory	
AGEC 614 (3) Global Food and Agribusiness Policy	Field Electives	
AGEC 652 (3) Internat'l Agribusiness Trade Analysis	AGEC 601 (3) Commodity Fut. & Opt. Markets	
AGEC 659 (3) Ecological Economics (taught in even	AGEC 603 (3) Land Economics	
years only)	AGEC 604 (3) Natural Resource Economics	
	AGEC 605 (3) Rural Real Estate Appraisal and Organization	
	AGEC 606 (3) Water Resource Economics	
	AGEC 625 (3) Environment of Agribusiness	
	AGEC 634 (3) Rural Financial Markets & Planning	
	AGEC 638 (3) Managerial Economics for Regulatory Science	
Final Semester		
Field Electives	Field Electives	
AGEC 614 (3) Global Food and Agribusiness Policy	AGEC 601 (3) Commodity Fut. & Opt. Markets	
AGEC 652 (3) Internat'l Agribusiness Trade Analysis	AGEC 603 (3) Land Economics	
AGEC 659 (3) Ecological Economics (taught in even years only)	AGEC 604 (3) Natural Resource Economics	
Optional	AGEC 605 (3) Rural Real Estate Appraisal and Organization	
AGEC 691 Research	AGEC 606 (3) Water Resource Economics	
	AGEC 625 (3) Environment of Agribusiness	
	AGEC 634 (3) Rural Financial Markets & Planning	
	AGEC 638 (3) Managerial Economics for Regulatory Science	
	Optional	
	AGEC 691 Research	

Figure 3. Master of Science – Thesis Option: Typical Schedule

Spring	Summer I	Summer II
First Year		
AGEC 622 (3)	Elective (3)	AGEC 691 (3)
AGEC 607 (3)		
ECON 611 (3)		
Fin	 al Year	
	AGEC 622 (3) AGEC 607 (3) ECON 611 (3)	AGEC 622 (3) Elective (3) AGEC 607 (3)

# **Master of Science - Non-Thesis Option**

A minimum of 36 hours of graduate credit is required for the Agricultural Economics MS - non-thesis option degree. The MS non-thesis option is designed for those students who want the MS degree but who lack an interest in writing the thesis. To compensate for not writing a thesis, students are required to take a greater number of courses than MS students choosing the thesis option. Students may also complete a Professional Study paper (three credit hours).

# Requirements

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The following courses (or their equivalents) are required under the MS non-thesis option:

Microeconom	ic Theory—Choose one of three courses:	
AGEC 619 ECON 607 ECON 629	Managerial Economics for Agribusiness, Foundations of Microeconomic Theory, or Microeconomic Theory	
ECON 02)	whereceonomic rheory	
Macroeconon	nic Theory—Choose one of two courses:	
ECON 611 ECON 636	Foundations of Macroeconomic Theory, <b>or</b> Macroeconomic Theory I	
Quantitative 1	Methods:	
AGEC 621 AGEC 661	Econometrics for Agribusiness, <b>or</b> Applied Econometric Methods in Agriculture	
AGEC 622 AGEC 641 AGEC 643	Agribusiness Analysis and Forecasting, <b>or</b> Operations Research Methods in Agricultural Economics, <u>and</u> Applied Simulation in Agricultural Economics	
Subtotal of Re	equired Courses	
Field Requirements—Nine hours of 600-level Agricultural Economics courses		
(Excluding AC	GEC 681, 684, 685, and 693)	
Research Requirements		
AGEC 693	Professional Study Paper <b>or</b> . an elective course approved by the Student's Advisor	
Electives		
Total Credits		

Any course taken as AGEC 685 Directed Studies will require the completion of a <u>commitment form</u>. Each AGEC 685 course taken must have a completed commitment form on file in the Graduate Office, which will include an outline of objectives, and a syllabus with grading criteria.

AGEC 684 Professional Internship is an elective option for Master of Science-Non-Thesis students. For information about the Internship program, consult the <u>Procedural Manual for the Master of Science Internship Program</u>

Prior to registering for AGEC 693 Professional Study, the student must complete the "<u>Professional Study Proposal Form</u>". The Professional Study paper should focus on an issue of special interest and relevance to the student's specialty area and must show evidence of an ability to complete an applied research project,

including defining the project's objectives, analyzing the problem, and writing the results in a paper using an acceptable manuscript format. The advisor or his/her designee will supervise the development of this paper. Students should refer to the <u>AGEC 693 Professional Study Paper for instruction concerning</u> the preparation of the professional study paper. The completed paper will be presented to the student's advisor, who assigns a letter grade. Bound copies of the paper are to be provided to Advisory Committee members upon request. In addition, a pdf version of the paper is to be submitted to the Grad Office. The final oral examination, taken after all other requirements are completed, covers course work and the Professional Study paper. A "Request and Announcement of the Final Examination" form must be submitted at least two weeks prior to the desired exam date.

# **Planning Schedules**

The three figures that follow have been prepared to assist the student in planning the MS non-thesis program. Figure 4 summarizes the degree requirements. Figure 5 provides information to help sequence the courses. Figure 6 provides a typical schedule for a MS non-thesis student.

Figure 4. Master of Science – Non-Thesis Option: Degree Planning Guide (36 Hours) (Revised 1-18-2022)

Student's Name		
Student S Ivanie		

			Semester	Year
Course	Course Description	Credits	Offered	Taken
PREREQUISITE	S OR EQUIVALENTS			
ECON 323	Microeconomic Theory	Credit 3	F,S,SSI	
ECON 410 <sup>a</sup>	Macroeconomic Theory	Credit 3	F,S,SSII	
MATH 142 <sup>b</sup>	Business Mathematics II (Multivariate Calculus)	Credit 3	F,S,SSI,SSII	
STAT 303	Statistical Methods	Credit 3	F,S,SSI,SSII	
REQUIRED COU	JRSES			
<b>Economic Theor</b>	y:			
AGEC 619 <sup>c</sup>	Managerial Economics for Agribusiness	Credit 3	Fall	
ECON 611 <sup>d</sup>	Foundations of Macroeconomic Theory	Credit 3	Spring	
Quantitative Me	thods:	•		
AGEC 621 <sup>e</sup>	Econometrics for Agribusiness	Credit 3	Fall	
AGEC 622 <sup>f</sup>	Agribusiness Analysis and Forecasting	Credit 3	Spring	
Field Requireme	nts (9 Credits of AGEC Field Courses):	•		
D 1D :	1			
Research Requir		C 1:4 2	All	
AGEC 693g	Professional Study	Credit 3	All	
Elective Courses	(12 Credits Required):		T 1	
Student's Adviso	ory Committee		<u> </u>	
Chair	Member	Outside	Member	

Minimum Credits Required: 36. Departures from courses listed above require written justification and approval by the student's proposed Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> Or ECON 311 or AGEC 430.

<sup>&</sup>lt;sup>b</sup> Or MATH 152 or 172.

<sup>&</sup>lt;sup>c</sup> Or ECON 607 Foundations of Microeconomic Theory (Fall) or ECON 629 Microeconomic Theory I (Fall).

<sup>&</sup>lt;sup>d</sup>Or ECON 636 Macroeconomic Theory I (Spring).

<sup>&</sup>lt;sup>e</sup>Or AGEC 661 Applied Econometric Methods in Agriculture (Spring).

<sup>&</sup>lt;sup>f</sup>Or AGEC 641 Operations Research Methods in Agricultural Economics (Fall) or AGEC 643 applied Simulation in Agricultural Economics (Fall)

<sup>&</sup>lt;sup>g</sup>Or an elective course approved by the Student's Advisor (If this option is chosen, the final exam will be over MS course work.)

Figure 5. Master of Science – Non-Thesis Option: Scheduling of Curriculum

Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Required
AGEC 619 (3) Managerial Economics in Agribusiness	AGEC 622 (3) Agribusiness Analysis & Forecasting	AGEC 693 (3) Professional Study
AGEC 621 (3) Econometrics for Agribusiness	ECON 611 (3) Macroeconomic Theory	
Field Electives	Field Electives	
AGEC 608 (3) Economics of Conflict and Development	AGEC 601 (3) Commodity Fut. & Opt. Markets	
AGEC 613 (3) INTC Agricultural Development Policy	AGEC 603 (3) Land Economics	
AGEC 614 (3) Global Food and Agribusiness Policy	AGEC 604 (3) Natural Resource Economics	
AGEC 652 (3) Internat'l Agribusiness Trade Analysis	AGEC 605 (3) Rural Real Estate Appraisal and Organization	
	AGEC 606 (3) Water Resource Economics	
	AGEC 620 (3) Food Security Climate Conflict	
	AGEC 625 (3) Environment of Agribusiness	
	AGEC 634 (3) Rural Financial Markets & Planning	
	AGEC 638 (3) Managerial Economics for Regulatory Science	
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Field Electives	Field Electives	
AGEC 608 (3) Econ of Conflict and Development	AGEC 601 (3) Commodity Fut. & Opt. Markets	
AGEC 613 (3) INTL Ag Development Policy	AGEC 603 (3) Land Economics	
AGEC 614 (3) Global Food and Agribusiness Policy	AGEC 604 (3) Natural Resource Economics	
AGEC 652 (3) Internat'l Agribusiness Trade Analysis	AGEC 605 (3) Rural Real Estate Appraisal and Organization	
	AGEC 606 (3) Water Resource Economics	
	AGEC 620 (3) Food Security Climate Conflict	
	AGEC 625 (3) Environment of Agribusiness	
	AGEC 634 (3) Rural Financial Markets &Planning	
	AGEC 638 (3) Managerial Economics for Regulatory Science	

Figure 6. Master of Science – Non-Thesis Option: Typical Schedule

Fall	Spring	Summer I	Summer II
	First Year		
AGEC 619 (3)	AGEC 622 (3)	AGEC 693 (3)	
AGEC 621 (3)	ECON 611 (3)	Elective (3)	Elective (3)
Field Elective or Elective (3)	Field Elective or Electives (3)		
Second Year			
Field Electives or Electives (9)			

# **Master of Agribusiness**

A minimum of 39 hours of graduate credit is required for the Master of Agribusiness (MAB) degree. The MAB option is non-thesis, interdisciplinary, and jointly administered by the College of Agriculture and Life Sciences and the Mays Business School. This professional curriculum is designed to provide a broad preparation for economic, financial, and marketing analysis of agribusiness, food, and fiber industry decisions. Students may select 9 credit hours of electives within the 39-credit hour requirement in consultation with the Program Director, which may include an AGEC 684 Internship. A Procedural Manual for the Master of Agribusiness Internship Program. In addition, students will be required to take capstone courses during their last fall semester (AGEC 629 and 630). Successful completion of these capstone courses allows waiving of the final oral examination.

# Requirements

The following courses (or their equivalents) are required under the Master of Agribusiness option:

#### **Foundation Courses:**

ACCT 640	Accounting Concepts and Procedures
AGEC 619	Managerial Economics in Agribusiness
FINC 635	Financial Management
MGMT 655	Survey of Management
MKTG 621	Survey of Marketing

If the student has previously taken one or more course(s) equivalent to the foundation courses, the MAB Director will allow substitution of one or more elective course(s) from the Mays Business School, or the MAB Director may allow substitution of related courses if, in his/her judgment and in consultation with the student, these courses would better suit the student's objectives.

#### **Quantitative Methods:**

Total credits		39 Credits
Electives		9 Credits
AGEC 630	Financial Analysis for Agribusiness Firms	3 Credits
AGEC 629	Agribusiness Strategic Management.	3 Credits
AGEC 625	Environment of Agribusiness	3 Credits
Field Require	ments:	
AGEC 622	Agribusiness Analysis and Forecasting	3 Credits
AGEC 621	Econometrics for Agribusiness	3 Credits

The capstone courses (AGEC 629, 630) are taught during the Fall semester and taken during the second year of the student's program. Prerequisites for these courses are ACCT 640, AGEC 621, AGEC 625, AGEC 619, and FINC 635. Students must have taken or be concurrently enrolled in the foundation courses. Course sequence is based on entry in the Fall semester.

One available elective is the AGEC 684 Internship, which should be taken during the summer term in the middle of the program rather than at the end. <u>A Procedural Manual for the Master of Agribusiness Internship</u> Program

Any course taken as AGEC 685 Directed Studies will require the completion of a <u>commitment form</u>. Each AGEC 685 course taken must have a completed commitment form on file in the Graduate Office, which will include an outline of objectives, and a syllabus with grading criteria.

The MAB Director may substitute related courses for required courses if, in his/her judgment and in consultation with the student, these courses would better suit the student's objectives.

# **Planning Schedules**

The three figures that follow have been prepared to assist the student in planning the Master of Agribusiness program. Figure 7 summarizes the degree requirements. Figure 8 provides a typical schedule for a Master of Agribusiness student. Figure 9 lists suggested elective courses to satisfy Master of Agribusiness requirements.

# Figure 7. Master of Agribusiness: Degree Planning Guide

(Revised 1-18-2022)

Student's Name

			Semester	Year
Course	Course Description	Credits	Offereda	Taken
PREREQUISITI	ES OR EQUIVALENTS			
ECON 323	Microeconomic Theory	Credit 3	F,S,SSI	
ECON 410 <sup>b</sup>	Macroeconomic Theory	Credit 3	F,S,SSII	
MATH 142°	Business Mathematics II (Multivariate Calculus)	Credit 3	F,S,SSI,SSII	
STAT 303	Statistical Methods	Credit 3	F,S,SSI,SSII	
REQUIRED CO	URSES			
Foundation Co	urses <sup>d</sup> :			
ACCT 640	Accounting Concepts and Procedures	Credit 3	F, S	
AGEC 619	Managerial Economics in Agribusiness	Credit 3	F	
FINC 635	Financial Management	Credit 3	F, S	
MGMT 655	Survey of Management	Credit 3	F, S	
MKTG 621	Survey of Marketing	Credit 3	F, SSI	
Quantitative Co	ourses:			
AGEC 621	Econometrics for Agribusiness	Credit 3	Fall	
AGEC 622	Agribusiness Analysis and Forecasting	Credit 3	Spring	
Field Course Ro	equirements:	1		•
AGEC 625	Environment of Agribusiness	Credit 3	Spring	
AGEC 629	Agribusiness Strategic Management	Credit 3	Fall	
AGEC 630	Financial Analysis for Agribusiness Firms	Credit 3	Fall	
<b>Elective Course</b>	es (9 Credits required):			
		Credit 3		
		Credit 3		
		Credit 3		

# Student's Advisory Committee:

Chair	
	Director, Master of Agribusiness Program

Minimum Credits Required: 39. Departures from listed courses require approval of the MAB Program Director at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> Some Mays Business School classes may be offered in the summer term.

<sup>&</sup>lt;sup>b</sup> or ECON 311 or AGEC 430

<sup>&</sup>lt;sup>c</sup> or MATH 152, or 172.

<sup>&</sup>lt;sup>d</sup>Students may elect to take a more advanced course in ACCT, FINC, MKTG, or MGMT with the approval of the MAB Program Director.

# Figure 8. Master of Agribusiness: Typical Schedule (Revised 1-18-2022)

Fall (First Year)	Spring (First Year)	Summer
Required	Required	Field Electives
AGEC 619 (3) Managerial Economics in Agribusiness AGEC 621 (3) Econometrics for Agribusiness ACCT 640 (3) Accounting Concepts and Procedures MGMT 655 (3) Survey of Management or MKTG 621 Survey of Marketing	AGEC 622 (3) Agribusiness Analysis & Forecasting AGEC 625 (3) Environment of Agribusiness FINC 635 (3) Financial Management	6 Hours of Electives (may include AGEC 684 Internship) or MKTG 621 Survey of Marketing
Fall (Second Year)  AGEC 629 (3) Strategic Agribusiness Management AGEC 630 (3) Financial Analysis for Agribusiness Firms Elective (3)		

Figure 9. Master of Agribusiness: Suggested Elective Courses

Department of Agricultural Economics (AGEC)	Department of Management (MGMT)
447 Food and Agricultural Price Analysis	637 Foundations of Entrepreneurship
601 Commodity Futures & Options Markets	638 Strategic Entrepreneurship
603 Land Economics	639 Negotiations in Competitive Environments
604 Natural Resource Economics	640 Managing for Creativity and Innovation
605 Rural Real Estate Appraisal and Organization	643 Foundations of Managerial Law
606 Water Resource Economics	647 Law for Small and Family Owned Businesses
608 Econ of Conflict and Development	658 Managing Projects
613 International Ag Development Policy	663 Transfer Pricing
614 Global Food & Agribusiness Policy	667 Multinational Enterprises
620 Food Security Climate Conflict	678 International Management
634 Rural Financial Markets & Financial Planning	679 International Business Policy
652 International Agribusiness Trade Analysis	680 Business and Corporate Strategy
659 Ecological Economics (offered even years only)	
684 Professional Internship	Department of Accounting (ACCT)
Department of Finance (FINC)	641 Accounting Concepts and Procedures II
629 Financial Management I	647 Financial Statement Analysis
632 Investment Management	
642 Analysis of Money and Capital Markets	Department of Animal Science (or Food Science)
645 International Finance	FSTC/ANSC 657 Introduction to HACCP
647 Financial Statement Analysis	FSTC/ANSC 670 Food Quality Management
649 Financial Modeling	
661 Trading Risk Management	Department of Ag. Leadership, Education, and Comm
665 Derivative Securities	ALEC 618 Leadership in Teams
666 Wall Street, Investment Banking, & Financial Markets	AGED 625 Program Evaluation
667 Commodity Trade Strategy	ALEC 625 Team Projects
672 Real Property Finance	
Department of Marketing (MKTG)	
604 Data Visualization in Marketing	
650 Analyzing Consumer Behavior	
665 Research for Marketing Decisions	
671 Product Innovation	
673 Services Marketing	
675 Marketing Strategy	
677 Multinational Marketing Management	

# PhD DEGREE

# **Degree Requirements**

PhD students are expected to gain an acceptable level of competency in economic theory, quantitative methods, and field areas in agricultural economics. The courses necessary to meet PhD requirements are listed below. Any alterations in course requirements must be accompanied by a written explanation from the student (and endorsed by the student's advisory committee chair) to the Associate Head for Graduate Programs at the time the degree plan or any petition to alter the plan is submitted. The Associate Head for Graduate Programs must approve alterations in course requirements.

#### Credit Hour Requirements

PhD degree plans must reflect a minimum of 64 hours beyond the Master's degree and prerequisites, including course work and research credits (AGEC 691). Course work counted toward a Master's degree cannot be counted in the total hours required for a PhD student's degree plan but can satisfy the specific course requirements listed below.

# **Prerequisites**

A student undertaking a 64-hour program of study leading to the PhD degree must have completed the following or equivalent courses:

ECON 607	Foundations of Microeconomic Theory
ECON 611	Foundations of Macroeconomic Theory
AGEC 621	Econometrics for Agribusiness
ECMT 660	Mathematical Economics I
AGEC 607	Research Methodology (not required if student has
	completed a MS thesis)

A solid foundation is critical to success in the AGEC PhD program. Hence, in addition to the prerequisite courses, all beginning students are encouraged to take a Departmental on-line math camp that will be offered as a non-credit course during the summer preceding the start of the PhD program. In addition to the Departmental math camp, students are encouraged to take or audit the Math Prep and Stat Prep courses offered by the Department of Economics early August. After the math and stat prep courses, students starting the PhD program will take a placement exam that covers required mathematical concepts. If, in the judgment of the Associate Head for Graduate Programs, the student is deficient in any subject matter areas important to his/her graduate program, the student may be required to satisfy additional prerequisites before starting the required PhD courses listed below. This will not affect the student's status in the program or funding.

