

2025-2027

Graduate Student Handbook

Department of Agricultural and
Technology Education

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Introduction

Montana State University was founded in 1893 as the Agricultural College of the State of Montana. Today, the College of Agriculture is an integral part of fulfilling MSU's land grant mission to provide a liberal, practical education to the sons and daughters of Montana. As part of the College of Agriculture, the Montana Agricultural Experiment Station (MAES) conducts research on old and new challenges for Montana's agricultural community. MAES creates opportunities for students and faculty to excel through hands-on learning, to serve through campus and community engagement, to explore unique solutions to distinct and interesting questions, and to connect Montanans with the global community.

Within the College of Agriculture, the Department of Agricultural and Technology Education is dedicated to serving the needs of all students and agricultural professionals through a dynamic and comprehensive program of rural leadership, technology, science, and proven educational practices. The program is grounded in basic and applied research aimed at improving professional and technical skills in the realm of Montana agriculture.

Overview

The Montana State University Agricultural Education graduate program is designed to prepare graduates for entry into or advancement in formal and non-formal teaching careers. This program also provides development of professional leadership skills for other careers in agricultural leadership and communications.

The Agricultural Education master's degree program, online or face-to-face, can be tailored to meet each student's career goals. In addition to the wide variety of professional courses in agricultural education, offerings are also available from all academic Departments in the College of Agriculture, including agricultural economics and economics, animal and range sciences, land resources and environmental sciences, plant sciences and plant pathology, and microbiology and cell biology. Specialization areas such as adult education, educational administration, career education, and curriculum coordination are also available through cooperation with the College of Education, Health and Human Development.

Why a Master's Degree?

It is important to have a clear articulation of what your personal and professional goals are before you apply to this or any graduate program. Some people have the goal of "I want to get a master's degree," which can be sufficient in many cases. Often, though, it is preferable to create a goal framework that categorizes the degree as a means to achieve a goal rather than the end itself. This can be a reframing from undergraduate programs where getting a degree is often the end in itself. Here are some guiding questions that might help in your decision:

- Will a master's degree help advance my career?
- Will the coursework better prepare me for my career?
- Will a master's degree help accomplish a personal goal?
- Do I have enough time to dedicate to advanced coursework and projects?
- Do I have the support network needed to complete a multi-year program?
- Will graduate school help build my professional network?

It is worth noting that teaching in public schools in Montana requires a license issued by the Office of Public Instruction. You can read more about their different licenses [here](#). Our master's program does NOT satisfy Educator Preparation Program (EPP) requirements. Completion of an EPP is required for most (but not all) of the teaching licenses in Montana.

Pathways

The program offers three pathways to completion, all of which can be taken online. Plan A is the traditional thesis option, while Plan B requires a professional paper or project, and Plan C is course-based with a comprehensive exam. The program offers considerable flexibility to students to help them meet their professional and personal objectives. Plan A requires a thesis and a minimum of 30 credit hours, of which 20 credits are considered traditional coursework and 10 credits are thesis preparation. Students who choose Plan B are required to complete a professional paper or project based on a current research issue related to the student's emphasis area. Students will take a minimum of 30 credit hours of coursework, of which 24 credits are considered traditional coursework and 6 credits are professional paper credits. The final selection of the student's professional paper or project will be the student's responsibility in collaboration with their Major Advisor and Graduate Advisory Committee. All Plan B students will then choose one of the following options to complete as part of program requirements with advisor approval:

1. Create a research paper/project formatted for journal publication or conference proceedings.
2. Create a research paper/project at a smaller scale and scope as compared to a Plan A Thesis.
3. Submit a substantial grant proposal for funding.
4. Create an exhaustive literature review on a research topic.

Plan C requires students to complete 30 credits of coursework and a comprehensive exam. Deciding whether to choose an option is an important step in your graduate career and will inform your credit structure, course load, and committee formation. Aside from the academic ramifications, the end product itself will be quite different, so you should consider your professional goals and how you can advance them with this work. Choosing a graduate project that advances your career, as opposed to simply doing it because it is a requirement of the program, will aid enormously in keeping you motivated and will also infuse your work with a genuine sense of passion that will almost certainly shine through in the final product. Below are some questions and examples to help you think through your options.

