

Tuskegee University
College of Agriculture, Environment and Nutrition Sciences
Department of Agricultural and Environmental Sciences
Master of Science (M.S.) in Agricultural and Resource Economics

Contact Information:

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Degree(s) Offered: Master of Science (M.S.) in Agricultural and Resource Economics, Thesis and Non-Thesis Options

* For additional information please refer to the Graduate Handbook.

The Agricultural and Resource Economics graduate program offers several specialty areas, such as **rural economic and community development, agribusiness management and marketing, and natural resources economics**. This program is flexible in terms of research and course work so that students can achieve their career-inspired and individual objectives. Students complete a total of ~30 credit hours that include a research (thesis option) or professional project (non-thesis option). Find out more about the agricultural and resource economics research program in this area

http://www.tuskegee.edu/academics/colleges/caens/daes/graduate_programs/ms_in_agrecon.aspx. The program seeks to facilitate the development of competencies in applied economics and analysis of challenges and opportunities in agriculture and food, community and other resource systems. Graduates of the program are successfully pursuing careers with government, academia, and industry! Numerous graduates have also gone on to further their education in graduate and professional degree programs at universities across the country.

Departmental Admissions Requirements:

- Applicants must have completed a B.S. degree from a department of approved standing and granted by an accredited college or university, preferably in Agricultural Economics, Agribusiness, Business, Sociology or a related area to be considered for the Master's program in Agricultural and Resource Economics.
- Prerequisite academic work should provide evidence that the application shall be able to pursue the graduate course effectively.
- A cumulative GPA of 3.0/4.0 or better is required for regular admission; however, student with a cumulative GPA of 2.7-2.99/4.0 will be considered for conditional admittance.

University Admissions Requirements:

- Although it is required that applicants submit GRE scores to complete the admissions application, no minimum is required.
- Official Transcript from all colleges/universities attended (International Students must have transcripts translated through World Education Services -WES).

- Completed Application along with the required amount of application fees
- Three Letters of Recommendation
- Statement of Purpose
- GRE Scores
- Financial Affidavit (International Students –only)
- Test of English as Foreign Language (TOEFL) Scores (International students only).

Graduation Requirements:

A. The Master of Science, Non-Thesis Option

The **non-thesis** M.S. is a professional degree in which a student must complete a minimum of 32 credit hours of graduate course work to receive the degree, and other requirements may be specified by the department. Thus, programs leading to this degree provide opportunities for students to increase their knowledge and competencies in the various agricultural disciplines. A student, according to his/her needs may **(a)** obtain a balanced and unified training encompassing a wide spectrum of subject matter area or **(b)** obtain intensive training in a specified area. The emphasis of the program is to enable students to develop skills as professional practitioners in the communication of technical knowledge and its application to the solution of current and future technical, economic, and social problems of individuals and groups. The expected duration of the Non-Thesis Option program is 12-18 months.

- Core Courses: 14 Credits
- Area of Concentration (AGEC) Courses: 12 Credits
- Elective Courses: 6 Credits (Any graduate level courses 500 or above outside AGEC)
- Admission to Candidacy
- Passing of the Final Oral Examination

Course and Credit Requirements for the Master of Science, Non-Thesis Option

To earn a professional degree, a minimum of **32 graduate credits** are required comprising **14 credit hours** of core courses, **12 credit hours** for the area of concentration (Agricultural and Resource Economics; AGEC) of which **6 credit hours** must be at the **600 level or higher**, **6 credit hours at the 500 level (one of which must include AGEC 0505)**, and **6 credit hours of electives in a discipline other than the student's concentration**. The **final project/paper** will account for **3 credit hours** of the core requirements. Following the completion of 15 credits, students are required to be admitted to Candidacy. In addition to the course work outlined above, students must present 1) an **acceptable document** comprising a minimum of 20 pages on a selected professional problem or a report of training and 1) pass a **Final Oral Examination** based on the document as determined by the Advisory Committee.

Core Courses (14 credits):

AGEC 0615	Quantitative Methods (or equivalent)	3 credits
ECON 0512	Introduction to International Trade	3 credits
AGSC 0600	Non-Thesis/Thesis Graduate Project Seminar I	1 credit

AGSC 0604	Non-Thesis/Thesis Graduate Project Seminar II	1 credit
IBSC 0601	Research Ethics in Bioscience	3 credits*
AGSC 0699	Non-Thesis Graduate Project	3 credits

*Courses in discipline approved by Advisory Committee may be substituted for these courses.

Advisory Committee

A three-member Advisory Committee will be appointed to guide and monitor the student's professional development. The chairman of the appointed committee shall serve as the student's advisor.