## **Course Requirements**

The following courses (or their equivalents) are required under the PhD program:

# Economic Theory and Applications

Competency in economic theory and application is expected. Two courses (6 credit hours) are taken to meet the minimum microeconomic theory requirement.

#### **Microeconomic Theory:**

Total Econom	ic Theory Requirements	6 Credits
ECON 630	Microeconomic Theory II	3 Credits
ECON 629	Microeconomic Theory I	3 Credits

One course (3 credit hours) covering advanced material which comprise a common body of critical knowledge is required for all PhD students.

# **Core Requirements**

AGEC 636	Agribusiness Markets and Applied Welfare Analysis
Total Economic Theory and Applications	

#### **Quantitative Methods**

Three courses (9 credit hours) in quantitative methods are required for the PhD degree in agricultural economics. These courses are:

Two out of the following three courses:		
AGEC 662	Applied Econometric Methods in Agriculture and Resources I	
AGEC 661	Applied Econometric Methods in Agriculture and Resources I	
ECMT 675*	Econometrics I	

AGEC 641	Operations Research Methods in Agricultural Economics	
AGEC 642	Dynamic Optimization <b>OR</b>	
AGEC 643	Applied Simulation in Agricultural Economics <u>3 Credits</u>	
* or STAT 630 or sequence STAT 610 and STAT 611.		

# **Economic Theory or Quantitative Methods Elective**

Students must choose two of the following courses to augment their studies in economic theory or quantitative methods:

#### 

Other graduate courses may be required or recommended depending on the student's area of emphasis. If, in the judgment of the student's Advisory Committee chair, the student is deficient in other subject matter areas important to his/her graduate program, the student may be required to satisfy additional requirements.

# Field Area

Students, in consultation with their Advisory Committee, are required to take 12 credit hours of field courses. First, the student must choose a field area that includes a minimum of 6 credit hours. The Department offers <u>four</u> field areas: (A) Applied Market Analysis, (B) Resources and Environmental Economics, (C) Agribusiness and (D) Committee Generated Field Area. Each field area consists of two required courses: a Fundamentals course, and a Frontiers course. Students will be required to take a field prelim over these two courses. In addition to the two required field courses, students must take two or more field elective courses, either inside or outside the department, which will provide greater depth in their primary field area or constitute a second field as defined by their Advisory Committees.

# Field Requirement: Choose one field area:

# **Applied Market Analysis**

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Required Field Courses:		
AGEC 672	Fundamentals in Applied Market Analysis	
AGEC 676	Frontiers in Applied Market Analysis	
Subtotal in Field Area 6 Credits		
Field Courses	(Two out of the following courses)	
AGEC 671	Fundamentals in Agribusiness and Managerial Economics	
AGEC 672	Fundamentals in Applied Market Analysis	
AGEC 673	Fundamentals in Resource and Environmental Economics	
AGEC 676	Frontiers in Applied Market Analysis	
AGEC 677	Frontiers in Resource and Environmental Economics	
AGEC 695	Frontiers in Agricultural Economics and Agribusiness	
Subtotal in Field Elective Area		
Total Field Requirements12 Credits		
In satisfying the field <b>elective</b> requirements, students may substitute courses for the six courses listed above. However, students must obtain the approval of the Graduate Advisory Committee (GAC) to take masters-level courses offered in Agricultural Economics, Economics, and the Mays Business School; or departmental courses that are prerequisite to field courses or part of the core PhD curriculum. Students may not include any 681, 684, 685, or 691 credits for field courses.		
Total Minimum Course Requirements42 Credits		
Research		
AGEC 691	Research	
All PhD students must attain a level of understanding of philosophy of science comparable to AGEC 607 (Research Methodology) and a working knowledge of the use of computers in research and teaching.  Additional hours of coursework can be used to replace research hours.		
Total Credits64 Credits		

# Resource and Environmental Economics

Required Field Courses:			
AGEC 673	Fundamentals in Resource and Environmental Economics		
AGEC 677	Frontiers in Agricultural Economics and Agribusiness		
Subtotal in Field Area 6 Credits			
Field Courses (Two out of the following courses)			
AGEC 671	Fundamentals in Agribusiness and Managerial Economics		
AGEC 672	Fundamentals in Applied Market Analysis		
AGEC 673	Fundamentals in Resource and Environmental Economics		
<b>AGEC 676</b>	Frontiers in Applied Market Analysis		
AGEC 677	Frontiers in Resource and Environmental Economics		
AGEC 695	Frontiers in Agricultural Economics and Agribusiness		
Subtotal in Field Elective Area 6 Credits			
Total Field Requirements:			
In satisfying the field <b>elective</b> requirements, students may substitute courses for the six courses listed above. However, students must obtain the approval of the Graduate Advisory Committee (GAC) to take masters-level courses offered in Agricultural Economics, Economics, and the Mays Business School; or departmental courses that are prerequisite to field courses or part of the core PhD curriculum. Students may not include any 681, 684, 685, or 691 credits for field courses.			
Total Minimum Course Requirements			
Research			
AGEC 691	Research		
All PhD students must attain a level of understanding of philosophy of science comparable to AGEC 607 (Research Methodology) and a working knowledge of the use of computers in research and teaching. Additional hours of coursework can be used to replace research hours.			
Total Credits			

#### **Agribusiness**

Four field areas are offered in the Agribusiness Field: (1) finance, (2) strategic management, (3) marketing, and (4) supply chain management. Students are required to take specific courses offered by the Finance (FINC), Management (MGMT), Marketing (MKTG) and Information and Operations Management departments in the Mays Business School. This is in addition to core courses in the Agricultural Economics (AGEC) and Economics (ECON) departments. There is no specific commitment from the Mays Business School to offer a particular doctoral seminar every year or during a particular term, as course offerings vary with the size of departmental programs and the availability of faculty to teach a particular topic.

#### Agribusiness - Finance emphasis:

Required Fiel	eld Courses:	
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	nomics3 Credits
AGEC 695*	Frontiers in Agribusiness and Managerial Economic	cs3 Credits
Subtotal in Fi	ield Area	6 Credits
<b>Business Field</b>	d Courses	
FINC 688**	Seminar in Corporate Finance	3 Credits
FINC 688**	Seminar in Asset Pricing	3 Credits
Subtotal in Fi	ield Elective Area	6 Credits
Total Field Ro	Requirements	12 Credits
Chair of the student's parts of AGEC 676 Fr faculty, or any comballow the student to s	aught under the direction of the Chair of the student's grading and it is advisory committee can take an active role in teaching frontiers in Applied Market Analysis, allow students to take binations of these alternatives. The Chair of the student substitute AGEC 676 for AGEC 695. When the course is all in a section opened for the Chair of the student's advis	this class, allow students to take the directed readings from selected t's advisory committee may also to taught as an AGEC 695 course,
**Two finance sequences are offered, Asset Pricing and Corporate Finance, with a theory and an empirical course for each. A doctoral seminar in Research Methods is also offered depending on the availability of instructors. ABME students are required to take two doctoral seminars. It is recommended that students take the asset pricing or corporate finance sequence. However, students can take any of the doctoral seminars with the exception that the empirical seminars cannot be taken before taking the associated theory course. The theory courses are taught each year. Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses and under the direction of the Finance Department.		

Total Minimum Course Requirements		
Research		
AGEC 691	Research	

All PhD students must attain a level of understanding of philosophy of science comparable to AGEC 607 (Research Methodology) and a working knowledge of the use of computers in research and teaching. Additional hours of coursework and FINC 690 Research Topics Seminar can be used to replace research hours. ABME students are invited and encouraged to attend the Finance Friday seminars. It is expected that this will help ABME students to better understand the research methodology used to publish in the finance literature.

## Agribusiness -- Marketing emphasis:

	Required Field	d Courses:
	AGEC 671	Fundamentals in Agribusiness and Managerial Economics
	AGEC 695**	Frontiers in Agribusiness and Managerial Economics
	AGEC 672	Fundamentals in Applied Market Analysis
	Subtotal in Fie	eld Area
	<b>Business Field</b>	Courses (Three out of the following courses)
	MKTG 680	Seminar in Buyer Behavior
	MKTG 682	Seminar in Marketing Strategy Research
	MKTG 687	Seminar in Marketing Methods
	MKTG 688**	Doctoral Seminar
	Subtotal in Fie	eld Elective Area
	Total Field Re	quirements18 Credit
k	committee. The class, allow stu to take directed of the student's 695. When the	ill be taught under the direction of the Chair of the student's graduate advisore Chair of the student's advisory committee can take an active role in teaching the dents to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow student readings from selected faculty, or any combinations of these alternatives. The Chair advisory committee may also allow the student to substitute AGEC 676 for AGE course is taught as an AGEC 695 course, the student will enroll in a section opened the student's advisory committee.
*:	This course con	vers basic econometrics. Check with the instructor to determine if this will cover neou haven't already taken in AGEC 661.
Total 1	Minimum Cour	se Requirements48 Credit
	Research AGEC 691	Research

Total Credits .......64 Credits

## Agribusiness -- Strategic Management Emphasis:

Required Field Courses:			
AGEC 671	Fundamentals in Agribusiness and Managerial Economics		
AGEC 695*	Frontiers in Agribusiness and Managerial Economics		
Subtotal in Fi	teld Area 6 Credits		
Field Courses	s (Two out of the following courses)		
MGMT 634	Seminar in Organizational Behavior		
MGMT 636	Seminar in Organizational Theory		
MGMT 676	Strategic Management Survey		
Subtotal in Fi	teld Elective Area 6 Credits		
Total Field R	equirement12 Credits		
* This course will be taught under the direction of the Chair of the student's graduate advisory committee. The Chair of the student's advisory committee can take an active role in teaching this class, allow students to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students to take directed readings from selected faculty, or any combinations of these alternatives. The Chair of the student's advisory committee may also allow the student to substitute AGEC 676 for AGEC 695. When the course is taught as an AGEC 695 course, the student will enroll in a section opened for the Chair of the student's advisory committee.			
Total Minimum Course Requirements42 Credits			
Research			
AGEC 691	Research		
Total Credits	64 Credits		

## Agribusiness -- Supply Chain Management Emphasis:

Required Fiel	d Courses:		
AGEC 671	Fundamentals in Agribusiness and Managerial Economics		
AGEC 695*	Frontiers in Agribusiness and Managerial Economics		
AGEC 672	Fundamentals in Applied Market Analysis		
Subtotal in Fi	eld Area		
Field Courses			
SCMT 688	Doctoral Seminar		
Subtotal in Fi	eld Elective Area 6 Credits		
Total Field R	equirement15 Credits		
* This course will be taught under the direction of the Chair of the student's graduate advisory committee. The Chair of the student's advisory committee can take an active role in teaching this class, allow students to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students to take directed readings from selected faculty, or any combinations of these alternatives. The Chair of the student's advisory committee may also allow the student to substitute AGEC 676 for AGEC 695. When the course is taught as an AGEC 695 course, the student will enroll in a section opened for the Chair of the student's advisory committee.			
Total Minimum Cour	rse Requirements		
Research			
SCMT 690	Theory of Research in Information and Operations Management		
AGEC 691	Research		
Total Research Credi	t		
Total Credits			

#### Committee Generated Field Area

The Graduate Students Advisory Committee will define the field area and the classes to be taken by the student. Field classes must come from the currently approved field courses or AGEC 689 Special Topics approved by GAC and the Associate Head. The student, with approval from the student's Chair, must submit a petition, with the proposed field courses, to GAC to consider the proposed specialized field area. GAC will submit their decision to the Associate Head and the Associate Head will approve or disapprove the petition.

Required	Field	<b>Courses:</b>
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Graduate Students Advisory Committee defined fundamentals course		
Graduate Stud	dents Advisory Committee defined frontiers course	
Subtotal in F	ield Area 6 Credits	
Field Course	s (Two out of the following courses)	
AGEC 671	Fundamentals in Agribusiness and Managerial Economics	
AGEC 672	Fundamentals in Applied Market Analysis	
AGEC 673	Fundamentals in Resource and Environmental Economics	
AGEC 676	Frontiers in Applied Market Analysis	
AGEC 677	Frontiers in Resource and Environmental Economics	
AGEC 695	Frontiers in Agricultural Economics and Agribusiness.	
Subtotal in Field Elective Area		
Total Field Requirements12 Credits		

In satisfying the field elective requirements, students may substitute courses for the six courses listed above. However, students must obtain the approval of the Graduate Advisory Committee (GAC) to take masters-level courses offered in Agricultural Economics, Economics, and the Mays Business School; or departmental courses that are prerequisite to field courses or part of the core PhD curriculum. Students may not include any 681, 684, 685, or 691 credits for field courses.

Total Minimum Cou	rse Requirements42	Credits
Research		
AGEC 691	Research	Credits

All PhD students must attain a level of understanding of philosophy of science comparable to AGEC 607 (Research Methodology) and a working knowledge of the use of computers in research and teaching.

Additional hours of coursework can be used to replace research hours.

#### Variable Credit Courses

Variable credit courses (AGEC 685 and 691) will require the completion of a commitment form. Each AGEC 685 Directed Studies course taken must have a completed <u>commitment form</u> on file in the Graduate Office. For AGEC 691, the <u>commitment form</u> is required only for research hours requested before completion of prelims.

#### **Dissertation and Proposal**

A dissertation based upon original research is required for the PhD degree. A dissertation proposal must be filed with the Office of Graduate and Professional Studies. The proposal coversheet can be found on the Office of Graduate and Professional Studies forms website. It should be completed as early in the student's program as the planned research project can be outlined in reasonable detail. The proposal must be completed and submitted to the student's Advisory Committee prior to the Oral Preliminary Examination, which is a defense of the dissertation proposal. To be sure required procedures are followed, consult the Thesis Manual for detailed instruction on the formatting of the dissertation.

#### Straight-Through PhD

Students wanting to go straight through from a BS to a PhD degree are required to complete a 96-hour program typically including course work and research (AGEC 691). The required coursework is the same as the PhD curriculum. If a student has been admitted for a straight-through PhD degree, thereby by-passing the Master's degree, he/she will be classified as G7 until 30 hours of course work applicable to the doctoral degree have been completed, after which his/her classification will be changed to G8 (see section on Academic Status in this Handbook).

#### **Prerequisites**

Students undertaking a program of study leading to the straight-through PhD degree must have completed an accepted BS degree program, including the following courses or their equivalent:

ECON 323 Microeconomic Theory
ECON 410, 311 or AGEC 430 Macroeconomic Theory

MATH 142, 152, or 172 Calculus

STAT 303 Statistical Methods

If, in the judgment of the student's Advisory Committee, the student is deficient in other subject matter areas important to his/her graduate program, additional prerequisites may be required.

#### Recommended Courses Depending on Student's Background

It is <u>recommended</u> that students who have not had graduate coursework in microeconomic theory (or equivalent) take <u>ECON 607</u> (Foundations of Microeconomic Theory). Students who have not had graduate coursework in macroeconomic theory (or equivalent) should take <u>ECON 611</u> (Foundations of Macroeconomic Theory). Students who have not had courses that cover matrix algebra and multivariate calculus should take <u>ECMT 660</u> (Mathematical Economics I). Students who have not had coursework in statistical data analysis, multiple regression, hypothesis testing, and simultaneous equation models should take <u>AGEC 621</u> (Econometrics in Agribusiness). Students who have not had coursework in linear programming, time series, forecasting and simulation should take <u>AGEC 622</u> (Agribusiness Analysis and Forecasting). Students who have not had coursework in basic probability theory including distributions of random variables and expectations should take STAT 630 (Overview of mathematical Statistics).

A solid foundation is critical to success in the AGEC PhD program. Hence, in addition to the prerequisite courses, all beginning students are encouraged to take a Departmental on-line math camp that will be offered as a non-credit course during the summer preceding the start of the PhD classes. In addition to the Departmental math camp, students are encouraged to take or audit the Math Prep and Stat Prep courses offered by the Department of Economics early August. After the math and stat prep courses, students starting the PhD program will take a placement exam that covers required mathematical concepts. If, in the judgment of the Associate Head for Graduate Programs, the student is deficient in any subject matter areas important to his/her graduate program, the student maybe required to satisfy additional prerequisites before starting the required PhD courses listed below. This will not affect the student's status in the program or funding.

#### **Planning Schedules**

The six figures that follow have been prepared to assist the student in planning the PhD program.

Figures 10 and 25 summarize the degree requirements for the PhD and the straight-through PhD degrees, respectively.

Figures 11 and 26 provide information to help sequence the courses for the PhD and straight- through PhD degrees, respectively.

Figures 12 and 27 provide a typical schedule for PhD and straight- through PhD students, respectively.

The twelve figures that follow have been prepared to assist the student in planning the PhD in the **Agribusiness field area**. The Degree Planning Guide figure summarizes the degree requirements for the PhD. The Scheduling of Curriculum figure provides information to help sequence the courses for the PhD degree. The Typical Scheduling figure provides a typical schedule for PhD students.

Agribusiness: **Finance Option** - Figures 13-15 Agribusiness: **Marketing Option** - Figures 16-18

Agribusiness: **Strategic Management Option** – Figures 19-21 Agribusiness: **Supply Chain Management Option** – Figures 22-24

## Figure 10. PhD: Degree Planning Guide

(Revised 1-18-2022)

Student's Name:	
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Course	Course Description	Credits	Semester Offered	Year Taken
Prerequisites or Eq	uivalents:			·
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall, SSII	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:			
<b>Economic Theory:</b>				
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requirement:				•
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative Metho	ds:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 641 AGEC 642 AGEC 643	Operations Research Dynamic Optimization OR Applied Simulation in Agriculture	Credit 6	Spring Spring Fall	
AGEC 661	Applied Econometric in Agriculture and Resources I	Credit 3	Fall	
AGEC 662	Applied Econometric in Agriculture and Resources II	Credit 3	Spring	
Economic Theory o	r Quantitative Methods Electives <sup>c</sup> :			
		Credit 3		
		Credit 3		
Research Requirem		1	T	
AGEC 691 <sup>d</sup>	Research	Credit 22		
	(12 Credits Required):	1	T	
AGEC 672 and 676 OR	Fundamentals and Frontiers in Applied Market Analysis	Credit 6	Fall/Spring	
AGEC 673 and 677	Fundamentals and Frontiers in Natural Resource and Environmental Economics	Credit 6	Fall/Spring	
	Elective field course	Credit 3	Fall/Spring	
	Elective field course	Credit 3	Fall/Spring	

Student's Advisory Committee:

Chair	Member	Member	Outside Member

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of a MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

<sup>&</sup>lt;sup>c</sup> Choose from ECON 636 Macroeconomic Theory I; ECON 646 Macroeconomic Theory II; ECMT 677 Applied Econometrics; ECMT 678 Advanced Topics in Econometrics; AGEC 641 Operations Research Methods in Agricultural Economics; AGEC 642 Dynamic Optimization or AGEC 643 Applied Simulation in Agricultural Economics.

d Research credits may be replaced by course credits.