If you agree with some or all of these statements, it might mean a thesis is better for you:

- You would like to be published in a peer-reviewed academic journal.
- You want to steer your career towards working in higher education, either as teaching faculty, researcher, or both.
- You avidly read industry publications or academic journals in your field (or you think this would interest you) and enjoy cutting-edge, data-driven insights in education.
- You love to write and/or want to invest in seriously improving your academic writing ability.
- You like the idea of one big project making up a large portion of your grade instead of several smaller projects.

If you find yourself aligning with the statements below, then a professional paper or project might be the better route:

- You are interested in learning how to conduct academic research that could be presented at a conference or published.
- You are interested in taking more classes as part of your master's program than doing research independently.
- You have a project that you want to create that requires grant funding and/or some other tangible set of deliverables.
- You are already working on something within the field of agricultural education that, with slight tweaks, could be improved via what you have learned in your graduate program and come to represent elements of your subject mastery.

Coursework Requirements

Unless otherwise approved by your Graduate Advisory Committee, your coursework must include the following: Research Methods (AGED 506 – 3 credits), Philosophy of Teaching and Learning in Agricultural Education (AGED 511 – 3 credits), Program Planning and Evaluation (AGED 507 – 3 credits), Statistical Analysis for Agricultural and Technology Education (AGED 505 – 3 credits), and Graduate Seminar (AGED 594 – 1 credit).

How to Apply

Application Procedures

Any applicant who has received a bachelor's degree from a regionally accredited college or university may apply for admission to the Graduate School. This can be done by [applying online](#). A non-refundable application fee can be paid by credit card or online check. A full application fee is required for the first application, and a partial application fee is assessed for subsequent applications to different programs within the same first year (the appropriate graduate committee reviews each application).

Students interested in the program should take the following steps to apply:

1. Compose a **letter of intent**: This letter should be directed to the Department in which you are applying. It should clearly identify how you believe the program is suited to further you either personally or professionally. Additionally, time should be spent here identifying your interests in teaching and researching agricultural education. Suggested length is 1-2 pages, single-spaced.
2. Identify three individuals for **professional reference**: These individuals should be able to speak to your ability as a learner, employee, or professional. You will not directly solicit reference letters. This will occur through the Graduate School's Admission Portal. You will only need these individuals' contact information.
3. Gather **official transcripts**: Transcripts should possess official letterhead and watermark/stamping from an accredited university. High-quality copies are initially accepted, but paper copies may be requested later for verification.
4. Compose a **writing sample**: This can be up to 10 pages and may be a previous capstone project, thesis, journal article, or other scholarly work that exemplifies your writing abilities.
5. [Create an account](#) in the Graduate School's Admission Portal and [submit](#) all documents.

Additionally, international applicants must submit official [TOEFL/IELTS](#) scores and a [Financial certificate](#) (available at the MSU Graduate School website).

Once all application materials are received, they will be reviewed by an Agricultural and Technology Education graduate screening committee. Based on their review, a recommendation will be made to the Graduate School regarding admission. The Graduate School will inform the applicant of their final decision. The applicant will then either confirm or deny admittance.

Deadlines

Applications are due:

- July 1st for Fall Semester
- November 15th for Spring Semester
- March 15th for the Summer Semester

Provisional Admission

If you do not meet these requirements, you may seek [provisional admission](#). A status of provisional admission is assigned when the applicant has not met the requirements for full admission. For example:

- A cumulative undergraduate GPA greater than 2.75, but less than 3.00 (on a 4.00 scale);
- Insufficient rigor in the last two (2) years of study;
 - o A major change in the area of specialization (e.g., B.A. in English, applying for an M.S. in Psychology);
 - o Other academic weaknesses.

The Graduate School assigns a provisional admission status with up to 15 credits of leveling coursework. The admitting department will communicate in writing to the applicant the leveling coursework on or before the first (1st) day of the term the student begins their graduate study. This coursework will also be listed in writing on the official acceptance letter from The Graduate School. Applicants admitted provisionally may be suspended without a probationary period if the provisions placed on their admission have not been met.

Departmental Standards

Once admitted to the program, students must meet the MSU Graduate School and Agricultural Education [grade and academic standards](#) each semester to remain enrolled. Grade point averages are reviewed by the Graduate School, department head, and faculty advisor at the end of each semester. All graduate students must maintain a cumulative GPA of 3.0 to remain in good standing. Should the semester GPA fall below a 3.0, the student is placed on probation for the following semester. During the semester of probation, the student cannot be admitted to degree candidacy, and any assistantship stipend may be suspended. With the attainment of the required semester GPA and a cumulative GPA of 3.0 or higher, the student returns to good standing.