B. The Master of Science, Thesis Option

The **thesis** M.S. is research oriented and requires a student to complete a minimum of 30 credit hours of graduate course work to receive the degree along with other requirements that may be specified by the department. The program is designed to (1) enhance the understanding of an area of science beyond the baccalaureate level, and (2) attain scientific research skills. Candidates for the M.S. degree are considered "novice" researchers and are expected to require considerable guidance in choosing and executing their thesis research projects. However, upon completion of the MS, the students are expected to have developed some capacity to conduct independent research. The expected duration of the Thesis Option program is ~24 months.

- Core Courses: 8 Credits
- Area of Concentration (AGEC): 12 Credits
- Elective Courses: 4 Credits (Any discipline 500 level or above)
- Thesis: 6 Credits
- Admission to Candidacy
- Passing of the Final Oral Examination

Course and Credit Requirements for the Master of Science, Thesis Option

To earn a thesis degree, a minimum of **30 graduate credits** are required comprising 20 core courses, which include **6 credit hours** of 700 level research, **6 credit hours** of research, **2 credit hours** of seminar, **3 credits hours** of Quantitative Methods or equivalent (AGEC 0615) and an additional **9 credit hours** of AGEC coursework as well as **6 credit hours** of electives. All courses must be approved by the Advisory Committee. Following the completion of 15 credits, students are required to be admitted to Candidacy. In addition to the course work outlined above, students must present 1) an **acceptable thesis** on a selected research project and 2) pass a **Final Oral Examination** based on the document as determined by the Advisory Committee.

Core Courses (20 credits):

AGEC 0553	Macroeconomics and Applications in Agriculture	3 credits
AGEC 0604	Microeconomics Theory and Applications to Agriculture	3 credits
AGEC 0615	Quantitative Methods (or equivalent)	3 credits
AGEC 0622	Research Methodology	3 credits
AGSC 0600	Non-Thesis/Thesis Graduate Project Seminar I	1 credit

AGSC 0604	Non-Thesis/Thesis Graduate Project Seminar II	1 credit
AGEC 0700	Research in Agricultural and Resource Economics	6 credits

Advisory Committee

A Major Advisor will be assigned to the student by the department head if the student has not already identified one. The Department of Agricultural and Environmental Sciences and the Dean of Graduate Programs encourage the formation of an Advisory Committee during the first semester of your graduate studies. In consultation with the Major Advisor, the Advisory Committee should be selected and is comprised of three members (including the Major Advisor). At least two must be in the area of the student's research interest. Together with the Major Advisor, the student will identify a research problem (subject matter to study) and prepare a research proposal for subsequent approval by the committee. It is the student's responsibility to contact each prospective committee member to see if he/she will serve on the Advisory Committee. It is recommended that the student obtain the written approval of each committee member. After the approvals are received, the Department head, College and Graduate School deans are to be notified of the committee members. The Major Advisor serves as chairperson of this committee and will convene meetings at his/her discretion.

Other:

Professional Development Document/Thesis

The final draft of the non-thesis document or the thesis must be filed with the student's Advisory/Examining Committee at least 30 days before the date listed in the university calendar for final copies to be submitted during the semester in which the student expects to graduate. The student must present to the Dean of Graduate Programs a "Preliminary Approval Sheet" (PAS) bearing the signature of the Major Professor before the final oral examination may be scheduled and before copies of the thesis are distributed to members of the Advisory/Examining Committee. After the "Preliminary Approval Sheet" has been signed, it should be submitted to the Dean of Graduate Programs before the final examination is scheduled and before the final draft of the thesis/dissertation is prepared for final approval. Approval of the Professional Development Document/Thesis in its final form rests with the Advisory/Examining Committee.

Transfer Credits

A **maximum of nine (9) semester hours** may be transferred from graduate courses taken at other university provided the student has grades of **"B"** or better in these courses. For students who are pursuing a second Master's degree at Tuskegee University nine hours of credit are transferable from courses taken to fulfill the requirements of the first degree. **Correspondence course credits are not acceptable.** Transfer credits may be recommended under both core and elective categories.

Admission to Candidacy

Immediately after completing 15 credits of course work at Tuskegee University, the student must submit to the Dean of Graduate Studies, a completed application for the Candidacy for the degree.

Seminars

A student pursuing the Master of Science degree in Agricultural and Resource Economics must present at least two seminars. The first seminar (AGSC 0600) shall be the presentation of the student's research proposal of the Master's thesis. The second (AGSC 0604) shall be his/her final seminar. The student is also required to participate in all seminars arranged by the department regardless of if he or she is enrolled in the course or not.