Figure 11. PhD: Scheduling of Curriculum (Revised 6-23-2023)

		Summer (Month of August)
		Quantitative Methods  Math Prep  Stat Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required  ECON 629 (3) Microeconomic Theory I  AGEC 661 (3) Applied Econometrics I  Quantitative Methods  ECMT 675 (3) Econometrics I  STAT 630 (3) Overview of Math Stat  STAT 610 (3) Theory of Statistics I	Required  ECON 630 (3) Microeconomic Theory II  AGEC 662 (3) Applied Econometrics II  Quantitative Methods  AGEC 641 (3) Operations Research  STAT 611 (3) Theory of Statistics II  Elective	Required  AGEC 691 Research  Electives  .Qualifier Examination <sup>a</sup> (Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required  AGEC 636 (3) Agribus. Mkts. & Welfare Econ.  Quantitative Methods  AGEC 643 (3) Applied Simulation  Field Courses  AGEC 671 (3) Fundamentals: Agribusiness  AGEC 672 (3) Fundamentals: Markets  AGEC 673 (3) Fundamentals: Resources	Quantitative Methods  AGEC 641 (3) Operations Research Theory AGEC 642 (3) Dynamic Optimization  Field Courses  AGEC 676 (3) Frontiers: Markets AGEC 677 (3) Frontiers: Resources AGEC 695 (3) Frontiers: Agribusiness	Optional Field Elective AGEC 691 Research
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Electives  AGEC 671 (3) Fundamentals: Agribusiness  AGEC 672 (3) Fundamentals: Markets  AGEC 673 (3) Fundamentals: Resources  Optional  AGEC 691 Research  Oral Prelim	Field Electives  AGEC 676 (3) Frontiers: Markets  AGEC 677 (3) Frontiers: Resources  AGEC 695 (3) Frontiers: Agribusiness  Optional  AGEC 691 Research	Optional Field Elective AGEC 691 Research

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

## Figure 12. PhD: Typical Schedule (Revised 1-18-2022)

		Summer (prior to first Fall)
		MATH Prep
		STAT Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
ECMT 675 (3)	AGEC 662(3)	Qualifier Examination
AGEC 661 (3)	AGEC 641 (3)	(Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 (3)	AGEC 642 (3)	AGEC 691(6)
AGEC 643 (3)	Field Elective, Econ Theory or Quant Elective (6)	
Field Course (3)		
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective, Econ Theory or Quant Elective (6)		
AGEC 691	AGEC 691	AGEC 691
Oral Prelim		

## Figure 13. PhD: Degree Planning Guide – Agribusiness: Finance Option

(Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
	Prerequisites or Equivalen	its:		
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:	•		
<b>Economic The</b>	eory:			
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Require	ment:	•	•	
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative 1	 Methods:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661	Applied Econometric in Agriculture and Resources I	Credit 3	Fall	
AGEC 662	Applied Econometric in Agriculture and Resources II	Credit 3	Spring	
AGEC 641 AGEC 642 AGEC 643	Operations Research Methods in Ag. Econ Dynamic Optimization <b>OR</b> Applied Simulation in Agricultural Economics	Credit 6	Spring Spring Fall	
Economic The	ory or Quantitative Methods Elective <sup>c</sup>	Credit 6		
Research Reg	uirement:	<b>-</b>	•	<b>.</b>
AGEC 691 <sup>d</sup>	Research	Credit 22		
Field Require	ment (15 Credits Required):	1	•	ı
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
FINC 688e	Doctoral Seminars	Credit 6	Fall/Spring	

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of a MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

<sup>&</sup>lt;sup>c</sup> Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics.

d Additional hours of coursework and FINC 690 Research Topics Seminar can be used to replace research hours.

<sup>&</sup>lt;sup>e</sup> Two finance sequences are offered, Asset Pricing and Corporate Finance, with a theory and an empirical course for each. A doctoral seminar in Research Methods is also offered depending on the availability of instructors. ABME students are required to take two doctoral seminars. It is recommended that students take the asset pricing or corporate finance sequence. However, students can take any of the doctoral seminars with the exception that the empirical seminars cannot be taken before taking the associated theory course. The theory courses are taught each year. Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses.

Figure 14. PhD: Scheduling of Curriculum – Agribusiness: Finance Option (Revised 6-23-2023)

		Summer (Month of August)
		<b>Quantitative Methods</b> ECON Stat Prep ECMT <sup>a</sup> Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required ECON 629 (3) Microeconomic Theory I AGEC 661 (3) Applied Econometrics I ECMT 675 (3) Econometrics I Quantitative Methods STAT 610 (3) Theory of Statistics I	Required ECON 630 (3) Microeconomic Theory II AGEC 662 (3) Applied Econometric II AGEC 641 (3) Operations Research Theory Quantitative Methods STAT 611 (3) Theory of Statistics II Research	Required AGEC 691 Research Electives  Qualifier Examination <sup>a</sup> (Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required AGEC 636 (3) Agribus. Mkts. & Welfare Econ. Quantitative Methods AGEC 643 (3) Applied Simulation Field Courses AGEC 671 (3) Fundamentals in Agribusiness & Managerial Economics AGEC 672 (3) Fundamentals: Markets FINC 688 <sup>d</sup> (3) Doctoral Seminar	Quantitative Methods  AGEC 641 (3) Operations Research Theory AGEC 642 (3) Dynamic Optimization  Field Courses  AGEC 695 (3) Frontiers in Agbus. & Ag Econ AGEC 676 (3) Frontiers: Markets  FINC 688d (3) Doctoral Seminar  Research	Research AGEC 691 Research
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective  FINC 688° (3) Doctoral Seminar  AGEC 672 (3) Fundamentals: Markets  Research  AGEC 691 Research  Oral Prelim	Field Electives  AGEC 695 (3) Frontiers in Agbus. & Ag Econ FINC 688 <sup>d</sup> (3) Doctoral Seminar  AGEC 676 (3) Frontiers: Markets  Research  AGEC 691 Research	Research AGEC 691 Research

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

<sup>&</sup>lt;sup>b</sup> These courses will not always be taught and are dependent on the availability of instructors.

Figure 15. PhD: Typical Schedule – Agribusiness: Finance Option (Revised 1/18/2022)

		Summer (prior to first Fall)
		Stat Prep
		Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
AGEC 662 (3)	AGEC 661 (3)	Qualifier Examination
ECMT 675 (3)	AGEC 641 (3)	(Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 (3) or AGEC 671 (3) or AGEC 643 (6)	AGEC 695 (3)	AGEC 691 (6)
FINC 688 <sup>a</sup> , AGEC 672 or Quant. Elective (3)	AGEC 642 or FINC 688 <sup>a</sup> or Quant. Elective (6)	
	Spring (Third Year)	Summer (Third Year)
FINC 688 <sup>a</sup> , AGEC 672 or Quant Elective (3)	FINC 688 <sup>a</sup> or Quant. Elective (3)	
AGEC 636 (3) or AGEC 671 (3) or AGEC 643 (3)	AGEC 691 (6)	AGEC 691 (6)
AGEC 691 (3)		
Oral Prelim (Before January)		

<sup>&</sup>lt;sup>a</sup>Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses.

## Figure 16. PhD: Degree Planning Guide - Agribusiness: Marketing Option

(Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
	Prerequisites or Equivalen	ts:		
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:			
<b>Economic The</b>	ory:			
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requiren	nent:			
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative M	lethods:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661 AGEC 662	Applied Econometric in Agriculture and Resources I Applied Econometric in Agriculture and Resources II	Credit 3 Credit 3	Fall Spring	
AGEC 641 AGEC 642 AGEC 643 AGEC 662	Operations Research Methods in Ag. Econ Dynamic Optimization <b>OR</b> Applied Simulation in Agricultural Economics Applied Econometric Methods II	Credit 6 Credit 3	Spring Spring Fall Fall	
	ory or Quantitative Methods Elective <sup>c</sup>	Credit 6	1 an	
Research Requ	• -	Credit 0		
AGEC 691 <sup>d</sup>	Research	Credit 16		
Field Requiren	nent (18 Credits Required):	L	-1	
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
AGEC 672	Fundamentals in Applied Market Analysis	Credit 3	Spring	
	Take three of the following four classes			
MKTG 680	Seminar in Buyer Behavior	Credit 3	Spring	
MKTG 682	Seminar in Marketing Strategy Behavior	Credit 3	Spring	
MKTG 687	Seminar in Marketing Models	Credit 3	Fall	
MKTG 688	Doctoral Seminar	Credit 3	Fall	

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

**a** ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

c Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics,

d Research credits may be replaced by course credits.

Figure 17. PhD: Scheduling of Curriculum – Agribusiness: Marketing Option (Revised 6-23-2023)

		Summer (Month of August)
		<b>Quantitative Methods</b> ECON Stat Prep ECMT Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required  ECON 629 (3) Microeconomic Theory I  AGEC 661 (3) Applied Econometrics  ECMT 675 (3) Econometrics I  Quantitative Methods	Required  ECON 630 (3) Microeconomic Theory II  AGEC 662 (3) Applied Econometric II  AGEC 641 (3) Operations Research Theory  Quantitative Methods	Required  AGEC 691 Research  Electives  Qualifier Examinationa  (Offered May and August)
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	
Fall (Second Year)	Field Courses	Cumman (Casand Vaan)
	Spring (Second Year)	Summer (Second Year)  Research
Required  AGEC 636 (3) Agribus. Mkts. & Welfare Econ  Quantitative Methods  AGEC 643 (3) Applied Simulation  Field Courses  AGEC 671 (3) Fundamentals in Agribusiness  AGEC 672 (3) Fundamentals: Markets  MKTG 687 (3) Seminar in Marketing Models  MKTG 688 (3) Doctoral Seminar	Quantitative Methods  AGEC 641 (3) Operations Research Theory AGEC 642 (3) Dynamic Optimization  Field Courses  AGEC 695 (3) Frontiers in Agribusiness AGEC 672 (3) Frontiers: Markets  MKTG 680 (3) Seminar in Buyer Behavior  MKTG 682 (3) Seminar in Marketing Strategy  Research	AGEC 691 Research
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective  AGEC 671 (3) Fundamentals in Agribusiness  AGEC 672 (3) Fundamentals: Markets  MKTG 687 (3) Seminar in Marketing Models  MKTG 688 (3) Doctoral Seminar  AGEC 691 Research  Oral Prelim	Field Electives  AGEC 695 (3) Frontiers in Agribusiness  AGEC 672 (3) Frontiers: Markets  MKTG 680 (3) Seminar in Buyer Behavior  MKTG 682 (3) Seminar in Marketing Strategy Res.  AGEC 691 Research	Research AGEC 691 Research

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

Figure 18. PhD: Typical Schedule – Agribusiness: Marketing Option (Revised 1/18/2022)

		Summer (prior to first Fall) ECON Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3) AGEC 661 (3) ECMT 675 (3)	ECON 630 (3) AGEC 662 (3) AGEC 641 (3)	AGEC 691 (6)  Qualifier Examination (Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 or AGEC 671 or AGEC 643 (3) AGEC 672 (3) MKTG 687 (3)	AGEC 642 or AGEC 676 (3) AGEC 695 (3) MKTG 680 (3)	
	Spring (Third Year)	Summer (Third Year)
AGEC 636 or AGEC 643 or AGEC 671 (3) AGEC 691 (3) AGEC 672 or Quant Elective	AGEC 642 or AGEC 676 or Quant Elective (3) MKTG 682 (3) AGEC 691 (3)	AGEC 691 (6)
Oral Prelim		

Figure 19. PhD: Degree Planning Guide – Agribusiness: Strategic Management Option

Student's Name:

Course	Course	Description		Credits	Semester Offered	Year Taken
Course	Course	-	es or Equivalen		Officieu	Taken
AGEC 607	Research	Methodology (or MS thesis		Credit 3	Spring	
AGEC 621		etrics in Agribusiness	,	Credit 3	Fall	
ECON 607		ons of Microeconomic Theo	ry	Credit 3	Fall	
ECON 611	Foundati	ons of Macroeconomic Theo	ry	Credit 3	Spring	
ECMT 660a		atical Economics I	•	Credit 3	Fall	
	I	Requir	ed Courses:			
<b>Economic Theo</b>	ry:	-				
ECON 629		onomic Theory I		Credit 3	Fall	
ECON 630	Microec	onomic Theory II		Credit 3	Spring	
Core Requirem	ent:	•			, , ,	1
AGEC 636		ness Mkts. and Applied Welt	fare Analysis	Credit 3	Fall	
Quantitative M	ethods:		·		<u> </u>	•
ECMT 675 <sup>b</sup>	Econome	etrics I		Credit 3	Fall	
AGEC 661	Applied	Econometric in Agriculture a	and Resources I	Credit 3	Fall	
AGEC 662	Applied	Econometric in Agriculture a	and Resources II	Credit 3	Spring	
AGEC 641	Operatio	ns Research Methods in Ag.	Econ		Spring	
AGEC 642	Dynamic	Optimization <b>OR</b>			Spring	
AGEC 643	Applied	Simulation in Agricultural Economics		Credit 6	Fall	
	L			- 4		
		itative Methods Elective <sup>c</sup>		Credit 6		
Research Requi						
AGEC 691 <sup>d</sup>	Research			Credit 22		
		edits Required):				
AGEC 671		entals in Agribusiness and M		Credit 3	Fall	
AGEC 695	Frontiers	s in Agribusiness and Manage	erial Econ	Credit 3	Fall/Spring	
		Take two of the	following three c			
MGMT 634		nar in Organizational Behavior		Credit 3	Fall	
MGMT 636		in Organizational Theory		Credit 3	Spring	
MGMT 676		Management Survey		Credit 3	Fall	
Student's Advis	ory Com					
Chair		Member	Member		<b>Outside Member</b>	

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

c Choose from AGEĆ 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics.

d Research credits may be replaced by course credits.

Figure 20. PhD: Scheduling of Curriculum – Agribusiness: Strategic Management Option (Revised 6-23-2023)

		Summer (Month of August)
		Quantitative Methods
		ECON <sup>a</sup> Stat Prep
		ECMT <sup>a</sup> Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Required
ECON 629 (3) Microeconomic Theory I	ECON 630 (3) Microeconomic Theory II	Qualifier Examination <sup>a</sup>
AGEC 661 (3) Applied Econometric Methods I	AGEC 662 (3) Applied Econometric II	(Offered May and August)
ECMT 675 (3) Econometrics I	AGEC 641 (3) Operations Research Theory	
Quantitative Methods	Quantitative Methods	
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	
F-11 (C1 V)	Field Courses	C (C 1 V)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required	Quantitative Methods	Research AGEC 691 Research
AGEC 636 (3) Agribus. Mkts. & Welfare Econ	AGEC 641 (3) Operations Research Theory	AGEC 691 Research
Quantitative Methods	AGEC 642 (3) Dynamic Optimization	
AGEC 643 (3) Applied Simulation	. , , ,	
Field Courses		
MGMT 634 (3) Seminar in Organizational Behavior	Field Courses	
AGEC 671 (3) Fundamentals in Agribusiness &	AGEC 695 (3) Frontiers in Agbus. & Ag Econ	
Managerial Economics	MGMT 636 (3) Seminar in Organizational Theory	
AGEC 673 (3) Fundamentals: Resources	AGEC 672 (3) Fundamentals: Markets	
AGEC 676 (3) Frontiers: Markets	AGEC 677 (3) Frontiers: Resources	
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective	Field Electives	Research
MGMT 676 (3) Seminar in Strategic Management	MGMT 677 (3) Strategy Implementation	AGEC 691 Research
AGEC 673 (3) Fundamentals: Resources	MGMT 682 (3) Ind. Organ. And Strategy Mgmt.	
AGEC 676 (3) Frontiers: Markets		
Research	Research	
AGEC 691 Research	AGEC 691 Research	
Oral Prelim		

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

Figure 21. PhD: Typical Schedule – Agribusiness: Strategic Management Option (Revised 1/18/2022)

		Summer (prior to first Fall)
		ECON Math Prep
		ECMT Stat Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
AGEC 661 (3)	AGEC 662 (3)	Qualifier Examination
	AGEC 641 (3)	(Offered May and August)
ECMT 675 (3)		(ey) or our rising uniter ring usery
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 (3)	AGEC 642 or AGEC 676 or Quant Elective (3)	AGEC 691 (6)
AGEC 671 or AGEC 643 (3)	AGEC 695 (3)	
MGMT 634 (3)	MGMT 636 (3)	
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
MGMT 676 (3)	AGEC 691 (3)	
AGEC 643 (3) or		AGEC 691 (6)
AGEC 691 (3)		
AGEC 672 or Quant Elective (3)		
Oral Prelim		

Figure 22. PhD: Degree Planning Guide—Agribusiness: Supply Chain Management Option: (Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
	Prerequisites or Equivalent	ts:	•	
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:			•
Economic Theor	ry:			
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requireme	ent:			
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative Mo	ethods:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661	Applied Econometric Methods I	Credit 3	Fall	
AGEC 662	Applied Econometric Methods II	Credit 3	Spring	
AGEC 641	Operations Research Methods in Ag. Econ		Spring	
AGEC 642	Dynamic Optimization <b>OR</b>		Spring	
AGEC 643	Applied Simulation in Agricultural Economics	Credit 6	Fall	
	y or Quantitative Methods Elective <sup>c</sup>	Credit 6		
Research Requi				
SCMT 690	Theory of Research in Information and Op. Mgmt.	Credit 3	Summer	
AGEC 691 <sup>d</sup>	Research	Credit 16		
	ent (15 Credits Required):		•	l .
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
AGEC 672	Fundamentals in Applied Market Analysis	Credit 3	Spring	
SCMT 688	Doctoral Seminar	Credit 6		

Student's Advisory Committee:

Chair	Member	Member	Outside Member

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of a MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

c Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics,

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

d Research credits may be replaced by course credits.