Progress made toward completion of the degree will be assessed annually by the student's Major Advisor. Failure to demonstrate reasonable progress towards degree completion can result in dismissal of the student from the graduate program. After a minimum of one semester away from the program, an appeal for readmission can be submitted by the student to the current Department

Head in the form of an official letter detailing a plan for completion. Students with coursework more than six years old cannot apply these credits towards the degree requirements for their master's degree in Agricultural Education.

All Montana State University policies for Academic Misconduct also apply to graduate students in the Department of Agricultural and Technology Education. These policies include cheating, plagiarism, forgery, falsification, facilitation or aiding academic dishonesty; multiple submission, theft of instructional materials or tests; unauthorized access to, manipulation of or tampering with laboratory equipment, experiments, computer programs, or animals without proper authorization; alteration of grades or files; misuse of research data in reporting results; use of personal relationships to gain grades or favors, or otherwise attempting to obtain grades or credit through fraudulent means. For additional details, review the [MSU Student Conduct and Grievance Procedures](#).

Professional Standards

1. Make a standing meeting (calendar invite) with the primary advisor at least once a month.
 - Students' responsibility is to prepare and send an agenda to the advisor at least one day in advance. This should include.
 1. What do you plan to discuss?
 2. Supplemental material
 3. Question list
2. If Plan A or B, use the writing center before sending documents to the advisor.
3. If Plan A or B, you must have a statistical committee member on your committee.
 - Quantitative
 - Qualitative
4. Create a timeline for degree completion with classes and review with advisor.

Planning Your Graduate Program

Degree Requirements

To earn a Master's of Science in Agricultural Education, students must complete a minimum of 30 credits. Students deficient in preliminary coursework may be required by their Graduate Advisory Committee to take additional courses for which they will not receive graduate credit. A general detail of the Graduate School's Degree Requirements can be viewed [here](#).

The DATE Graduate program offers three options to help students meet their professional and personal objectives. The thesis option requires a minimum of 30 credit hours, including 20 credits of coursework and 10 thesis credits. The professional master's option requires 24 credits of coursework and a professional paper (6 credits), and the course-based option requires 30 credits of coursework and a required comprehensive exam. The professional paper is based on a current research issue related to the student's emphasis area. One plan requires a thesis (Plan A), the professional master's option requires a professional paper or project (Plan B), and the course-based option (Plan C) involves coursework and a comprehensive exam.

- **Plan A (Thesis Option):** Plan A requires a thesis, the topic of which must be approved by the students' Graduate Advisory Committee before the start of research in a thesis proposal meeting (see below). Students will take a minimum of 20 credit hours of coursework and 10 thesis credit hours. Unless otherwise approved, coursework must include:
 1. Research Methods (AGED 506 – 3 credits)
 2. Philosophy of Teaching and Learning in Agricultural Education (AGED 511 – 3 credits),
 3. Program Planning and Evaluation (AGED 507 – 3 credits),
 4. Statistical Analysis for Agricultural and Technology Education (AGED 505 – 3 credits), and
 5. Graduate Seminar (AGED 594 – 1 credit)
 6. Seven elective credits
 - Suggested elective: AGSC 502 – Enhancing Women's Roles in Agriculture and Natural Resources – 2 credits
 7. 10 Thesis Credits (AgEd 590)

Plan A culminates in a defense-of-thesis verbal examination and presentation.

- **Plan B (Professional Paper Option):** The student who chooses Plan B will complete a professional paper or project based on an independent investigation related to his/her career goals. Students will take a minimum of 24 credit hours of coursework and 6 professional paper credit hours. Unless otherwise approved, coursework must include:
 1. Research Methods (AGED 506 – 3 credits)
 2. Philosophy of Teaching and Learning in Agricultural Education (AGED 511 – 3 credits),
 3. Program Planning and Evaluation (AGED 507 – 3 credits),
 4. Statistical Analysis for Agricultural and Technology Education (AGED 505 – 3 credits), and
 5. Graduate Seminar (AGED 594 – 1 credit)
 6. 11 elective credits
 - Suggested elective: AGSC 502 – Enhancing Women's Roles in Agriculture and Natural Resources- 2 credits
 7. Six Professional Paper credits (AgEd 575)

Plan B allows students to work with their primary advisor to select one of the following options as part of program requirements:

1. Create a research paper/project formatted for journal publication or conference paper proceeding.
2. Create a research paper/project at a smaller scale and scope as compared to a Plan A thesis.
3. Submit a substantial grant proposal for funding.
4. Create an exhaustive literature review of a research topic.