Research and Teaching Assistantships

Funding through research and teaching assistantships is available for accepted graduate students on a competitive basis. While thesis option students may qualify for support for tuition and stipend; non-thesis option students may only qualify for a work study (15 hr/wk). Research and teaching assistants are expected to provide service to the Department through conducting or assisting with research, teaching and other projects related to the college. Continuation of the financial support depends on student's performance in course work, satisfactory progression on research/professional development project and availability of funds.

List of Courses

(Master of Sciences Non-Thesis and Thesis Options)

AGEC 0505. AGRIBUSINESS MANAGEMENT: 2nd Semester. Lect. 3. Economic principles applied to organization and operations of farms; introduction to farm financial management techniques. 3 credits.

AGEC 0513. AGRICULTURAL PRICES. 1st Semester. Lect. 3, 3 credits. Use of economic theory and quantitative methods to solve problems in agricultural price analysis, problem formulation, forecasting and model evaluation of structural economic relations.

AGEC 0515. MARKETING OF AGRICULTURAL PRODUCTS. 2nd Semester. Lect. 3, 3 credits. The U.S. agricultural marketing system and the changes in the marketing structure and practice. Marketing margins, and derived demand; supply and demand relationship, elasticities; production and marketing information.

AGEC 553. MACROECONOMICS AND APPLICATIONS IN AGRICULTURE: 1st Semester. Lect. 3. An advanced look at theory and applications to agriculture of the circular flow framework, supply and demand in the macroeconomy, labor and factor markets, aggregate real supply and demand analysis; effects of fiscal and monetary policy on the price level, real output, and unemployment; budget deficits, and stability of the banking system. Prerequisites: ECON 353.

AGEC 0602. AGRICULTURAL POLICY IN DEVELOPING COUNTRIES. 1st Semester. Lect. 3, 3 credits. Agriculture in the structure of developing nations; its role in economic development; historical experience and models; sectoral policies relating to prices, inputs, productivity, and marketing,; international inputs into agricultural development.

AGEC 604. MICROECONOMICS THEORY AND APPLICATIONS TO AGRICULTURE: 2nd Semester. Lect. 3. This is an advanced microeconomics course that develops the theoretical structure of microeconomics principles and application to economic policy and decision making. The course covers the microeconomics of consumer choice, theory of the firm, general equilibrium, welfare economics, externalities and public goods. Prerequisites: ECON 352.

AGEC 0613. FINANCIAL MANAGEMENT IN AGRICULTURE. FINANCIAL MANAGEMENT IN AGRICULTURE. 1st Semester. Lect. 3, 3 credits. Principles of investment decision and financial control relating to management of cost, credit, insurance and debt. Use of financial management principles in the analysis of problems such as budgeting, investment, marketing and savings.

AGEC 0615/616. QUANTITATIVE METHODS. 1ST Semester. Lect. 3. Statistical methods and their applications: probability density and distribution functions as background studying principles of economic models analyses; prediction problems, programming, scheduling and network; special topics of current interest 3 credits. Prerequisites: AGECE 553; ECON 352, 353.

AGEC 0618. AGRICULTURAL POLICY, 2nd Semester. Lect. 3, 3 credits. Public issues involving agriculture and rural development topics relating to price controls, nutrition policy, food safety, farm labor, use of finite resources, marketing orders, production controls, etc.

AGEC 0620. ADVANCED MARKETING OF AGRICULTURAL PRODUCTS. 1st Semester. Lect. 3, 3 credits. Principles of industrial marketing and their relevance to agricultural marketing; standardization of diversified farm products; market differentiation; competitive structure and performance of the marketing system and the role of marketing research; marketing in economic development. Prerequisite: AGECE 0515.

AGEC 622. RESEARCH METHODOLOGY. 2nd Semester. Lect. 3. 3 credits. Selection, planning and conduct of research; alternative approaches, role of theory, beliefs and values; critical appraisal of research tools and studies; empirical development, presentation and defense of researchable problems by students. Prerequisite: one year of graduate work, including statistics.

AGEC 0630. SPECIAL PROBLEMS IN AGRICULTURAL AND RESOURCE ECONOMICS. 1st and 2nd Semester. 1-Summer. 1-3 credits. Special studies for graduate students in agricultural and resource economics. A presentation of topics not in regularly offered courses. Prerequisite: Permission of Instructor.