Figure 23. PhD: Scheduling of Curriculum – Agribusiness: Supply Chain Management Option (Revised 6-23-2023)

		Summer (Month of August)
		Quantitative Methods
		ECON Stat Prep
		ECMT Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Required
ECON 629 (3) Microeconomic Theory I	ECON 630 (3) Microeconomic Theory II	AGEC 691 Research (6)
AGEC 661 (3) Applied Econometric Methods I	AGEC 662 (3) Applied Econometric Methods II	` ,
ECMT 675 (3) Econometrics I	AGEC 641 (3) Operations Research Theory	Qualifier Examination <sup>a</sup>
Quantitative Methods	Quantitative Methods	(Offered May and August)
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	7 3 7
,	Field Courses	
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required	Quantitative Methods	Research
AGEC 636 (3) Agribus. Mkts. & Welfare Econ	_	SCMT690(3)Research in Information and
Quantitative Methods	AGEC 641 (3) Operations Research Theory	Operations Management
AGEC 643 (3) Applied Simulation	AGEC 642 (3) Dynamic Optimization	AGEC 691 Research
Field Courses	Field Courses	AGEC 071 Research
AGEC 671 (3) Fundamentals in Agribusiness &	AGEC 695 (3) Frontiers in Agbus. & Ag Econ	
Managerial Economics	SCMT 688 (3) Doctoral Seminar	
SCMT 688 (3) Doctoral Seminar	AGEC 672 (3) Fundamentals: Markets	
AGEC 673 (3) Fundamentals: Resources	AGEC 677 (3) Frontiers: Resources	
AGEC 676 (3) Frontiers: Markets		
AGLE 0/0 (3) Frontiers. Markets		
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective	Field Electives	Research
SCMT 688 (3) Doctoral Seminar	SCMT 688 (3) Doctoral Seminar	AGEC 691 Research
AGEC 673 (3) Fundamentals: Resources	AGEC 672 (3) Fundamentals: Markets	
AGEC 676 (3) Frontiers: Markets	AGEC 677 (3) Frontiers: Resources	
Research	Research	
AGEC 691 Research	AGEC 691 Research	
Oral Prelim		

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

Figure 24. PhD: Typical Schedule – Agribusiness: Supply Chain Management Option (Revised 1/18/2022)

		Summer (prior to first Fall)
		ECON Math Prep
		ECMT Stat Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
AGEC 661 (3)	AGEC 662 (3)	Qualifier Examination
ECMT 675 (3)	AGEC 641 (3)	(Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 671 (3)	AGEC 642 or AGEC 676 or Quant Elective (3)	SCMT 690 (3)
AGEC 636 (3)	AGEC 695 (3)	AGEC 691 (3)
SCMT 688 (3)	SCMT 688 (3)	
	Spring (Third Year)	Summer (Third Year)
AGEC 643 (3)	AGEC 691 (9)	AGEC 691 (6)
AGEC 672 or Quant Elective (3)		
AGEC 691 (6)		
Oral Prelim		

Figure 25. Straight-Through PhD: Degree Planning Guide (Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
	PRE REQUISITES OR EQUIVALINTS			
ECON 323	Microeconomic Theory	Credit 3	F,S,SSI	
ECON 410 <sup>a</sup>	Macroeconomic Theory	Credit 3	F,S,SSII	
MATH 142 <sup>b</sup>	Business Mathematics II (Calculus)	Credit 3	F,S,SSI,SSII	
STAT 303	Statistical Methods	Credit 3	F,S,SSI,SSII	
RECOMMENDED DEPENDING ON BACKGROUND				
AGEC 621	Econometrics for Agribusiness	Credit 3	Fall	
AGEC 622	Agribusiness Analysis and Forecasting	Credit 3	Spring	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>c</sup>	Mathematical Economics I	Credit 3	Fall	
	REQUIRED COURSES			
Sai	Same as first year PhD students			

Minimum Credit hours required are 96, not counting prerequisites. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed courses require written justification and approval by the student's proposed Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> Or ECON 311 or AGEC 430.

<sup>&</sup>lt;sup>b</sup> Or MATH 152 or 172.

<sup>&</sup>lt;sup>c</sup> ECMT 660 is taught in Fall semester. ECON 460, taught Spring semester is a good substitute.

# Figure 26. Straight-Through PhD: Scheduling of Curriculum (Revised 9/15/2021)

Fall (First Year)	Spring (First Year)	Summer (First Year)
Recommended Depending on Background	Recommended Depending on Background	Quantitative Methods
ECON 607 (3) Microeconomic Theory AGEC 621 (3) Econometrics for Agribusiness  Electives  AGEC 608 (3) Econ of Conflict and Development AGEC 613 (3) International Ag Development Policy AGEC 614 (3) Global Food and Agribusiness Policy AGEC 639 (3) Comparative Global Standards in Food Systems AGEC 652 (3) Internat'l Agribusiness Trade Analysis ECMT 660 (3) Mathematical Economics I	ECON 611 (3) Macroeconomic Theory AGEC 622 (3) Agribusiness Analysis and Forecasting AGEC 607 (3) Research Methodology Electives  AGEC 601 (3) Commodity Fut. & Opt. Markets AGEC 603 (3) Land Economics AGEC 604 (3) Natural Resource Economics AGEC 605 (3) Rural Real Estate Appraisal and Organization AGEC 606 (3) Water Resource Economics AGEC 620 (3) Food Security Climate Conflict AGEC 634 (3) Rural Financial Markets & Planning AGEC 638 (3) Managerial Economics for Regulatory Science	ECON <sup>a</sup> Math Prep ECON <sup>a</sup> Stat Prep  Electives
Fall (After first Year)	Spring (After first Year)	Summer (After firstYear)
Same as First Year PhD students	Same as First Year PhD students	Same as First Year PhD students

Figure 27. Straight-Through PhD: Typical Schedule (Revised 1/18/2022)

Fall (First Year)	Spring (First Year)	Summer (First Year)
AGEC 621 (3)	AGEC 607 (3)	Quantitative Methods
ECON 607 (3)	AGEC 622 (3)	Stat Prep
ECMT 660 (3)	ECON 611 (3)	Math Prep These Prep courses are taught in August
Fall (After First Year)	Spring (After First Year)	Summer (After First Year)
Same as First Year PhD students	Same as First Year PhD students	Same as First Year PhD students

#### PHD DEGREE in AGRIBUSINESS AND MANAGERIAL ECONOMICS

(This PhD programed will be phased out. No new students will be admitted starting spring 2022)

#### **Degree Requirements**

The PhD in Agribusiness and Managerial Economics (PhD in ABME) is an interdisciplinary program offered by the Intercollegiate Faculty of Agribusiness (IFA) with faculty from both the Department of Agricultural Economics and the Mays Business School. A description of the structure of this PhD program can be found in Figure 16. This program has a required core of applied economics courses offered through the Economics and Agricultural Economics departments. Current PhD programs in Finance, Marketing, Management and Supply Chain Management will support the degree through courses taught by Mays Business School faculty. A hallmark of this PhD program is that graduates will have the ability to integrate analytical skills across both economics and business disciplines.

PhD students are expected to gain an acceptable level of competency in economic theory, quantitative methods, and their field areas. The courses necessary to meet PhD requirements are listed below. Any alterations in course requirements must be accompanied by a written explanation from the student (and endorsed by the student's advisory committee chair) to the Co-Chair of the PhD in ABME Operations Committee at the time the degree plan or any petition to alter the plan is submitted. The Co-Chair of the PhD in ABME Operations Committee must approve alterations in course requirements.

#### **Credit Hour Requirements**

PhD degree plans must reflect a minimum of 64 hours beyond the Master's degree and prerequisites, including course work and research credits (AGEC 691). Course work counted toward a Master's degree cannot be counted in the total hours required for a PhD student's degree plan but can satisfy the specific course requirements listed below. A minimum of 6 hours in specific courses in the Mays Business School will be required for each area of emphasis.

#### **Prerequisites**

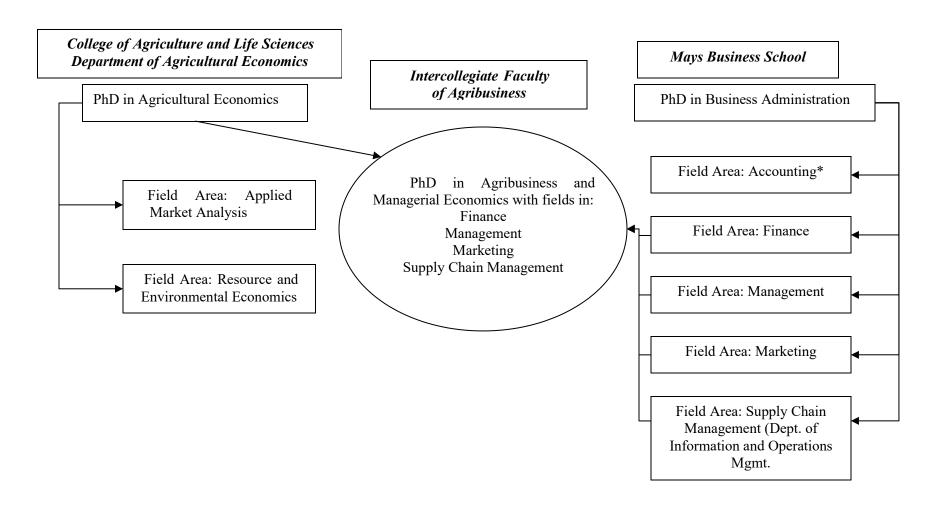
Minimum prerequisites include a Master of Agribusiness, an MS in Agricultural Economics or Economics, an MS degree in a business field such as Finance, Accounting, Management, Marketing or Information Systems, an MBA, or equivalent degree. Depending upon the student's background, specific prerequisite courses may be required.

A student undertaking a 64-hour program of study leading to the PhD degree must have completed the following or equivalent courses:

ECON 607	Foundations of Microeconomic Theory
ECON 611	Foundations of Macroeconomic Theory
AGEC 621	Econometrics for Agribusiness
ECMT 660	Mathematical Economics I
AGEC 607	Research Methodology (not required if student has completed a
	MS thesis)

A solid foundation is critical to success in the ABME PhD program. Hence, in addition to the prerequisite courses, all beginning students are encouraged to take a Departmental on-line math camp that will be offered as a non-credit course during the summer preceding the start of the PhD program. In addition to the Departmental math camp, students are encouraged to take or audit the Math Prep and Stat Prep courses offered by the Department of Economics early August. After the math and stat prep courses, students starting the PhD program will take a placement exam that covers required mathematical concepts. If, in the judgment of the Associate Head for Graduate Programs, the student is deficient in any subject matter areas important to his/her graduate program, the student maybe required to satisfy additional prerequisites before starting the required PhD courses listed below. This will not affect the student's status in the program or funding.

Figure 28. Structure of PhD in Agribusiness and Managerial Economics Program



<sup>\*</sup> The PhD in Agribusiness and Managerial Economics does not propose a field area in accounting at this time.

#### **Second Year Continuation in Program**

Continuation in the PhD in Agribusiness and Managerial Economics will be evaluated after the student has completed the first semester of fall core courses. Continuation will be based on criteria established by the PhD in Agribusiness and Managerial Economics operations committee of the IFA. The IFA will set the continuation standards for the program and provide oversight of the evaluation process. These standards will be consistent with those of existing PhD programs offered by the Mays Business School and the Department of Agricultural Economics at Texas A&M University.

#### **Program Requirements:**

Competency in economic theory and application is expected. Two courses (6 credit hours) are taken to meet the minimum microeconomic theory requirement.

#### Economic Theory and Applications

#### **Microeconomic Theory:**

ECON 629	Microeconomic Theory I	3 Credits
ECON 630	Microeconomic Theory II	3 Credits
Total economic Theory Requirements		

#### **Core Requirements**

One course (3 credit hours) covering advanced material which comprise a common body of critical knowledge is required for all PhD students.

AGEC 636	Agribusiness Markets and Applied Welfare Analysis	3 Credits
Total Economic Theory and Applications		
Quantitative Methods		

Three courses (12 credit hours) in quantitative methods are required for the PhD degree in agricultural economics. These courses are:

ECMT 675*	Econometrics I	3 Credits
AGEC 661	Applied Econometric in Agriculture and Resources I	3 Credits
AGEC 662	Applied Econometric in Agriculture and Resources II	3 Credits

#### Two out of the following three courses:

AGEC 641	Operations Research Methods in Agricultural Economics
AGEC 642	Dynamic Optimization <b>OR</b>
AGEC 643	Applied Simulation in Agricultural Economics
* or STAT 630	or sequence STAT 610 and STAT 611.

#### **Economic Theory or Quantitative Methods Elective**

Students must choose two of the following courses to augment their studies in economic theory or quantitative methods:

AGEC 641	Operations Research Methods in Agricultural Economics	
AGEC 642	Dynamic Optimization	
AGEC 643	Applied Simulation in Agricultural Economics	
ECON 636	Macroeconomic Theory I	
<b>ECON 646</b>	Macroeconomic Theory II	
<b>ECMT 677</b>	Applied Microeconometrics	
ECMT 678	Advanced Topics in Econometrics	
Total Economic Theory or Quantitative Methods Electives		

Other graduate courses may be required or recommended depending on the student's area of emphasis. If, in the judgment of the student's Advisory Committee chair, the student is deficient in other subject matter areas important to his/her graduate program, the student may be required to satisfy additional requirements.

#### Field Area

Four field areas are offered: (1) finance, (2) strategic management, (3) marketing, and (4) supply chain management. Students are required to take specific courses offered by the Finance (FINC), Management (MGMT), Marketing (MKTG) and Information and Operations Management departments in the Mays Business School. This is in addition to core courses in the Agricultural Economics (AGEC) and Economics (ECON) departments.

#### Finance Emphasis:

#### **Required Field Courses:**

AGEC 671	Fundamentals in Agribusiness and Managerial Economics	ts
AGEC 695*	Frontiers in Agribusiness and Managerial Economics	ts
FINC 688**	Seminar in Corporate Finance	ts
FINC 688**	Seminar in Asset Pricing	ts

<sup>\*</sup> This course will be taught under the direction of the Chair of the student's graduate advisory committee. The Chair of the student's advisory committee can take an active role in teaching this class, allow students to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students to take directed readings from selected faculty, or any combinations of these alternatives. The Chair of the student's advisory committee may also allow the student to substitute AGEC 676 for AGEC 695. When the course is taught as an AGEC 695 course, the student will enroll in a section opened for the Chair of the student's advisory committee.

<sup>\*\*</sup>Two finance sequences are offered, Asset Pricing and Corporate Finance, with a theory and an empirical course for each. A doctoral seminar in Research Methods is also offered depending on the availability of instructors. ABME students are required to take two doctoral seminars. It is recommended that students take the asset pricing or corporate finance sequence. However, students can take any of the doctoral seminars with the exception that the empirical seminars cannot be taken before taking the associated theory course. The theory courses are taught each year. Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses and under the direction of the Finance Department.

Total Field Requirements		
Total Minimum Cour	se Requirements42 Credits	
Research		
AGEC 691	Research	

All PhD students must attain a level of understanding of philosophy of science comparable to AGEC 607 (Research Methodology) and a working knowledge of the use of computers in research and teaching. Additional hours of coursework and FINC 690 Research Topics Seminar can be used to replace research hours. ABME students are invited and encouraged to attend the Finance Friday seminars. It is expected that this will help ABME students to better understand the research methodology used to publish in the finance literature.

## Marketing emphasis:

Required Fiel	ld Courses:	
AGEC 671	Fundamentals in Agribusiness and Managerial Economics	
AGEC 695*	Frontiers in Agribusiness and Managerial Economics	
AGEC 672	Fundamentals in Applied Market Analysis	
Three out of t	the following four courses:	
MKTG 680	Seminar in Buyer Behavior	
MKTG 682	Seminar in Marketing Strategy Research	
MKTG 687	Seminar in Marketing Methods	
MKTG 688**	Doctoral Seminar	
committee. The class, allow strage to take directe of the student 695. When the for the Chair of this course	will be taught under the direction of the Chair of the student's graduate advisory e Chair of the student's advisory committee can take an active role in teaching this udents to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students d readings from selected faculty, or any combinations of these alternatives. The Chair's advisory committee may also allow the student to substitute AGEC 676 for AGEC course is taught as an AGEC 695 course, the student will enroll in a section opened of the student's advisory committee.	
new material that you haven't already taken in AGEC 661.  Total Field Requirement		
Total Minimum Course Requirements		
Research		
AGEC 691	Research	
Total Credits		

#### Strategic Management Emphasis:

#### **Required Field Courses:** AGEC 671 AGEC 695\* **MGMT 634 MGMT 636 MGMT 676** \* This course will be taught under the direction of the Chair of the student's graduate advisory committee. The Chair of the student's advisory committee can take an active role in teaching this class, allow students to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students to take directed readings from selected faculty, or any combinations of these alternatives. The Chair of the student's advisory committee may also allow the student to substitute AGEC 676 for AGEC 695. When the course is taught as an AGEC 695 course, the student will enroll in a section opened for the Chair of the student's advisory committee. Total Minimum Course Requirements ......45 Credits Research AGEC 691 Research 19 Credits Additional hours of coursework can replace research hours.

## Supply Chain Management emphasis (Department of Information and Operations Management):

Required Field	Required Field Courses:		
AGEC 671	Fundamentals in Agribusiness and Managerial Economics		
AGEC 695*	Frontiers in Agribusiness and Managerial Economics		
AGEC 672	Fundamentals in Applied Market Analysis		
SCMT 688	Doctoral Seminar		
committee. The class, allow stu to take directed of the student's 695. When the	will be taught under the direction of the Chair of the student's graduate advisory to Chair of the student's advisory committee can take an active role in teaching this advisor to take parts of AGEC 676 Frontiers in Applied Market Analysis, allow students of readings from selected faculty, or any combinations of these alternatives. The Chair is advisory committee may also allow the student to substitute AGEC 676 for AGEC course is taught as an AGEC 695 course, the student will enroll in a section opened of the student's advisory committee.		
Total Field Re	quirement		
Total Minimum Course Requirements45 Credits			

SCMT 690	Theory of Research in Information and Operations Management	3 Credits
AGEC 691	Research	16 Credits

\* Additional hours of coursework can replace research hours.

Total Credits .......64 Credits

There is no specific commitment from the Mays Business School to offer a particular doctoral seminar every year or during a particular term, as course offerings vary with the size of departmental programs and the availability of faculty to teach a particular topic.

#### **Variable Credit Courses**

Variable credit courses (AGEC 685 and 691) will require the completion of a commitment form. Each AGEC 685 Directed Studies course taken must have a completed <u>commitment form</u> on file in the Graduate Office. For AGEC 691, the <u>commitment form</u> is required only for research hours requested before completion of prelims.

#### **Dissertation and Proposal**

A dissertation based upon original research is required for the PhD in Agribusiness and Managerial Economics degree. A dissertation proposal must be filed with the Office of Graduate and Professional Studies. The proposal coversheet can be found on the Office of Graduate and Professional Studies website. It should be completed as early in the student's program as the planned research project can be outlined in reasonable detail. The proposal must be completed and submitted to the student's Advisory Committee prior to the Oral Preliminary Examination, which includes a defense of the dissertation proposal. To be sure required procedures are followed, consult the Thesis Manual for detailed instruction on the formatting of the dissertation.

#### Straight-Through PhD in Agribusiness and Managerial Economics

Students wanting to go straight through from a BS to a PhD degree are required to complete a 96-hour program typically including course work and research (AGEC 691). The required coursework is the same as the PhD curriculum. If a student has been admitted for a straight-through PhD degree, thereby by-passing the Master's degree, he/she will be classified as G7 until 30 hours of course work applicable to the doctoral degree have been completed, after which his/her classification will be changed to G8. For more information on the straight-through PhD, see the section on Straight-Through PhD as written in the section for "PhD Degree."

#### **Planning Schedules**

The figures that follow have been prepared to assist the student in planning the PhD in Agribusiness and Managerial Economics program. The Degree Planning Guide figure summarizes the degree requirements for the PhD. The Scheduling of Curriculum figure provides information to help sequence the courses for the PhD degree. The Typical Scheduling figure provides a typical schedule for PhD students.

For the **Finance option**, the applicable figures are Figures 29-31.

For the **Marketing option**, the applicable figures are Figures 32-34.

For the **Strategic Management option**, the applicable figures are Figures 35-37.

For the **Supply Chain Management option**, the applicable figures are Figures 38-40.

## Figure 29. PhD: Degree Planning Guide - ABME: Finance Option

(Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
304150	Prerequisites or Equivalents:			
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:			
<b>Economic Theo</b>	ry:			
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requirem	ent:			
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative M	ethods:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661	Applied Econometric in Agriculture and Resources I	Credit 3	Fall	
AGEC 662	Applied Econometric in Agriculture and Resources II	Credit 3	Spring	
AGEC 641	Operations Research Methods in Ag. Econ		Spring	
AGEC 642	Dynamic Optimization <b>OR</b>		Spring	
AGEC 643	Applied Simulation in Agricultural Economics	Credit 6	Fall	
	y or Quantitative Methods Elective <sup>c</sup>	Credit 6		
Research Requi	rement:			
AGEC 691 <sup>d</sup>	Research	Credit 22		
Field Requirem	ent (15 Credits Required):	-	•	
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
FINC 688 <sup>e</sup>	Doctoral Seminars	Credit 6	Fall/Spring	

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

<sup>&</sup>lt;sup>c</sup> Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics.

d Additional hours of coursework and FINC 690 Research Topics Seminar can be used to replace research hours.