Students will then present these projects as part of their final project defense.

- **Plan C (Course-based Option):** The student who chooses Plan C will complete 30 credit hours of coursework and a comprehensive exam. Unless otherwise approved, coursework must include:

1. Research Methods (AGED 506 – 3 credits)
2. Philosophy of Teaching and Learning in Agricultural Education (AGED 511 – 3 credits),
3. Program Planning and Evaluation (AGED 507 – 3 credits),
4. Statistical Analysis for Agricultural and Technology Education (AGED 505 – 3 credits),
5. Graduate Seminar (AGED 594 – 1 credit)
6. At least 17 additional elective credits:
 - Suggested elective: AGSC 502 – Enhancing Women's Roles in Agriculture and Natural Resources- 2 credits

Graduate Advisory Committee

The Graduate Advisory Committee advises the student on academic matters, including their program of study and research objectives. They also act as the examining committee for the master's defense-of-thesis examinations (Plan A), final project defense (Plan B), and comprehensive exam (Plan C).

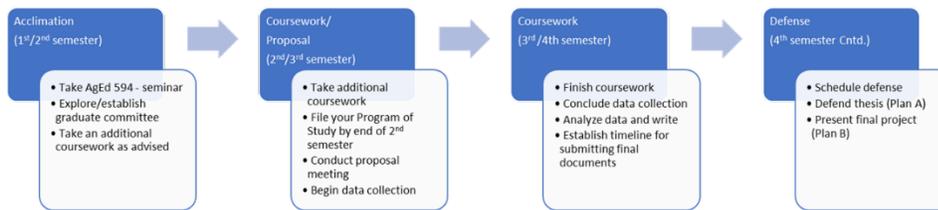
A faculty committee of three to five members representing the student's major and supporting or minor fields will be recommended by the department head and approved by the Graduate Dean. A majority of the committee members must be from the major department or be familiar with the student's major area of interest. One member from the major area of study will be designated committee chairperson and act as the student's graduate advisor or Major Advisor. Faculty affiliates, faculty of other institutions, and non-academic experts may serve as additional members, but not as chairs. Once the committee is selected, their information is to be submitted via MyMSU. All students are required to meet with their Graduate Advisory Committee to discuss a Program of Study and Thesis/project proposal.

Program of Study

The Graduate Advisory Committee and the student jointly develop a proposed Program of Study. The Program of Study defines the *minimum* course requirements for the degree. Other requirements, as determined by the student's Graduate Advisory Committee, may also be listed. The Program of Study must be submitted on an official "Program of Study" form to The Graduate School by the *end of the second semester* of graduate study. Students failing to submit a program by this date will be seen as failing to achieve satisfactory progress. Consequently, the student becomes ineligible for financial aid (including graduate assistantships, work-study, and student labor) and will be placed on college probation.

The Program of Study acts as a contract between the student and the University. It may be amended through the course of the student's graduate education. Changes to a student's program of study must be made through MyMSU and approved by The Graduate School.

Abbreviated Timeline



Agricultural Education Graduate Courses

AgEd 506 – Research Methods

3 credits: Fall of odd years

Principles and techniques of research appropriate for planning, conducting, and reporting agricultural and extension education research.

AgEd 507 – Program Planning and Evaluation

3 credits: Spring of odd years

A study of the literature on specific facets of program planning and evaluation applicable to agricultural and extension education. Application of program planning and evaluation concepts through individual and class projects.

AgEd 511 – Philosophy of Teaching and Learning in Agricultural Education

3 credits: Fall of even years

The purpose of this course is to provide graduate students with a comprehensive understanding of broad-based agricultural education through an examination of its formative individuals/events, philosophical premises, and instructional approaches. Specifically, this course will focus on historical development, foundational philosophies, and various learning theories and teaching techniques for formal and non-formal educational settings.

AGSC 502 – Enhancing Women's Roles in Agriculture and Natural Resources

2 credits: Summer

The purpose of the course is to explore the cultures, life experiences, worldviews, roles, and contributions of women in agriculture in select occupational pathways, including research, extension, marketing, education, production, and administration. Course content will focus on investigating the opportunities, demands, impacts, and conditions for success of local and global women in agriculture.