AGEC 0752. CONTINUOUS REGISTRATION. 1st and 2nd Semesters, Summer. 0 credits. Restricted to Graduate students who have taken all courses including AGECE 700 and need to use the service and resources of the University to complete their theses or reading for graduate examinations. Students may have a maximum of two registrations only; afterward registration as a regular graduate student will be required until the degree requirements have been completed. Prerequisite: Permission of major advisor.

AGEC 0754. CANDIDATE FOR DEGREE ONLY. 1st and 2nd Semesters, Summer. 0 credits. Restricted to graduate students who have completed all requirements for graduate degree including final oral or comprehensive examination, submission of thesis and approval of the thesis by the Office of the Graduate Programs. Students will be permitted to register in the category one at a time.

AGSC 0600. NON-THESIS GRADUATE PROJECT PROPOSAL SEMINAR I. 1st and 2nd Semesters. Lect. 1, 1 credit. Lectures from visiting scientists, and other organizations on topics related to environmental science. Presentation of proposals for thesis/non-thesis projects and technical reports by students on research in environmental science and related areas. This is a unique type of seminar in which knowledge from different areas will be integrated and students will write technical reports from the notes of the lectures combined with literature research. (Only one credit hour for any given semester will be allowed).

AGSC 0604. NON-THESIS GRADUATE PROJECT PROPOSAL SEMINAR. 1st and 2nd Semesters II. Lect. 1, 1 credit. Lectures from visiting scientists, and other organizations on topics related to environmental science. Presentation of project results for non-thesis graduate projects by students on research in environmental science and related areas. This is a unique type of seminar in which knowledge from different areas will be integrated and students will write technical reports from the notes of the lectures combined with literature research. (Only one credit hour for any given semester will be allowed).

AGSC 0699. NON-THESIS GRADUATE PROJECT. 1st and 2nd Semesters, Summer, 3 credits. Research, preparation and production of final project paper under the directions of a major advisor. Students in this program will be required to select research problems on a specific topic concentrating on the investigation of problems in agricultural, environmental and related sciences.

EVSC 0500. BIO-STATISTICS I. 1st Semester. Lect. 2, Lab 3, 3 credits. Statistical methods in scientific research. An introductory course in statistics dealing with the application of various methods of analyzing research data to include sampling, randomization, the normal distribution, "t" test, linear regression, correlation, Chi-Square, and analysis of variance of random design. Laboratory assignments require the use of pocket calculators and the University's time share computer.

EVSC 0501. BIO-STATISTICS II. 1st Semester. Lect. 2, Lab 3, 3 credits. The application of advanced statistical methods in analyzing biological data to include analysis of two-way experiments, factorial experiments, covariance analysis, least-square analysis with unequal subclass numbers and curvilinear regression. Laboratory assignments require the use of the University's time share computer and departmental microcomputers. Prerequisites: EVSC 0500 or Permission of instructor.

IBSC 0601. RESEARCH ETHICS IN BIOSCIENCE. 1st Semester Lec. 2 hours. 3 credits. This course is open only to graduate students. A special focus will be ethical problems in bioscience related to race/ethnicity and work of minority bio-scientists. Instructors will primarily serve as learning guides. Extensive student preparation prior to class is essential. Students are

expected to participate significantly in class discussion and conscientiously contribute to group work. Independent student research will be required. There are no prerequisites.

****Note: At the time of program development the listed courses comprise AGECE courses; however, any AGECE courses developed hereafter and meet the requirements indicated may be used to fulfill the concentration requirement indicated above. Further, elective courses may include those in any discipline offered at the graduate level (500 or above) as specified above.**

Key Graduate Faculty

Name	Specialty Area	Phone	E-mail Address
Ntam Baharanyi	Community Development, Resource Policy	724-4840	baharany@mytu.tuskegee.edu
Eunice Bonsi	Community Food Systems, Youth	727-8816	ebonsi@mytu.tuskegee.edu
Youssouf Diabate	International Development, Agribusiness	724-4232	diabate@mytu.tuskegee.edu
Tasha Hargrove	Marketing and Evaluation	724-4524	tmhargrove@mytu.tuskegee.edu
Ellene Kebede	Resource Economics, Agricultural Policy	724-4522	kebede@mytu.tuskegee.edu
Nii O. Tackie	Resource Policy	727-8813	ntackie@mytu.tuskegee.edu
Wylin Wilson	Health Policy and Ethics	725-2340	wwilson@mytu.tuskegee.edu
Robert Zabawa	Community Development, Agricultural & Resource Policy	727-8114	zabawar@mytu.tuskegee.edu

Additional details that are not shown in this handout may be found in the Bulletin of the Department of Agricultural and Environmental Sciences, the DAES website, the DAES Graduate Student Handbook as well as TU's Graduate Handbook and website.