<sup>&</sup>lt;sup>e</sup> Two finance sequences are offered, Asset Pricing and Corporate Finance, with a theory and an empirical course for each. A doctoral seminar in Research Methods is also offered depending on the availability of instructors. ABME students are required to take two doctoral seminars. It is recommended that students take the asset pricing or corporate finance sequence. However, students can take any of the doctoral seminars with the exception that the empirical seminars cannot be taken before taking the associated theory course. The theory courses are taught each year. Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses.

Figure 30. PhD: Scheduling of Curriculum – ABME: Finance Option (Revised 1/18/2022)

		Summer (Month of August)
		Quantitative Methods
		ECON Stat Prep
		ECMT <sup>a</sup> Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Required
ECON 629 (3) Microeconomic Theory I	ECON 630 (3) Microeconomic Theory II	AGEC 691 Research
AGEC 661 (3) Applied Econometrics I	AGEC 662 (3) Applied Econometric II	Electives
ECMT 675 (3) Econometrics I	AGEC 641 (3) Operations Research Theory	
Quantitative Methods	Quantitative Methods	Qualifier Examination <sup>a</sup>
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	(Offered May and August)
	Research	
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required  AGEC 636 (3) Agribus. Mkts. & Welfare Econ.  Quantitative Methods  AGEC 643 (3) Applied Simulation  Field Courses  AGEC 671 (3) Fundamentals in Agribusiness & Managerial Economics  AGEC 672 (3) Fundamentals: Markets  FINC 688 <sup>d</sup> (3) Doctoral Seminar	Quantitative Methods  AGEC 641 (3) Operations Research Theory  AGEC 642 (3) Dynamic Optimization  Field Courses  AGEC 695 (3) Frontiers in Agbus. & Ag Econ  AGEC 676 (3) Frontiers: Markets  FINC 688 <sup>d</sup> (3) Doctoral Seminar  Research	AGEC 691 Research
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective	Field Electives	Research
FINC 688 <sup>b</sup> (3) Doctoral Seminar	AGEC 695 (3) Frontiers in Agbus. & Ag Econ	AGEC 691 Research
AGEC 672 (3) Fundamentals: Markets	FINC 688 <sup>d</sup> (3) Doctoral Seminar	
Research	AGEC 676 (3) Frontiers: Markets	
AGEC 691 Research	Research	
Oral Prelim	AGEC 691 Research	

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

b These courses will not always be taught and are dependent on the availability of instructors.

Figure 31. PhD: Typical Schedule – ABME: Finance Option (Revised 1-18-2022)

		Summer (prior to first Fall)
		Stat Prep
		Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
AGEC 662 (3)	AGEC 661 (3)	Qualifier Examination
ECMT 675 (3)	AGEC 641 (3)	(Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 (3) or AGEC 671 (3) or AGEC 643 (6)	AGEC 695 (3)	AGEC 691 (6)
FINC 688 <sup>a</sup> , AGEC 672 or Quant. Elective (3)	AGEC 642 or FINC 688 <sup>a</sup> or Quant. Elective (6)	Written Field Prelim <sup>b</sup>
		(Offered in January and May)
	Spring (Third Year)	Summer (Third Year)
FINC 688 <sup>a</sup> , AGEC 672 or Quant Elective (3)	FINC 688 <sup>a</sup> or Quant. Elective (3)	
AGEC 636 (3) or AGEC 671 (3) or AGEC 643 (3)	AGEC 691 (6)	AGEC 691 (6)
AGEC 691 (3)		
Oral Prelim (Before January)		

<sup>&</sup>lt;sup>a</sup> Typically, the asset pricing theory is taught in the fall and the corporate finance theory is taught in the spring. The empirical course for asset pricing and the empirical course for corporate finance are taught every other year. The sequencing of all doctoral seminars is dependent on the availability of faculty to teach these courses.

<sup>&</sup>lt;sup>b</sup> The written prelim may be postponed to the third year if it is not possible to take the required doctoral seminars in the Finance Department in the second year.

# Figure 32. PhD: Degree Planning Guide - ABME: Marketing Option:

(Revised 1/18/2022)

Student's Name:

Course	Course Description	Credits	Semester Offered	Year Taken
Course	Prerequisites or Equivale	0 - 0 - 0 - 0 - 0	Officieu	Taken
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660a	Mathematical Economics I	Credit 3	Fall	
	Required Courses:			
Economic Theor				
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requireme				
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative Me	ethods:			
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661	Applied Econometric in Agriculture and Resources I	Credit 3	Fall	
AGEC 662	Applied Econometric in Agriculture and Resources II	Credit 3	Spring	
AGEC 641	Operations Research Methods in Ag. Econ		Spring	
AGEC 642	Dynamic Optimization <b>OR</b>		Spring	
AGEC 643	Applied Simulation in Agricultural Economics	Credit 6	Fall	
AGEC 662	Applied Econometric Methods II	Credit 3	Fall	
Economic Theor	y or Quantitative Methods Elective <sup>c</sup>	Credit 6		
Research Requi		1	•	•
AGEC 691 <sup>d</sup>	Research	Credit 16		
Field Requirem	ent (18 Credits Required):		•	•
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
AGEC 672	Fundamentals in Applied Market Analysis	Credit 3	Spring	
	Take three of the following four classes			
MKTG 680	Seminar in Buyer Behavior	Credit 3	Spring	
MKTG 682	Seminar in Marketing Strategy Behavior	Credit 3	Spring	
MKTG 687	Seminar in Marketing Models	Credit 3	Fall	
MKTG 688	Doctoral Seminar	Credit 3	Fall	

Student's Advisory Committee:

Chair	Member	Member	Outside Member

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

<sup>&</sup>lt;sup>b</sup> or STAT or sequence STAT 610 and STAT 611.

c Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics,

d Research credits may be replaced by course credits.

Figure 33. PhD: Scheduling of Curriculum - ABME: Marketing Option (Revised 1-18-2023)

		Summer (Month of August)
		Quantitative Methods
		ECON Stat Prep
Fall (First Year)	Spring (First Year)	ECMT Math Prep Summer (First Year)
Required	Required	Required
ECON 629 (3) Microeconomic Theory I	ECON 630 (3) Microeconomic Theory II	AGEC 691 Research
AGEC 661 (3) Applied Econometrics	AGEC 662 (3) Applied Econometric II	Electives
ECMT 675 (3) Econometrics I	AGEC 641 (3) Operations Research Theory	Litetives
Quantitative Methods	Quantitative Methods	Qualifier Examination <sup>a</sup>
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	(Offered May and August)
(2) ====================================	Field Courses	(-3,)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required	Quantitative Methods	Research
AGEC 636 (3) Agribus. Mkts. & Welfare Econ	AGEC 641 (3) Operations Research Theory	
Quantitative Methods	AGEC 642 (3) Dynamic Optimization	AGEC 691 Research
AGEC 643 (3) Applied Simulation	Field Courses	
Field Courses	AGEC 695 (3) Frontiers in Agribusiness	Written Field Prelimb
AGEC 671 (3) Fundamentals in Agribusiness	AGEC 672 (3) Frontiers: Markets	(Offered in January and May)
AGEC 672 (3) Fundamentals: Markets	MKTG 680 (3) Seminar in Buyer Behavior	
MKTG 687 (3) Seminar in Marketing Models	MKTG 682 (3) Seminar in Marketing Strategy	
MKTG 688 (3) Doctoral Seminar	Research	
E 11 (TI ' 1 17 )	C ' (TIL' 1X)	C (TILLIA)
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective	Field Electives	Research
AGEC 671 (3) Fundamentals in Agribusiness	AGEC 695 (3) Frontiers in Agribusiness	AGEC 691 Research
AGEC 672 (3) Fundamentals: Markets	AGEC 672 (3) Frontiers: Markets	
MKTG 687 (3) Seminar in Marketing Models MKTG 688 (3) Doctoral Seminar	MKTG 680 (3) Seminar in Buyer Behavior	
AGEC 691 Research	MKTG 682 (3) Seminar in Marketing Strategy Res. AGEC 691 Research	
Oral Prelim	AGEC 091 Research	
Oral Fellin		

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

<sup>&</sup>lt;sup>b</sup> Offered in January and May. Field area and material covered from the core and quantitative methods courses will be integrated into the exams. These courses include AGEC 636, 641, 642, 643, and their prerequisites, with flexibility allowed for enrollment in 641, 642 or 643. After passing the oral preliminary exam that includes a presentation of the student's dissertation proposal must be taken before the next administration of the written field preliminary exams.

Figure 34. PhD: Typical Schedule - ABME: Marketing Option (Revised 1-18-2022)

		Summer (prior to first Fall)
		ECON Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	
AGEC 661 (3)	AGEC 662 (3)	AGEC 691 (6)
ECMT 675 (3)	AGEC 641 (3)	Qualifier Examination
		(Offered May and August)
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 or AGEC 671 or AGEC 643 (3)	AGEC 642 or AGEC 676 (3)	AGEC 691 (6)
AGEC 672 (3)	AGEC 695 (3)	Written Field Prelim <sup>a</sup>
MKTG 687 (3)	MKTG 680 (3)	(Offered January and May)
	Spring (Third Year)	Summer (Third Year)
AGEC 636 or AGEC 643 or AGEC 671 (3)	AGEC 642 or AGEC 676 or Quant Elective (3)	AGEC 691 (6)
AGEC 691 (3)	MKTG 682 (3)	
AGEC 672 or Quant Elective	AGEC 691 (3)	
Oral Prelim		

<sup>&</sup>lt;sup>a</sup> The written prelim may be postponed to the third year if it is not possible to take the required doctoral seminars in the Marketing Department in the second year.

Figure 35. PhD: Degree Planning Guide - ABME: Strategic Management Option: (Revised 1/18/2022)

Prerequisites or Equivalents:  AGEC 607 Research Methodology (or MS thesis) Credit 3 Spring  AGEC 621 Econometrics in Agribusiness Credit 3 Fall  ECON 607 Foundations of Microeconomic Theory Credit 3 Spring  ECON 611 Foundations of Macroeconomic Theory Credit 3 Spring  ECMT 660a Mathematical Economics I Credit 3 Fall  ECON 629 Microeconomic Theory I Credit 3 Fall  ECON 629 Microeconomic Theory II Credit 3 Spring  ECON 630 Microeconomic Theory II Credit 3 Spring  ECON 630 Microeconomic Theory II Credit 3 Fall  ECON 630 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675b Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 664 Operations Research Methods in Ag. Econ  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6  Research Requirement:  AGEC 691 Research  AGEC 691 Research  AGEC 691 Find Research  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall			a 11	Semester	Year
AGEC 607 Research Methodology (or MS thesis) Credit 3 Spring AGEC 621 Econometrics in Agribusiness Credit 3 Fall ECON 607 Foundations of Microeconomic Theory Credit 3 Fall ECON 611 Foundations of Macroeconomic Theory Credit 3 Spring ECMT 660a Mathematical Economics I Credit 3 Fall  Required Courses:  Economic Theory: ECON 629 Microeconomic Theory II Credit 3 Spring ECON 630 Microeconomic Theory II Credit 3 Spring ECON 630 Microeconomic Theory II Credit 3 Spring COR Requirement: AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods: ECMT 675b Econometric in Agriculture and Resources I AGEC 661 Applied Econometric in Agriculture and Resources III AGEC 662 Applied Econometric in Agriculture and Resources III AGEC 664 Operations Research Methods in Ag. Econ AGEC 641 Operations Research Methods in Ag. Econ AGEC 642 Dynamic Optimization OR AGEC 643 Applied Simulation in Agricultural Economics Economic Theory or Quantitative Methods Elective Credit 6 Research Requirement: AGEC 691 Research AGEC 691 Research AGEC 691 Findamentals in Agribusiness and Managerial Econ Credit 3 Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall	Course	1	0 - 0 0 - 0 0	Offered	Taken
AGEC 621 Econometrics in Agribusiness Credit 3 Fall  ECON 607 Foundations of Microeconomic Theory Credit 3 Fall  ECON 611 Foundations of Macroeconomic Theory Credit 3 Spring  ECMT 660° Mathematical Economics I Credit 3 Fall  ECON 620 Mathematical Economics I Credit 3 Fall  ECON 630 Microeconomic Theory I Credit 3 Spring  Core Requirement:  AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  CON 675° Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Spring  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research  AGEC 691 Research  AGEC 691 Fundamentals in Agribusiness and Managerial Econ  Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  AGEC 667 Fall  Fall AGEC 668 Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall  Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ  Credit 3 Fall		<u>-</u>			
ECON 607 Foundations of Microeconomic Theory Credit 3 Fall  ECON 611 Foundations of Macroeconomic Theory Credit 3 Spring  ECMT 660a Mathematical Economics I Credit 3 Fall  ECMT 660a Mathematical Economics I Credit 3 Fall  ECON 629 Microeconomic Theory I Credit 3 Spring  ECON 630 Microeconomic Theory II Credit 3 Spring  Core Requirement:  AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675b Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Spring  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Applied Simulation OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Electivec Credit 6 Fall  AGEC 691 Research  Field Requirement (15 Credits Required):  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 696 Fall  AGEC 697 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 698 Fall  AGEC 699 Fall  AGEC 699 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 699 Fall  AGEC 699 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall					
ECON 611 Foundations of Macroeconomic Theory Credit 3 Spring ECMT 660 <sup>a</sup> Mathematical Economics I Credit 3 Fall  Required Courses:  Economic Theory:  ECON 629 Microeconomic Theory II Credit 3 Spring Core Requirement:  AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675 <sup>b</sup> Econometrics I Credit 3 Fall AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Spring  II  AGEC 641 Operations Research Methods in Ag. Econ AGEC 642 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Fall  AGEC 696 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 696 Fall  AGEC 697 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 697 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall			_	Fall	
Required Courses:    Credit 3   Fall	ECON 607		Credit 3	Fall	
Required Courses:   Economic Theory:	ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECON 629 Microeconomic Theory I Credit 3 Fall  ECON 630 Microeconomic Theory II Credit 3 Spring  Core Requirement:  AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675 <sup>b</sup> Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I II  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 <sup>d</sup> Research  Field Requirement (15 Credits Required):  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 696 Fall  AGEC 697 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 696 Fall  AGEC 697 Fall Spring  AGEC 697 Fontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 698 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall	ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
ECON 629 Microeconomic Theory I Credit 3 Fall  ECON 630 Microeconomic Theory II Credit 3 Spring  Core Requirement:  AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675 <sup>b</sup> Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Spring  AGEC 662 Applied Econometric in Agriculture and Resources II  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research  Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall		Required Courses:			
Core Requirement:  AGEC 636	Economic Theor	ry:			
Core Requirement:  AGEC 636	ECON 629		Credit 3	Fall	
AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675b Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Spring  II Spring  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Electivec Credit 6  Research Requirement:  AGEC 691d Research  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall	ECON 630		Credit 3	Spring	
AGEC 636 Agribusiness Mkts. and Applied Welfare Analysis Credit 3 Fall  Quantitative Methods:  ECMT 675b Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Spring  II Spring  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Electivec Credit 6  Research Requirement:  AGEC 691d Research  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall	Core Requiremo	ent:			
ECMT 675b Econometrics I Credit 3 Fall  AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Fall  AGEC 662 Applied Econometric in Agriculture and Resources I Credit 3 Spring  II Spring  AGEC 641 Operations Research Methods in Ag. Econ  AGEC 642 Dynamic Optimization OR  AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Electivec Credit 6  Research Requirement:  AGEC 691d Research  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 696 Seminar in Organizational Behavior Credit 3 Fall	AGEC 636		Credit 3	Fall	
AGEC 661 Applied Econometric in Agriculture and Resources I Credit 3 Spring  AGEC 662 Applied Econometric in Agriculture and Resources II  AGEC 641 Operations Research Methods in Ag. Econ AGEC 642 Dynamic Optimization OR AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall	Quantitative Mo	ethods:			
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AGEC 662 Applied Econometric in Agriculture and Resources II  AGEC 641 Operations Research Methods in Ag. Econ AGEC 642 Dynamic Optimization OR AGEC 643 Applied Simulation in Agricultural Economics  Credit 6 Fall  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ AGEC 695 Frontiers in Agribusiness and Managerial Econ MGMT 634 Seminar in Organizational Behavior  Credit 3 Fall Fall Fall Fall Fall Fall Fall Fal	AGEC 661	Applied Econometric in Agriculture and Resources I	Credit 3	Fall	
AGEC 642 Dynamic Optimization OR AGEC 643 Applied Simulation in Agricultural Economics Credit 6  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3  MGMT 634 Seminar in Organizational Behavior Credit 3  Fall Fall Fall Fall Fall Fall Fall Fa	AGEC 662		Credit 3	Spring	
AGEC 642 Dynamic Optimization OR AGEC 643 Applied Simulation in Agricultural Economics Credit 6  Economic Theory or Quantitative Methods Elective <sup>c</sup> Credit 6  Research Requirement:  AGEC 691 Research Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3  MGMT 634 Seminar in Organizational Behavior Credit 3  Fall Fall Fall Fall Fall Fall Fall Fa	AGEC 641	Operations Research Methods in Ag. Econ		Spring	
AGEC 643 Applied Simulation in Agricultural Economics Credit 6 Fall  Economic Theory or Quantitative Methods Elective Credit 6  Research Requirement:  AGEC 691 Research Credit 19  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall	AGEC 642	Dynamic Optimization <b>OR</b>			
Research Requirement:AGEC 691 dResearchCredit 19Field Requirement (15 Credits Required):AGEC 671Fundamentals in Agribusiness and Managerial EconCredit 3FallAGEC 695Frontiers in Agribusiness and Managerial EconCredit 3Fall/SpringMGMT 634Seminar in Organizational BehaviorCredit 3Fall	AGEC 643	Applied Simulation in Agricultural Economics	Credit 6		
Research Requirement:AGEC 691 dResearchCredit 19Field Requirement (15 Credits Required):AGEC 671Fundamentals in Agribusiness and Managerial EconCredit 3FallAGEC 695Frontiers in Agribusiness and Managerial EconCredit 3Fall/SpringMGMT 634Seminar in Organizational BehaviorCredit 3Fall	E ' TI	O COLOR MALE FILE COLOR	G 1'4 6		
AGEC 691 <sup>d</sup> Research Credit 19  Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall			Credit 6		
Field Requirement (15 Credits Required):  AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall  AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring  MGMT 634 Seminar in Organizational Behavior Credit 3 Fall			G 11: 10	T	
AGEC 671 Fundamentals in Agribusiness and Managerial Econ Credit 3 Fall AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring MGMT 634 Seminar in Organizational Behavior Credit 3 Fall			Credit 19		
AGEC 695 Frontiers in Agribusiness and Managerial Econ Credit 3 Fall/Spring MGMT 634 Seminar in Organizational Behavior Credit 3 Fall					
MGMT 634 Seminar in Organizational Behavior Credit 3 Fall	AGEC 671			Fall	
$\epsilon$	AGEC 695				
	MGMT 634		Credit 3	Fall	
$\varepsilon$	MGMT 636		Credit 3	Spring	
MGMT 676 Strategic Management Survey Credit 3 Fall	MGMT 676	Strategic Management Survey	Credit 3	Fall	

Student's Advisory Committee:

Chair	Member	Member	Outside Member

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of a MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

c Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics,

d Research credits may be replaced by course credits.