AgEd 505 – Statistical Analysis for Agricultural and Technology Education

3 credits: Spring

Analyze and report data using statistical tools for Agricultural and Technology education research topics. A focus on descriptive statistics, t-tests, ANOVA, correlation, regression, data and graphs, APA tables, and APA-formatted descriptions of data results.

AgEd 575 – Professional Research Paper

On demand: 1-4 credits. Individual term maximum 6 credits

A research, professional paper, or project dealing with a topic in the field. The student, the Major Advisor, and the Graduate Advisory Committee must have mutually agreed upon the topic.

AgEd 590 – Master's Thesis

On demand: Individual term maximum 10 credits

Prerequisite: Master's standing.

AgEd 594 – Graduate Seminar

1 Credit:

Topics offered at the graduate level that are not covered in regular courses. Students participate in preparing and presenting discussion material.

See the [course catalog](#) for full descriptions of AgEd courses that are currently offered. Students will work with their Graduate Advisory Committee to develop a program of study and ensure that the courses they plan to take are appropriate for their degree/emphasis. Students are allowed and even encouraged to seek out additional coursework from other academic units on campus.

Thesis and Professional Paper/Project Detail

All Master's students are required to present a proposal for their thesis (Plan A) or professional paper/project (Plan B) to their Graduate Advisory Committee by the end of their second semester of study. The committee will review the proposed project/topic and offer guidance as the student conducts their research. When the research is completed, the student will present their findings and submit a written thesis (Plan A) or professional paper/project (Plan B) to the MSU Graduate School for publication.

The Proposal

An individually written thesis based on original research is a requirement for all **Plan A** master's degree programs. To best offer support and guidance, the research problem selected should be one that relates to the general area of study of the Major Advisor. The chosen research project should be one that can be completed in a reasonable amount of time, will challenge the problem-solving ability of the graduate student, and make a significant contribution to the existing knowledge in the field.

An individually conducted professional paper or project based on an independent investigation is a requirement for all **Plan B** master's degree students. Students who choose **Plan B** are required to complete a professional paper or project based on a current research issue related to the student's emphasis area, profession, or career goals. Students will take a minimum of 30 credit hours of coursework, of which 24 credits are considered traditional coursework, and 6 credits are professional paper credits. The final selection of the student's professional paper or project will be the student's responsibility in collaboration with their Major Advisor and Graduate Advisory Committee.

All Plan B students **will then choose one of the following options** to complete as part of program requirements with advisor approval:

- Create a research paper/project formatted for journal publication or conference paper proceeding.
- Create a research paper/project at a smaller scale and scope as compared to a Plan A Thesis.
- Submit a substantial grant proposal for funding.
- Create an exhaustive literature review on a research topic.

Prior to the initiation of a thesis or a professional paper/project, a formal proposal should be developed by the student. The proposal should include the research problem or question, purpose, and objectives to be investigated, an outline of proposed methods, a review of pertinent literature, and a statement of the relevance of the research. Recognizing Plan B has flexibility regarding what the final product will be, students are to work with their Major Advisor to develop evaluation and completion parameters.

If human subjects are to be used in the proposed research, this will need to be approved by the IRB committee. The IRB approval form will need to be kept on file in the Departmental office and at the MSU Graduate School. Information on the human subjects committee and its approval process can be found [here](#).

The proposal will be presented by the end of the second semester of graduate study to the Graduate Advisory Committee and other interested members of the departmental faculty. If not, the student may be considered for dismissal from the program due to lack of sufficient progress as outlined in the *Departmental Standards* section of this document. A significant change in the direction of the proposed research requires the submission of a revised master's research proposal to the committee for their approval.

Plan A Requirements

The Graduate School has formatting standards in place that all thesis projects must meet before they receive final approval as a fulfillment of graduation requirements. Familiarize yourself with the formatting guidelines on their website and use them while preparing your documents for submission. Typing and other costs involved in the preparation of the thesis or professional paper are the student's responsibility.

A student's advisor will review a thesis several times during the writing process and then approve a draft to be submitted to the Graduate Advisory Committee. At this point, the student will be required to pay for a 'write-check' of the draft thesis/professional paper on the website TurnItIn.com. The results of the write-up need to be submitted to and discussed with the Major Advisor to determine if any changes need to be made. Following this step, final advisor approval of the draft is given, and copies are distributed to the Graduate Advisory Committee.