Figure 36. PhD: Scheduling of Curriculum – ABME: Strategic Management Option (Revised 1-18-2022)

		Summer (Month of August)
		Quantitative Methods
		ECON <sup>a</sup> Stat Prep
		ECMT <sup>a</sup> Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required	Required	Required
ECON 629 (3) Microeconomic Theory I	ECON 630 (3) Microeconomic Theory II	Qualifier Examination <sup>a</sup>
AGEC 661 (3) Applied Econometric Methods I	AGEC 662 (3) Applied Econometric II	(Offered May and August)
ECMT 675 (3) Econometrics I	AGEC 641 (3) Operations Research Theory	
Quantitative Methods	Quantitative Methods	
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II	
E 11 (C 1 V )	Field Courses	G (G 1V )
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required	Quantitative Methods	Research
AGEC 636 (3) Agribus. Mkts. & Welfare Econ	AGEC 641 (3) Operations Research Theory	AGEC 691 Research
Quantitative Methods	AGEC 642 (3) Dynamic Optimization	Written Field Prelim <sup>b</sup>
AGEC 643 (3) Applied Simulation		(Offered in January and May)
Field Courses		(Offered in Sanuary and May)
MGMT 634 (3) Seminar in Organizational Behavior	Field Courses	
AGEC 671 (3) Fundamentals in Agribusiness &	AGEC 695 (3) Frontiers in Agbus. & Ag Econ	
Managerial Economics	MGMT 636 (3) Seminar in Organizational Theory	
AGEC 673 (3) Fundamentals: Resources	AGEC 672 (3) Fundamentals: Markets	
AGEC 676 (3) Frontiers: Markets	AGEC 677 (3) Frontiers: Resources	
D 11 (771 : 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective	Field Electives	Research
MGMT 676 (3) Seminar in Strategic Management	MGMT 677 (3) Strategy Implementation	AGEC 691 Research
AGEC 673 (3) Fundamentals: Resources	MGMT 682 (3) Ind. Organ. And Strategy Mgmt.	
AGEC 676 (3) Frontiers: Markets		
Research	Research	
AGEC 691 Research	AGEC 691 Research	
Oral Prelim		

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

<sup>&</sup>lt;sup>b</sup> Offered in January and May. Field area and material covered from the core and quantitative methods courses will be integrated into the exams. These courses include AGEC 636, 641, 642, 643, and their prerequisites, with flexibility allowed for enrollment in 641, 642 or 643. After passing the oral preliminary exam that includes a presentation of the student's dissertation proposal must be taken before the next administration of the written field preliminary exams.

Figure 37. PhD: Typical Schedule – ABME: Strategic Management Option (Revised 1-18-2022)

		Summer (prior to first Fall)
		ECON Math Prep
		ECMT Stat Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)
AGEC 661 (3)	AGEC 662 (3)	Qualifier Examination
	AGEC 641 (3)	(Offered May and August)
ECMT 675 (3)		(Office in the street in the s
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
AGEC 636 (3)	AGEC 642 or AGEC 676 or Quant Elective (3)	AGEC 691 (6)
AGEC 671 or AGEC 643 (3)	AGEC 695 (3)	Written Field Prelim
MGMT 634 (3)	MGMT 636 (3)	(Offered January and May)
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
MGMT 676 (3)	AGEC 691 (3)	
AGEC 643 (3) or		AGEC 691 (6)
AGEC 691 (3)		
AGEC 672 or Quant Elective (3)		
Oral Prelim		

Figure 38. PhD: Degree Planning Guide - ABME: Supply Chain Management Option (Revised 1/18/2022)

Course	Course Description	Credits	Semester Offered	Year Taken
	Prerequisites or Equivalent	ts:	•	
AGEC 607	Research Methodology (or MS thesis)	Credit 3	Spring	
AGEC 621	Econometrics in Agribusiness	Credit 3	Fall	
ECON 607	Foundations of Microeconomic Theory	Credit 3	Fall	
ECON 611	Foundations of Macroeconomic Theory	Credit 3	Spring	
ECMT 660 <sup>a</sup>	Mathematical Economics I	Credit 3	Fall	
	Required Courses:		<u> </u>	
Economic Theory	<b>/:</b>			
ECON 629	Microeconomic Theory I	Credit 3	Fall	
ECON 630	Microeconomic Theory II	Credit 3	Spring	
Core Requiremen	it:		•	
AGEC 636	Agribusiness Mkts. and Applied Welfare Analysis	Credit 3	Fall	
Quantitative Met	hods:		•	
ECMT 675 <sup>b</sup>	Econometrics I	Credit 3	Fall	
AGEC 661	Applied Econometric Methods I	Credit 3	Fall	
AGEC 662	Applied Econometric Methods II	Credit 3	Spring	
AGEC 641	Operations Research Methods in Ag. Econ		Spring	
AGEC 642	Dynamic Optimization <b>OR</b>		Spring	
AGEC 643	Applied Simulation in Agricultural Economics	Credit 6	Fall	
	or Quantitative Methods Elective <sup>c</sup>	Credit 6		
Research Require			T	1
SCMT 690	Theory of Research in Information and Op. Mgmt.	Credit 3	Summer	
AGEC 691 <sup>d</sup>	Research	Credit 16		
	nt (15 Credits Required):			
AGEC 671	Fundamentals in Agribusiness and Managerial Econ	Credit 3	Fall	
AGEC 695	Frontiers in Agribusiness and Managerial Econ	Credit 3	Fall/Spring	
AGEC 672	Fundamentals in Applied Market Analysis	Credit 3	Spring	
SCMT 688	Doctoral Seminar	Credit 6		

Student's Advisory Committee:

Chair	Member	Member	Outside Member

Minimum credit hours required, not counting prerequisites are 64. The course requirements listed above can also be met by taking equivalent courses as part of an MS program or as graduate credit from another Department or University. Departures from listed course require written justification and approval by the proposed student's Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

<sup>&</sup>lt;sup>a</sup> ECON 460 is a good substitute in semesters ECMT 660 is not taught.

b or STAT 630 or sequence STAT 610 and STAT 611.

c Choose from AGEC 641Operations Research Methods in Agricultural Economics, AGEC 642 Dynamic Optimization, AGEC 643 Applied Simulation in Agricultural Economics, AGEC 672 Fundamentals in Applied Market Analysis, AGEC 676 Frontiers in Applied Market Analysis, ECON 636 Macroeconomic Theory I, ECON 646 Macroeconomic Theory II, ECMT 677 Applied Microeconometrics, ECMT 678 Advanced Topics in Econometrics,

d Research credits may be replaced by course credits.

Figure 39. PhD: Scheduling of Curriculum – ABME: Supply Chain Management Option (Revised 1-8-2022)

		Summer (Month of August)
		ECON Stat Prep
		ECMT Math Prep
Fall (First Year)	Spring (First Year)	Summer (First Year)
Required  ECON 629 (3) Microeconomic Theory I  AGEC 661 (3) Applied Econometric Methods I  ECMT 675 (3) Econometrics  IQuantitative Methods	Required  ECON 630 (3) Microeconomic Theory II  AGEC 662 (3) Applied Econometric Methods II  AGEC 641 (3) Operations Research Theory  Quantitative Methods	Required  AGEC 691 Research (6)  Qualifier Examination <sup>a</sup> (Offered May and August)
STAT 610 (3) Theory of Statistics I	STAT 611 (3) Theory of Statistics II  Field Courses	
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)
Required AGEC 636 (3) Agribus. Mkts. & Welfare Econ Quantitative Methods AGEC 643 (3) Applied Simulation Field Courses AGEC 671 (3) Fundamentals in Agribusiness & Managerial Economics SCMT 688 (3) Doctoral Seminar AGEC 673 (3) Fundamentals: Resources AGEC 676 (3) Frontiers: Markets	Quantitative Methods  AGEC 641 (3) Operations Research Theory AGEC 642 (3) Dynamic Optimization Field Courses  AGEC 695 (3) Frontiers in Agbus. & Ag Econ SCMT 688 (3) Doctoral Seminar AGEC 672 (3) Fundamentals: Markets AGEC 677 (3) Frontiers: Resources	Research SCMT690(3)Research in Information and Operations Management AGEC 691 Research  Written Field Prelim (Offered January and May)
Fall (Third Year)	Spring (Third Year)	Summer (Third Year)
Field Elective  SCMT 688 (3) Doctoral Seminar  AGEC 673 (3) Fundamentals: Resources  AGEC 676 (3) Frontiers: Markets  Research  AGEC 691 Research  Oral Prelim	Field Electives  SCMT 688 (3) Doctoral Seminar  AGEC 672 (3) Fundamentals: Markets  AGEC 677 (3) Frontiers: Resources  Research  AGEC 691 Research	Research AGEC 691 Research

<sup>&</sup>lt;sup>a</sup> Offered in May and August. Covers ECON 629, ECON 630, ECMT 675 (or STAT 660 for statistical tools), AGEC 661 and AGEC 662.

<sup>&</sup>lt;sup>b</sup> Offered in January and May. Field area and material covered from the core and quantitative methods courses will be integrated into the exams. These courses include AGEC 636, 641, 642, 643, and their prerequisites, with flexibility allowed for enrollment in 641, 642 or 643. After passing the oral preliminary exam that includes a presentation of the student's dissertation proposal must be taken before the next administration of the written field preliminary exams.

Figure 40. PhD: Typical Schedule – ABME: Supply Chain Management Option (Revised 1-18-2022)

		Summer (prior to first Fall)	
		ECON Math Prep	
		ECMT Stat Prep	
Fall (First Year)	Spring (First Year)	Summer (First Year)	
ECON 629 (3)	ECON 630 (3)	AGEC 691 (6)	
AGEC 661 (3)	AGEC 662 (3)	Qualifier Examination	
ECMT 675 (3)	AGEC 641 (3)	(Offered May and August)	
Fall (Second Year)	Spring (Second Year)	Summer (Second Year)	
AGEC 671 (3)	AGEC 642 or AGEC 676 or Quant Elective (3)	SCMT 690 (3)	
AGEC 636 (3)	AGEC 695 (3)	AGEC 691 (3)	
SCMT 688 (3)	SCMT 688 (3)	Written Field Prelim	
		(Offered January and May)	
	Spring (Third Year)	Summer (Third Year)	
AGEC 643 (3)	AGEC 691 (9)	AGEC 691 (6)	
AGEC 672 or Quant Elective (3)			
AGEC 691 (6)			
Oral Prelim			
Orac From			

### **DEGREE PLAN**

The University regulations regarding the completion and filing of the student's degree plan are discussed in the <u>Graduate Catalog</u>. The following discussion summarizes the major features associated with the degree plan procedure. Degree Planning Guides are found in Figures 2, 5, 8, 11, and 14.

# Online Degree Plan Submission System

The automated degree plan submission system is found at <a href="http://OGAPSdpss.tamu.edu/">http://OGAPSdpss.tamu.edu/</a> and is accessed with your NetID and password. You will need to enter all courses you will take, are taking, or have taken for the degree program you are in. You will also need to name all of your committee members. All members of your committee must be graduate faculty.

Once you have all the information entered for your degree plan, you must be sure that you complete the process by clicking the "Submit" button. The degree plan will then be routed electronically to all committee members, the Department, and OGAPS for approval. When the degree plan has completed the entire process, you will receive an email letting you know. If a problem is encountered along the way and your degree plan is rejected, you will also receive that information by email and you will need to go back in to the online degree plan submission system to make corrections and resubmit.

MS and MAB students in their 2nd semester, PhD students in their 4th semester, or straight-through PhDs in their 5th semester must submit a degree plan before pre-registration for the next semester. The approval process can take up to 90 days, so please start early. If you wait until the last minute to submit your degree plan, your registration may be delayed and you may not be able to register for the classes you need.

Special Instructions for MAB Students:

- In the online degree plan submission system, you will be asked for your department. MABs must choose "Agribusiness".
- Your committee consists of the Director of the MAB program as chair. That is the only name you need to enter.

Once your degree plan is submitted, any changes you make to your degree plan by petition will not be reflected here. To find your up-to-date degree plan, you must go to the <u>Howdy Portal</u> and do a degree evaluation.

### **Purpose of Degree Plan**

The degree plan sets forth the selection of courses graduate students must complete to satisfy the requirements for their degree. Changes can be made to the degree plan by submitting a petition, found on the <u>Degree Plan Submission Website</u>.

#### **Course Selections**

The courses students choose to include in their degree plan depend upon the degree and option or field area selected.

#### Transfer Credit from another Academic Institutions

A course can be used on your degree plan if it meets the transfer criteria below. If it does, then you would need to send your official transcript to admissions. You would then need to add the course to your degree plan.

- Courses taken in residence at an accredited U.S. institution or approved international institution with a final grade of B or greater may be considered for transfer credit if, at the time the courses were completed, the courses would be accepted for credit toward a similar degree for a student in degree-seeking status at the host institution.
- Courses used toward a degree at another institution may not be applied for graduate credit. If the course to be transferred was taken prior to the conferral of a degree at the transfer institution, a letter from the registrar at that institution stating that the course was not applied for credit toward the degree must be submitted to the Office of Graduate and Professional Studies.

# Limitations on the Use of Transfer, Extension and Certain Other Courses, Master's Degree

Some departments may have more restrictive requirements for transfer work. If otherwise acceptable, certain courses may be used toward meeting credit-hour requirements for the master's degree under the following limitations. The transfer of credits must be approved by the student's advisory committee and the Associate Provost for Graduate and Professional Studies.

- 1. The maximum number of credit hours which may be considered for transfer credit is the greater of 12 hours or one-third (1/3) of the total hours of a degree plan. The following restrictions apply:
  - Graduate and/or upper-level undergraduate courses with a final grade of B or greater taken in residence at an accredited U.S. institution or approved international institution will be considered for transfer credit if, at the time the courses were completed, the student was in degree-seeking status at Texas A&M, or the student was in degree-seeking status at the institution at which the courses were taken, and if the courses would be accepted for credit toward a similar degree for a student in degree-seeking status at the host institution.
  - Courses previously used for another degree are not acceptable for degree plan credit.
- 2. The maximum number of credit hours taken in post-baccalaureate non-degree (G6) classification at Texas A&M which may be considered for application to the degree plan is 12.
- 3. A zero credit 684 or 685 course is only allowed for non-thesis option master's students. A zero credit 681 course can be used for either thesis or non-thesis option master's students. Other courses, including 691 research hours, are not eligible for zero credit.
- 4. Not more than 12 hours may be used in any combination of the following categories:
  - Not more than 8 hours in the combination of 691 (research), 684 (Professional Internship) or SOPH 680 may be used.
  - Not more than 8 hours of 685 (Directed Studies) may be used.
  - Not more than 3 hours of 690 (Theory of Research) may be used.
  - Not more than 3 hours of 695 (Frontiers in Research) may be used.
- 5. A maximum of 2 hours of Seminar (681).
- 6. A maximum of 9 hours of advanced undergraduate courses (300- or 400-level).
- 7. For graduate courses of three weeks' duration or less, taken at other institutions, up to 1 hour of credit may be obtained for each five-day week of coursework. Each week of coursework must include at least 15 contact hours.

- 8. Continuing education courses may not be used for graduate credit.
- 9. Extension courses are not acceptable for credit.
- 10. For non-distance degree programs, no more than 50 percent of the credit hours required for the program may be completed through distance education courses.
- 11. To receive a graduate degree from Texas A&M University, students must earn one-third or more of the credits through the institution's own direct instruction. This limitation also applies to joint, dual, combined, and combination degree programs.

Exceptions will be permitted only in unusual cases when petitioned by the student's advisory committee and approved by the Office of Graduate and Professional Studies.

# **Grade Requirements**

Students must maintain cumulative and degree plan GPRs of at least 3.0 with no grade of D, F, or U for any course on the degree plan. Further, students must earn a cumulative GPR of at least 3.0 for all 300, 400, and 600 level courses.

### **Advisory Committee Structure**

The student's Advisory Committee consists of their major advisor or committee chair plus a specific number of additional members of the University's Graduate Faculty (see graduate faculty listings in the <u>Graduate Catalog</u>). All Advisory Committee members <u>must be</u> Graduate Faculty. One of the members of the student's Committee must come from another department (hence the term "outside member"). Master's students must have a minimum of three members including the committee chair. PhD students must have a minimum of four Committee members including the committee chair. Each member will approve the degree plan electronically, as well as the Associate Head for Graduate Programs and the Office of Graduate Studies. An approved copy is retained in the student's file.

## **Filing Deadline**

MS and MAB students in their 2nd semester, PhD students in their 3rd semester, or straight-through PhDs in their 4th semester must submit a degree plan before pre-registration for the next semester.

### **Frequently Asked Questions**

- Q. If I wish to deviate from Departmental policy concerning curriculum, what procedure should I follow?
- A. After you have discussed the nature of your intentions with your advisor, the next step is to prepare a Petition for Waivers and Exceptions to submit through the Degree Plan Submission System to the Associate Head for Graduate Programs outlining the policy you wish to petition and the reasons for your petition. After reviewing your petition, the Associate Head for Graduate Programs may circulate your petition to GAC for their recommendation. The Associate Head for Graduate Programs will inform you and your advisor whether or not your petition has been granted. Any deviation from this procedure will not be considered as a proper petition.
- Q. What will happen if I fail to file a degree plan by the deadline?
- A. You will be blocked from registration by the Office of Graduate Studies and/or the Department. The block will be removed when an approved degree plan is on file.
- Q. Can any required course be replaced with another course?
- A. Yes, if your Advisory Committee and the Associate Head for Graduate Programs approve. A written justification should accompany the request.
- Q. How do I sign up for AGEC 691, AGEC 685, or AGEC693?
- A. After completing a Commitment Form or Proposal form, if required, you must ask the Department Graduate Office to open a section for the instructor of record.
- Q. How do I make changes in my Advisory Committee after filing a degree plan?
- A. Submit a petition to the Office of Graduate Studies through the <u>Degree Plan Submission system</u> signed by all members of your current and proposed Advisory Committees and by the Associate Head for Graduate Programs.
- O. How do I make changes in my degree plan once it is on file at the Office of Graduate Studies?
- A. Any changes to your approved degree plan must be entered through the <u>Degree Plan Submission</u>
  System
- Q. What is an approved degree plan?
- A. An approved degree plan has been submitted through the <u>online degree plan submission system</u>, approved by the student's Advisory Committee, the Associate Head for Graduate Programs, Graduate Advisory Committee (if necessary), and the Office of Graduate Studies. This process takes time, so start early.

# **REQUIRED EXAMINATIONS**

The administration of PhD examinations involves (1) the graduate faculty, (2) the student's Graduate Advisory Committee, (3) the Departmental Graduate Office and (4) the University Office of Graduate Studies. The responsibilities of the latter two offices are administrative. The responsibility of the Departmental Graduate Office is to assist the graduate faculty in the administration of exams, to ensure technical correctness of petitions, forms, and other required paperwork, and to keep records of the status of graduate students. It is the responsibility of the graduate faculty and the student's Advisory Committee to handle all matters academic.

The Department's PhD examinations consist of: (1) the Qualifier Examination, (2) the Preliminary Examination, consisting of one field preliminary exam that is written, administered, and graded by the students' Graduate Advisory Committee, and an oral preliminary exam, and (3) a final oral exam (defense of the dissertation). The written preliminary exam can be replaced by a paper as discussed later in this document.

### **Qualifier Examination**

All Agricultural Economics PhD students are required to pass a comprehensive Qualifier Exam. The Qualifier is administered twice a year on the Wednesday before classes begin for the first summer term and on the first Wednesday before August 1. First-year PhD students are required to take the Qualifier in May of their first year. Straight-through PhD students are required to take the Qualifier in May of their second year. Exemption. The qualifier will be waived for any student that receives an A in all qualifier courses, ECON 629, ECON 630, and Econometrics (AGEC 661 and 662). Any student who is required to take the Qualifier but is not present at the administration of the examination will be deemed a "no show". A "no show" who has not formally requested and received a waiver by submitting a petition to GAC prior to the examination or provided documentation of an emergency at the time of the exam, will receive a grade of "Fail" for the Oualifier.

Students may access pdf files of past Qualifier exams online to help prepare for the Qualifier. If you would like access to these exams, please contact the Grad Office.

A Qualifier Committee appointed by the Department Head will administer the Qualifier Exam. Results for each student will be reported to the departmental Graduate Office by the Qualifier Committee. The departmental Graduate Office will notify each student in writing of the results of the exam.

### Objectives, Scope, and Subject Matter

The objective of the agricultural economics written Qualifier Exam is to examine the student's competency in the fundamentals of microeconomic theory, econometrics, and their applications. The Qualifier Exam is dominated by topics relating to microeconomic theory at the ECON 629 and ECON 630 level and econometrics at the AGEC 661 and AGEC 662 level. Students will be expected to demonstrate mastery of the basic microeconomics of production, consumption, and welfare economics, as well as perfectly and imperfectly competitive markets. Quantitative applications focus on the level of ECMT 660 for calculus and linear algebra, AGEC 661 and AGEC 662 for statistical tools, and ECMT 675 for mathematical statistics. Proficiency is expected in the application of mathematical tools such as linear algebra, calculus, optimization methods, linear regression, and statistical hypothesis testing to economic theory.

### Qualifier Retest Procedures

A student is expected to take the Qualifier only once. However, if the student fails the Qualifier on the first attempt, a second attempt will be granted. Students who fail the Qualifier must retake the exam the next time it is offered. In the event a student fails the Qualifier twice, he/she is given the opportunity for an oral examination. If a student passes the oral examination, the student will be allowed to continue graduate study in the PhD program without taking another Qualifier Exam. Students who fail the oral exam or choose not to take the oral examination will not be allowed to continue in the PhD. program.

Oral Qualifier exams will be administered by the Qualifier Committee. If the student's advisor is a member of the Qualifier Committee, the Department Head will appoint a replacement on the Qualifier Committee for the purpose of the oral exam. The chair of the Graduate Advisory Committee (GAC) or his/her appointee will be an ex-officio member of the oral Qualifier exam committee. The purpose of the Qualifier Exam is to ensure that students who obtain a PhD. in our department have command of the essential skills of economic theory and econometrics necessary for professional economists. The purpose of the oral examination then is to give us all confidence that the written exams did not give an incorrect signal. If a student has command of the necessary material, we want him or her to advance. On the other hand, if a student has not developed that knowledge at this point, then continuing in the program is not in the best interests of either the student or our program. Students should be aware that to pass the oral qualifier exam, the entire committee must be convinced that the student has a strong command of the material required for the Qualifier. This goes substantially beyond an ability to answer questions on the recent examination and is a rather high standard.

The Qualifier Committee will report its final decision to the Associate Head for Graduate Studies and the student's advisor. The Associate Head for Graduate Programs will notify the student in writing of the decision reached by the Qualifier Committee. This process will be followed until the student passes the Qualifier or is dismissed from the program.

# Selection and Role of Qualifying Examination Committees

The Department Head, in conjunction with the Associate Head for Graduate Programs selects faculty members to serve on Qualifier Exam committee. This committee membership will be announced near the start of the academic year.

The chair of this committee will be given the names of those students who indicate their intention to take the next examination. It is the responsibility of the chair to: (1) meet with the students to answer any procedural questions they have, (2) write the examination with the input of the other committee members and other faculty and submit it to the departmental Graduate Office two days before the exam, (3) administer a 4-hour examination on the announced date, (4) submit the student's original examination answers to the departmental Graduate Office immediately after the completion of the exam, Coordinate the grading of the examination within the one-week period following the administration of the exam, and (6) report the results of the examination to the Associate Head for Graduate Programs.

### **Preliminary Examination**

Students must take and pass both a written and oral preliminary examination. The oral preliminary exam must be taken after the student has passed the written field preliminary exam and must be completed by December of the students' third year (December of the students' fourth year for straight-through PhD students). However, students are not eligible to take the Preliminary Examination until they have passed the Agricultural Economics Qualifier Exam. Students must also have cumulative and degree plan GPRs of at least 3.0 and an approved degree plan on file to take the Preliminary Examination.

Students must pass both the written preliminary and oral exam to pass the Preliminary Examination. A failure in either of these examinations constitutes a failure of the Preliminary Examination. Upon unanimous approval of the student's Advisory Committee and the approval of the Office of Graduate Studies, a student who has failed either part of the Preliminary Examination may be given <u>one</u> re-examination, when adequate

time has been given to permit the student to address the inadequacies emerging from the first examination. The second preliminary examination for students that fail the first time consists of one written field preliminary examination and a preliminary oral examination. The written field preliminary examination can be waived if passed the first time the student took the examination. A failure on the second attempt in either the written or the oral examination constitutes a failure, and the student will not have a third chance to take the Preliminary Examination.

# Written Preliminary Field Examination

The Written Field Preliminary Examination Committee will be students' graduate advisory committees. The student's graduate advisory committee will be responsible for preparing and administering the exam, and for evaluating the student's performance on the field exam. The Student's Graduate Advisory Committee will define the field area and the classes to be taken by the student. Field classes must come from the currently approved field courses or AGEC 689 Special Topics approved by GAC and the Associate Head.

# Objectives, Scope, and Subject Matter

The Agricultural Economics Field Examinations are designed to test the student's ability to recognize current issues and problems in the selected field of study and formulate them into an economic analysis framework that can contribute to their efficient solution. The Field Examinations are intended to measure subject matter competency and preparedness of the student to begin independent scholarly dissertation research in his or her chosen field of study.

Questions on the written field prelim exams will require students to apply economic theory and quantitative methods to issues in their field area. The exam will also include relevant core course material that can be used to answer integrative questions. Core courses include AGEC 636 Agribusiness Markets and Applied Welfare Analysis along with quantitative applications to the core material based on AGEC 641, 642, 643, 661, 662 and their prerequisites.

# **Examples of Field Areas.**

<u>Applied Market Analysis</u>: The PhD. Field Examination in Applied Market Analysis will emphasize material introduced by the Fundamentals (AGEC 672) and Frontiers (AGEC 676) courses, but background information derived from other coursework and readings will be useful. The exam's goal is to assess the student's integrative capacity to address Applied Market Analysis issues with appropriate interpretations, concepts, tools, and policies.

Resource and Environmental Economics: The PhD. Field Examination in Resource and Environmental Economics (R&EE) will emphasize material introduced by the Fundamentals (AGEC 673) and Frontiers (AGEC 677) courses, but background information derived from other preparations will be useful. This includes survey R&EE material (such as the topics covered in the AGEC 604 textbook), microeconomics, and material from the core courses (particularly welfare economics), econometrics, and static and dynamic optimization. The exam's goal is to assess the students' integrative capacity to address R&EE issues with appropriate interpretations, concepts, tools, and policies.

Agribusiness: The PhD Field Examination in Agribusiness will emphasize material introduced by the Fundamentals (AGEC 671) and Frontiers (AGEC 695) in Agribusiness and Managerial Economics, and Doctoral Seminars taught in the Business School for each student's focus area in Agribusiness. The exam's goal is to assess the student's integrative capacity to address issues in Agribusiness with appropriate interpretations, concepts, tools, and policies. It is expected that each ABME student will specialize in in one of the following: finance, Management, Marketing, or Supply Chain Management. It is also expected that students will be able to integrate the concepts, tools, and quantitative methods taught in the AGEC Department with the concepts, tools and quantitative methods taught in the Business School to address problems in Agribusiness. Currently, the written and oral prelim committee for each Agribusiness student will be their graduate advisory committee.

### Paper Alternative to the Written Preliminary Examination

The student and the student's Graduate Advisory Committee will jointly decide if the student will take a written field preliminary examination or replace the written prelim with a paper. If the paper is chosen, the student's graduate advisory committee is allowed to work with the student to complete the paper. The quality of the paper will be determined by the student's Graduate Advisory Committee and the same committee will determine if the paper is a pass or fail. The student's Graduate Advisory Committee will also determine if the paper can be part of the dissertation. The paper must be completed before the oral preliminary examination and must be presented at the oral exam.

# Preliminary Oral Examination

All students must take an oral preliminary examination administered by Students' Graduate Advisory Committees. Through the preliminary examination, the student's Advisory Committee should satisfy itself that the student has demonstrated the following qualifications:

- a. a mastery of the subject matter of fields within the student's core and specialty areas, and
- b. an adequate knowledge of the literature in these fields and an ability to carry out bibliographical research.

It is recommended that oral prelims include a departmental seminar to be attended by students and faculty which will be a presentation of a preliminary draft of the student's dissertation proposal or paper if they replaced the written preliminary exam with a paper, which must be written and submitted to the Advisory Committee two weeks prior to the oral exam. The student's Graduate Advisory Committee will decide if the seminar will be held and can work with the Departmental Graduate Office for scheduling. The intent of the seminar is to start preparing the student's presentation skills and ability to answer questions. This seminar is expected to last about 30-45 minutes and will occur at the beginning of the exam. During the seminar, all in attendance will be encouraged to ask questions relevant to the seminar topic. After the seminar ends, all in attendance will be dismissed except for the student and the student's Graduate Advisory Committee to continue the exam. If the student is presenting their dissertation proposal, it is not the intent to have study results but rather a presentation of proposed study(ies). Moreover, it is not the intent of the oral preliminary committee to sign off on the dissertation proposal during the exam. It is expected that the student has prepared a draft of the proposal and can justify the literature review and methodology.

It is up to the advisory committee to implement the oral prelim as they believe is appropriate. The oral prelim is not limited to questions about the proposal or paper but can address questions and responses from the written prelim and qualifier exams as well as any questions subject to the rules above. It is expected that all committee members will have a copy of the students' written prelim questions and responses or paper. If a student fails the oral exam, he/she must retake the oral exam within six months of the first failure.

The Office of Graduate Studies (OGAPS) requires the student to initiate the "<u>Preliminary Examination Checklist and Report</u>" prior to taking the Preliminary Exams. It is best to wait until the day before the exam to submit to submit the Preliminary Checklist and Report of the Preliminary Examination through DocuSign as the form may expire after an extended period time after submission of the Checklist and the date of the oral exam. Results of the Oral exam must be received by OGAPS 10 working days after exam date.

### Petitions for Exceptions to Preliminary Exam Policies

Students who wish to deviate from university preliminary examination policy must file a petition with the Office of Graduate Studies (for example, for permission to take a preliminary examination off-campus). A "Petition for Waivers or Exceptions to University Requirements" filed electronically through the <u>Degree Plan Submission System (OGSDPSS)</u>. All members of the students' Advisory Committee must approve this petition. A copy of all petitions will be filed by the student with the departmental Graduate Office.

# **Role of the Graduate Advisory Committee (GAC)**

The Department's Graduate Advisory Committee (GAC) will review all policies and procedures related to the departmental graduate program, including examinations. This Committee is appointed by the Department Head and advises the Head on matters relating to graduate program policy this request or the request of the graduate faculty. GAC reports regularly to the faculty on matters pertaining to graduate program policy and operations. Policy and procedural issue changes are recommended to the Department Head for his consideration.

If a student desires to deviate from the department's policies with respect to the Qualifier Examination, a "<u>Petition for Waivers or Exceptions to Departmental Requirements</u>" must be filed with GAC. This petition must include a statement of the nature of the student's request, underlying reasons, and if the student has an Advisory Committee their signatures are required. GAC will review the petition, and the student will be notified in writing of the decision reached.

#### **Final Examination**

The final exam is an oral defense of the dissertation. The student's Advisory Committee Chair requests permission at least two weeks in advance of the time scheduled for the oral defense. The request is made to the Office of Graduate Studies through the Associate Head for Graduate Programs with The official "Request and Announcement of the Final Examination" form.

# **COMPLETION OF DEGREE REQUIREMENTS**

# **Normal Progress Guidelines**

### MS & MAB Students

- ◆ Maintain an overall 3.0 GPR.
- ◆ Maintain a 3.0 GPR for courses on degree plan filed with the Office of Graduate Studies.
- Complete all degree requirements within 16 months of entering the program.

#### PhD Students

- ◆ Maintain an overall 3.0 GPR.
- ◆ Maintain a 3.0 GPR for courses on degree plan filed with the Office of Graduate Studies.
- Pass the Qualifier Exam by the end of the first year.
- Pass the written field Preliminary Examination by the end of the second year.
- Pass the oral Preliminary Examination by the end of the first semester of the third year.
- Complete all degree requirements within 40 months of entering the program.

All time schedules assume: (1) students pursue their graduate studies on a full-time and uninterrupted basis, (2) Students enter the program having met all prerequisites, (3) the student begins the program in the fall semester, (4) all required courses are available on schedule, and (5) PhD students have already obtained an MS degree. When any of the second actions do not hold, the student should work with her/his major professor to propose adjustments.

As students complete their formal coursework and are proceeding with their thesis or dissertation research (AGEC 691) or their Professional Study paper (AGEC 693), it is a good time to make sure they are "on track" toward meeting all of the requirements for their degree. Below is a summary of some of the things they should be aware of during their last year at TAMU.

### **Application for Degree**

One of the many things students must do during their last semester as a graduate student is to apply for their degree. This must be done at the beginning of the semester or 60 days prior to the end of the summer term in which they expect to graduate. The application must be made online at it can be accessed through the Howdy Portal.

### **Thesis/Dissertation Proposal**

All MS-thesis option and PhD students must prepare a thesis or dissertation proposal that outlines their proposed research in reasonable detail. This proposal should be as succinct as possible and must be approved by the student's entire Advisory Committee by signing the required cover page. In addition, the Associate Head for Graduate Programs will review the proposal and must sign the cover page. Please allow one week for this review, prior to the submission deadline. The cover page that must accompany the proposal. This proposal must be filed with the Office of Graduate and Professional Studies at least 14 weeks prior to submission of the "Request and Announcement of the Final Examination" form. It is recommended that all MS thesis and PhD proposals follow the format of the AJAE in terms of headings, tables, figures, equations, references, etc. as this format is required for MS thesis and PhD proposals (see the next section).

# Preparing the Thesis/Dissertation

Students should consult the "Thesis Manual" when they begin preparing their thesis or dissertation. The revised guidelines are applicable for students graduating in Summer 2021 and beyond. More information related to <u>Thesis and Dissertation Services</u>, as well as <u>FAQ</u>'s are online, too.

Knowledge of the University's requirements can eliminate problems later with the Thesis Clerk's Office. The *Thesis Manual* can be downloaded from the <u>OGAPS website</u> and provides detailed instruction on formatting the thesis/dissertation to meet university requirements. All MS non-thesis papers, MS thesis and PhD dissertations will be <u>required</u> to follow the format of the <u>AJAE</u> in terms of headings, tables, figures, equations, references, etc. If a website is referenced, the date the website was accessed must also be reported. The following link provides a AJAE article to be used as a guide.

The following links provide information on the AJAE style:

American J Agri Economics - 2014 - Baker - Farmland Is It Currently Priced as an Attractive Investment

http://www.chicagomanualofstyle.org/tools citationguide.html

http://www.oxfordjournals.org/our journals/ajae/for authors/general.html

Any student / committee wishing to deviate from the AJAE format can petition GAC to be allowed to deviate from the AJAE format. The student must provide a good reason(s) for deviating from this format. Whenever there are differences in format and layout between the specifications of the Thesis & Dissertation Manual and the style guide, the Thesis & Dissertation Manual overrules the style guide.

The Department has copies of past theses and dissertations completed by agricultural economics students in storage in the Learning Center. All recent thesis and dissertations are available through Evans Library as electronic versions. Frequently, a review of recently completed theses or dissertations can answer many questions students might have about style, length, etc. A "rough draft" conference with the Thesis Clerk is also helpful in eliminating last minute changes.

### Depositing Thesis/Dissertation with Clerk

After making any final changes to the thesis or dissertation indicated at the final oral examination, the student is required submit their dissertation or thesis electronically (as a pdf file) with the <u>Thesis Office</u>. The Thesis Clerk's Office checks all theses and dissertations for style, typos, completeness of references, adherence to formatting requirements, etc. The student will not be approved for graduation until all changes recommended by the Thesis Clerk's Office have been made.

#### Final Oral Examination

The Advisory Committee will conduct an oral examination of each MS or PhD student after all requirements for the degree have been completed. The student's Advisory Committee Chair must establish the examination date and notify the Office of Graduate Studies in accordance with University requirements. This includes requesting permission to administer the final exam at least two weeks prior to the examination. The official "Request and Announcement of the Final Examination" form is initiated by the student through DocuSign. Additional requirements are given in the Graduate Catalog.

All MS-thesis option and PhD students are expected to defend their thesis or dissertation in this examination, which may cover course work as well. The final defense will include a departmental seminar attended by faculty and graduate students. An abstract of the thesis or dissertation, not to exceed 350 words, should be circulated to the Department's Faculty and graduate students prior to the examination, with an invitation to attend the seminar. The student's Graduate Advisory Committee will decide when the seminar will be held and can work with the Departmental Graduate Office for scheduling and advertising the seminar. During the seminar, all in attendance will be encouraged to ask questions relevant to the seminar topic. After the seminar ends, all in attendance will be dismissed except for the student and the student's Advisory Committee to continue the final defense.

All MS-thesis option and PhD students are expected to defend their thesis or dissertation in this examination, which may cover course work as well. An abstract of the thesis or dissertation not to exceed 350 words should be circulated to the Department's Graduate Faculty prior to the examination, with an invitation to attend the presentation.

It is possible for Master of Science-thesis students to waive the final oral examination if their GPR is 3.5 or higher. Approval of the student's Advisory Committee, the Associate Head for Graduate Programs, and the Office of Graduate Studies is required. Master of Agribusiness students also may waive a final oral examination, provided they successfully complete the cornerstone courses (AGEC 629 and 630) of their program.

### **Timing of Final Oral Examinations**

The Office of Graduate and Professional Studies designates final dates each semester and during the summer for PhD and MS students to: (1) apply for graduation, (2) schedule final oral defense examinations, and (3) submit the final version of their dissertation or thesis to the Thesis Clerk. This calendar can be found on the OGAPS website. Agricultural Economics Department policy calls for students to provide their Chair and Committee with final copies (in a format consistent with the Thesis Clerk's requirements) at least two weeks prior to the defense date. However, students are advised to schedule the defense earlier than the final date set by the OGAPSS to allow ample time for all of the following to occur prior to the final date the dissertation/thesis is due in the Thesis Clerk's Office:

- 1. Students should expect to be required to make some corrections following the defense (1-2 weeks is a reasonable expectation for this activity).
- 2. Student's Chair and in some instances, one or more individual Committee members, will want to review part or all of the revised dissertation/thesis following corrections—when all concerns have been resolved, the Chair and Committee will sign the dissertation/thesis approval page (1-2 weeks is a reasonable expectation).
- 3. The Associate Head for Graduate Programs reviews and then forwards the dissertation/thesis approval page to the Department Head for signature following completion of steps 1 and 2 (allow another 1-2 weeks for this review).

### **FUNDING OPPORTUNITIES**

# **Graduate Assistantships**

#### Selection Process

A limited number of departmental assistantships and research assistantships are awarded to graduate students on a competitive basis. The Associate Head for Graduate Programs and the departmental Administrative Team are charged with the responsibility of making all departmental assistantship offers based on merit. The complete application package for each student will be used in determining who will be awarded graduate assistantships. Further, the student's Statement of Purpose describing his/her interests and the objectives of his/her educational program and professional career is important in the evaluation process. The number of offers made is contingent upon the faculty's need for research assistants and the Department's budget.

Individual faculty members may also make assistantship offers from Extension funds or from extramural grant and contract funds. The maximum term for such offers is the duration of the agreement or the grant or contract period and implies no financial commitment from the Department of Agricultural Economics and no assurance of funding beyond the period stated in the offer letter.

### Benefits and Requirements

The Department of Agricultural Economics has adopted a three-tiered pay scale for graduate assistants. These rates will be assigned based on the qualifications of the students as determined by a review of application materials, performance reviews, etc. The three levels of assistantship will be Basic, Standard, and Merit. The rates are as follows:

Degree Level	Basic	Standard	Merit
Master's Degree	\$1,050	\$1,200	\$1,600
PhD Degree	\$1,600	\$2,000	\$2,250

Graduate students receiving a half-time graduate assistantship are required to work 20 hours per week carrying out the functions identified by their assistantship supervisor. Graduate students cannot hold more than one assistantship (GAT, GANT, GAR), nor work as an employee of the State of Texas while holding an assistantship. Graduate assistants are eligible for official University holidays (typically 7-8 days at Christmas, 2-3 days during Spring Break, July 4, and 2 days at Thanksgiving). Graduate assistants desiring to be absent from their duties for longer periods must have the approval of their supervisor and must request leave-without-pay status from the Associate Head for Graduate Programs.

Students must be registered full-time at least two weeks before the start of their assistantship to ensure timely payment of their stipend. Moreover, students must complete payroll forms with the Ag Econ Business Office (AGLS Room 314) by that time. Each semester, students hired and assigned as TAs for the 1<sup>st</sup> time are required to attend the Teaching Assistant Training and Evaluation Program (TATEP) conducted by the Center for Teaching Enhancement, and a Departmental Graduate Assistant Training Workshop. Also, students must complete orientation with the Ag Program Human Resources Office prior to beginning their assistantship appointment.

Students awarded a half-time graduate assistantship on a competitive basis will have their non-resident tuition waived and are eligible to participate in the TAMU group insurance program. The student's spouse may also be exempt from non-resident tuition. The non-resident tuition waiver must be entered by the departmental Graduate Office each semester. If you are employed outside the Department of Agricultural Economics as a graduate assistant, you must complete an out-of-state tuition waiver request form.

As a holder of a half-time assistantship appointment, students <u>must</u> be registered full-time, which is a minimum of 9 credit hours in the Fall and Spring semester, and 6 credit hours during the summer term. A student's course selection should not interfere with their work schedule as prescribed by their supervisor.

Normal duration of combined fellowship and departmental assistantship support is 16 months for Master of Science (thesis or non-thesis), and Master of Agribusiness students, 40 months for PhD students with Master's degrees, and 52 months for straight-through PhD students. Extension of these limits will be considered only in exceptional circumstances by written request to the Associate Head for Graduate Programs at least one semester in advance and is dependent both on performance and on availability of funds. Clear justification must be provided by the student and endorsed by the student's Advisory Committee Chair.

### Initial Assignment to Supervisor(s)

All students on graduate assistantships with classroom responsibilities are assigned to faculty by the Associate Head for Graduate Programs in consultation with the Administrative Team. Priority is established by the academic rank of the faculty member (priority is given to junior faculty) and other resources available to the faculty member. Course enrollment, the faculty member's teaching load, number and nature of laboratory and homework assignments and exams, and the extent of required student computer use are explicitly considered in prioritizing plans for assignment of graduate teaching assistants. Graduate assistants are assigned in a manner consistent with the objectives of their funding sources. For example, plans for use of Agrilife Research funded graduate research assistants must support completion of Agrilife Research projects. Individual student assignments are, to the extent possible, made by mutual agreement of the faculty member and the graduate assistant.

# Work Performance

The student's assistantship supervisor will be asked by the Associate Head for Graduate Programs to periodically evaluate the assistant's performance (typically at the end of each semester). The purpose of this evaluation is to assure that the Department's needs are being met and that the assistant-supervisor relationship is working satisfactorily. A completed copy will be retained in the student's file.

Grounds for Losing Assistantship

Students holding a graduate assistantship are subject to losing their assistantship when: (1) their cumulative or degree plan grade point ratio falls below a 3.0 average, (2) they have failed to file an acceptable degree plan by the deadline, (3) they have failed to complete the Qualifier Examination and/or Preliminary Examination as required by Department policy, (4) they have failed to adequately perform their assistantship duties, or (5) they have been involved in scholastic dishonesty.

Students who's cumulative GPR or GPR for courses listed on the degree plan falls below 3.0 will have their assistantships immediately discontinued.

All Master's students must file an acceptable degree plan before registration for the semester following successful completion of 18 credit hours to qualify for continued assistantship funding. PhD students must file an acceptable degree plan before registration for the semester following successful completion of 27 credit hours to qualify for continued assistantship funding. Straight-through PhD students must file an acceptable degree plan before registration for the semester following successful completion of 36 credit hours to qualify for continued assistantship funding.

Students on departmental funding must take the Qualifier within one year after PhD prerequisites are completed (see section on Prerequisites). Normally, this will be in May of the first year of study for PhD students and May of the second year for straight-through PhD students. Students with departmental funding

who fail the Qualifier must retake the exam the next time it is offered. Any student on departmental funding who does not take the Qualifier as specified above will lose his/her funding at the end of the term in which this rule is violated.

Students on departmental funding must take the departmental field preliminary examination within two years after PhD prerequisites are completed (see section on Prerequisites). Normally, this will be in May of the second year of study for PhD students and May of the third year for straight-through PhD students. If a student on departmental funding has failed the written field exam, he/she must retake the exam the next time it is offered. Any student on departmental funding that does not take the prelims as specified above will lose his/her funding at the end of the term in which this rule is violated.

Termination of a PhD student's assistantship is automatic upon: (1) second failure of the Qualifier Examination, or (2) second failure of any portion of the preliminary exams (written or oral). In both cases, the assistantship will be terminated at the end of the semester or summer session during which the second failure was reported.

A student's assistantship also will not be renewed if the Associate Head for Graduate Programs, in consultation with the supervising instructor(s), concludes that the student's poor performance does not merit continuance of the assistantship. Protests stemming from termination of an assistantship will be addressed through formal Departmental grievance procedures.

## Reinstatement of Assistantship

A student, who has lost his/her assistantship because of unsatisfactory grades, becomes eligible again for assistantship funding when he/she raises his/her cumulative and degree plan GPR to 3.0 or higher. Students whose funding has been terminated for failure to meet requirements for taking the Qualifier or Prelims will not be eligible to be considered for reappointment to departmental funding until the required exam has been passed.

Should students lose their assistantship because of poor work performance, they can consider hourly wage employment with a faculty member in the Department. After six months of satisfactory wage employment, the student's work supervisor can recommend that the student be reconsidered for assistantship.

Should students lose their assistantship for any other reason, they may petition the Graduate Advisory Committee (GAC) for possible reinstatement. After six months, a student may become eligible again for assistantship funding. Renewal of a student's assistantship is not guaranteed but rather is subject both to the same competitive process under which it was initially offered and to funding availability.

# Participation in Developing Grant and Contract Proposals

To provide incentives for graduate students to gain both more control in their dissertation/thesis topics and potentially higher remuneration, graduate students are encouraged to become involved with faculty in grant and contract proposal writing. Graduate students who assist in writing grant/contract proposals, after joint consideration with the major professor, shall include their full salaries and tuition and fees in the proposal budget. Such salaries may exceed normal graduate assistantship salaries by a maximum of 25 percent. Participating students whose proposals are funded must document their involvement in the proposal writing through initiation of the proposal, developing a separate literature review, writing a separate paper on the topic, participating in the actual solicitation of funds with the granting institution, or other such actions that represent a substantive contribution to the proposal on the part of the student. The documentation must be verified by the major professor and project leader and submitted to the Associate Head for Graduate Programs when the proposal is submitted for funding. The Associate Head for Graduate Programs determines whether the student's participation is sufficient to warrant remuneration above the normal assistantship rate if the grant or contract is funded.

## **Frequently Asked Questions**

- Q. Do I assist my supervisor during finals week?
- A. You are paid to work 20 hours per week. If your duties require work during finals week, and they normally do if you have teaching assistantship responsibilities, you are expected to work during that time. If your duties do not require work that week, your supervisor may authorize you to make up the work before or after finals.
- Q. Do I have to work on student holidays?
- A. Your work schedule is to be arranged with your supervisor. You are required, however, to work 20 hours per week except during <u>official</u> University holidays.
- Q. Can I lose my assistantship if I receive a poor work performance evaluation from my supervisor?
- A. A poor work performance evaluation will suggest the need for a meeting between you, your supervisor, your major advisor where applicable, and the Associate Head for Graduate Programs. Every attempt will be made to understand and resolve the problems contributing to a poor performance rating. Loss of an assistantship will occur if the situation cannot be resolved over a reasonable length of time and dismissal is warranted.
- Q. What happens if I relinquish my assistantship but plan to apply for an assistantship at a later point in time?
- A. Your name will be re-entered into the "pool" of assistantship applicants, and you will most likely be awarded an assistantship if funding permits. Remember assistantships are awarded on a competitive basis, so there is an element of risk in relinquishing your assistantship.
- Q. Are there other ways I can earn money in the Department if I do not receive a Departmental assistantship?
- A. Yes. Students can be employed as graduate assistants by individual faculty members who have Extension, grant, or contract funds. A few students also earn money as hourly wage employees in the Department. For further information on potential employment in the Department, contact individual faculty, the Associate Head for Graduate Programs, or the Department Head's Office (AGLS Room 309).
- Q. How do I resign from my assistantship?
- A. Inform your supervisor and the Associate Head for Graduate Programs in writing as soon as you know that you will be resigning. Please give at least two weeks' notice of the exact date of resignation so that necessary arrangements can be made with the Department's Business Office.
- Q. I have been awarded a Departmental assistantship. If part of the assistantship is funded by individual faculty members who have Extension, grant, or contract funds, can the Departmental assistantship be extended.
- A. No. The months you were funded by an individual faculty member will be counted as part of your Departmental assistantship (a total of 16 months for MS, 40 months for PhD, and 52 months for Straight-through PhD).

### Fellowship and Scholarship Opportunities

There are a number of fellowship and scholarship opportunities that are available to graduate students. The following discussion summarizes some of the major opportunities currently available. Most provide a non-resident tuition waiver. Check with the Department Graduate Office and Office of Graduate Studies for details. Students holding fellowships should check the <u>Graduate Catalog</u> to determine registration requirements.

### Regents' Graduate Fellowships

These highly competitive awards are given to new graduates or professional students with exceptional credentials. The awards are for one year with an option for renewal by the College. Fellowship nominations are made by the Department to the College or by the intercollegiate faculties to the Office of Graduate Studies. The size of stipends varies depending on College guidelines.

### **Graduate Merit Fellowships**

These prestigious fellowships are awarded through a University-wide competition. The fellowships are designed to encourage high-quality applicants to enroll for the first time in graduate programs at Texas A&M University. Nominations are made by the Department to the College. These awards are for one year.

### National Science Foundation (NSF) Graduate Research Fellowships

The NSF awards these fellowships, and the money is administered through the Office of Graduate Studies. Applications can be obtained from the Office of Graduate Studies during September and October and sent directly to the NSF.

# Willie May Harris Charitable Trust Graduate Fellowship

The Willie May Harris Fellowship is awarded to first time graduate students who are citizens of the United States. The award is for a one-year term. Nominations are made by the Department to the College of Agriculture and Life Sciences.

### Heep Award for Excellence in Graduate Study

The Heep Award was created to enhance recruitment of the best prospective PhD. students. This is a three-year award made to incoming PhD. students, and can be given in conjunction with an assistantship in the department. Nominations are made by the Department to the Office of Graduate Studies.

### Tom Slick Fellowship

The Tom Slick Graduate Research Fellowship Program in the College of Agriculture and Life Sciences provides support for dissertation research of exceptional PhD students regardless of their nationality. The topic of the research conducted by the student should be relevant to Texas agriculture. Recipients are selected twice yearly with fellowships beginning January 1<sup>st</sup> and September 1st. Tenure is for no more than 12 months. Fellows are selected by a committee appointed by the Dean of Agriculture and Life Sciences. Fellows must have completed all preliminary exams and a dissertation proposal prior to the beginning of the fellowship.

# Robert G. Cherry Fellowship

The student receiving this fellowship must be enrolled as a PhD or a Master of Science student in Agricultural Economics. The maximum award is \$3,000 per year for three years. It is available to a student awarded a half-time assistantship by the Department. Preference is given to students who are Texas residents, employees of the Texas Cooperative Extension (TCE) with demonstrated potential for advancement or have an interest in employment with TCE and plan to pursue dissertation or thesis research on an economic problem relevant to Texas agriculture, agribusiness, or related food and fiber concerns.

# Tyrus Timm Fellowship

The student receiving this fellowship must be enrolled as a Master's student in Agricultural Economics. The recipient must also be a citizen or permanent resident of the United States, have a strong academic record and a clear conduct record. The stipend paid by this fellowship varies with the income available from the endowment. The recipient's name is also added to the plaque displayed in the Department.

# Rod Ziemer Scholarship

The Rod Ziemer Scholarship is a travel scholarship for graduate students in the College of Agriculture and Life Science who are presenting papers at the annual AAEA meetings. Requests for applications will be announced and distributed through the Department. This award is based on need and may not be awarded every year.

# Hopkin Scholarship

The Hopkin Scholarship is awarded through the Department of Agricultural Economics to assist in recruitment of outstanding graduate students specializing in Agricultural Finance. Requests for applications will be announced and distributed through the Department. This scholarship may not be awarded every year.

### Presentation and Research Grants (Minifellowships)

The Graduate Student Research and Presentation Grant Program is supported by funds from the Office of the Vice President for Research and Associate Provost of Former Students. Primarily, the program supports graduate student research. Secondly, it helps defray travel expenses of students attending professional meetings to present research papers.

Each applicant must have an approved proposal on file, be enrolled for a minimum of 9 semester hours (four semester hours if *in-absentia*) during a regular semester or a 10-week summer session (four of these semester hours must be in 684 Internship, 691 Research, or 693 Professional Study) and must not be a previous recipient of a Graduate Student Presentation and Research Grant.

Your application should clearly indicate the nature of the proposed activities with emphasis on how you will spend the requested funds. The budget should be brief but should list specific items. Funds awarded must be expended within 12 months, or they will revert to the Graduate Student Presentation and Research Grant Program.

The maximum dollar amount awarded is \$400. Further information can be found on OGAPS website.

# Other Fellowships

Externally funded competitive fellowships frequently are available. These fellowships are often funded by the Water Resources Institute, USDA, or commodity groups. Procedures for obtaining and maintaining these fellowships are the same as for graduate assistantships, unless otherwise stated.

### Competitive Scholarships

The Department may offer a limited number of competitive scholarships based on merit and financial need. Recipients of such scholarships are eligible for a waiver of non-resident tuition. Requests for applications will be announced and distributed through the Department.

### **Grounds for Losing Fellowships**

Fellowship holders are expected to maintain at least the same academic performance levels and progress as assistantship holders. Higher levels may be stated in the letter of offer. A GPR of at least 3.2 and adequate progress toward the degree are minimum requirements. Students not meeting these standards are subject to losing their fellowships. The termination procedures are the same as for assistantships.

# **Frequently Asked Questions**

- Q. Who do I contact to learn more about the fellowship and scholarship opportunities available to Master's and PhD students?
- A. The Department's Graduate Office can provide you with additional information.
- Q. Who selects the recipients of the Departmental fellowships and scholarships?
- A Departmental Graduate Scholarship Committee makes the decisions on who receives Departmental Graduate Scholarships. The Chair of GAC is the Chair of the Departmental Graduate Scholarship Committee, and the Associate Head for Graduate Programs serves as an ex officio member.

### INTERNATIONAL STUDENTS

International students must meet some additional requirements.

### **English Language Requirements**

International graduate students who will be serving as Teaching Assistants must complete English Language Certification at Texas A&M or show that they have completed an equivalent program at another U.S. institution. All other international students may demonstrate their abilities in English through English Language Proficiency Certification or Verification.

Texas A&M University requires students from countries where English is not the primary language to demonstrate the ability to speak, write, and understand the English language. The English proficiency requirements are independent of admission requirements. Graduate students may meet this requirement in one of the following ways:

- (1) English Language Proficiency Verification through official TOEFL score of 550 or higher (paper- based), 213 or higher (computer-based), or 80 (internet-based) taken within the last two years, GRE verbal score 146 or higher taken within the last five years, or GMAT verbal score 22 or higher taken within the last five years. Texas A&M requires an official copy of your test scores.
- (2) English Language Proficiency Certification may be achieved by taking the English Language Proficiency Examination (ELPE). To achieve English Language Proficiency Certification through the ELPE, a student must score at least 80 on the oral portion of the ELPE
- (3) English Language Proficiency verification may be achieved by receiving a two-year master's degree or a Baccalaureate degree following four years of study at an accredited U.S. institution.

#### Visa Status

The International Student Services (ISS) office is the best source of information on matters pertaining to an international student's visa status, as well as other questions pertaining to employment of international students. ISS is located at 110 Pavilion, phone number: 979-845-1824, and email: iss@tamu.edu.

# **Employment**

International students must be cleared through EEC prior to being employed by the Department. For more information, go to the Business Office in AGLS 314.

### **Enrollment**

International students are required to enroll full-time, i.e., a minimum of 9 hours in Fall and Spring semesters. If they have a graduate assistantship, they must maintain full-time enrollment during the Summer term as well (6 credit hours). Additionally, international students must be enrolled full-time in their initial or final semester, even if it falls in the summer.

# FORMS FOUND ON THE OFFICE OF GRADUATE STUDIES WEBSITE

The following official forms are available only at the Office of Graduate and Professional Studies website . All forms can be found at <a href="https://grad.tamu.edu/knowledge-center/forms">https://grad.tamu.edu/knowledge-center/forms</a>

- 1. Letter of Intent
- 2. Request and Announcement of the Final Examination
- 3. Proposal Cover Page for Thesis, Dissertation, or Record of Study
- 4. Out-of-State (Non-Resident) Tuition Waiver for student employed outside the Department