Plan A students are required to format a journal article for publication along with the draft copy of their thesis. The article should be ready for submission to an appropriate journal (your Major Advisor and/or Graduate Advisory Committee will help you select a suitable journal for publication of your research).

Copies of the draft thesis and journal article should be sent to the Committee at least four weeks before the thesis defense date to allow the Committee members adequate time to make revisions. Committee members will return the draft thesis and journal article with review comments within two weeks, and they will then be revised again. A final copy of the thesis and journal article must be presented to each member of the advisory committee no less than one week before the thesis defense.

Plan B Requirements

All Plan B students will choose one of the following options to complete as part of program requirements with advisor approval:

- Create a research paper/project formatted for journal publication or conference paper proceeding.
- Create a research paper/project at a smaller scale and scope as compared to a Plan A Thesis.
- Submit a substantial grant proposal for funding.
- Create an exhaustive literature review on a research topic.

Journal Article

For this option, students will be responsible for designing, implementing, and analyzing a research project that warrants publication in a peer-reviewed journal. Students may use data sets already in existence, or they can collect their own data. Major Advisors will work with the students to determine the most appropriate outlet for publication. All formatting for this option will follow the guidelines established by the journal.

Copies of the draft article should be sent to the Committee at least four weeks before the scheduled defense date to allow the Committee members adequate time to make revisions. Committee members will return the draft article with review comments within two weeks, and they will then be revised again. A final copy of the article must be presented to each member of the advisory committee no less than one week before the defense.

Conference Paper Proceeding

Students will be responsible for designing, implementing, and analyzing a research project that warrants publication in a conference paper proceeding. Students may use data sets already in existence, or they can collect their own data. Major Advisors will work with the students here to determine the most appropriate outlet for publication. All formatting for this option will follow the guidelines established by the conference.

Copies of the draft paper should be sent to the Committee at least four weeks before the scheduled defense date to allow the Committee members adequate time to make revisions. Committee members will return the draft paper with review comments within two weeks, and they will then be revised again. A final copy of the paper must be presented to each member of the advisory committee no less than one week before the defense.

Grant Proposal

As grant writing is an essential skill in Agricultural Education, students may opt for *Option 4*, a completed grant proposal. Students will work with their Major Advisor to identify a Request for Proposal (RFP) that suits the professional goals of the student. The RFP will then be used as a guide for evaluating proposals and end products presented at the student's defense. The RFP should include some aspect of required data collection and analysis, and be of substantial quality and depth.

Exhaustive Literature Review

The literature review demonstrates a comprehensive understanding of scholarship related to the agricultural, extension, or technology education field. The student systematically identifies and synthesizes peer-reviewed and credible sources to establish the current state of knowledge and practice.

The review should:

- Clearly define the topic and scope within agricultural, extension, or technology education.
- Organize the literature review in a format similar to a research paper, including an introduction, theoretical or conceptual framework, methods, results or thematic findings, and conclusions with implications and recommendations.
- Include a thorough and systematic search of relevant scholarly literature, incorporating foundational and recent studies.
- Critically summarize and evaluate sources, addressing methodological quality and relevance to the field.
- Synthesize literature thematically, highlighting trends, best practices, gaps, and areas for future research, practice, education, and improvement.
- Integrate theory with applied research and practice relevant to agricultural, extension, or technology education settings.
- Be well organized, scholarly in tone, and properly cited using APA format.

Plan C Requirements

Comprehensive Examination

For this option, students must successfully pass a comprehensive examination to ensure sufficient mastery of their program of study, including adequate knowledge of pertinent literature, academic background, training, and the ability to research a specified topic. The student usually takes the examination during the second year of attendance.

Each student's examination will be slightly different. Still, it should include a series of written prompts collected by the Major Advisor from, at minimum, three pivotal classes in the student's program of study. Students will have two options for responding to the written prompts:

1. Receive all prompts on a Monday at 8:00 AM and submit completed responses by that Friday by 5:00 PM.
2. Receive all prompts on a Friday at 12:00 PM and submit completed responses by the following Monday at 8:00 AM.

As each examination will be different, so will the evaluation criteria. Major Advisors will work with the instructors of 3-4 representative courses in evaluating the completeness of the response. On average, comprehensive exams produce a 15-20 page, double-spaced document.

Each student must successfully defend her/his program of study. It is the responsibility of the student to schedule the defense and reserve a meeting room (face-to-face or virtual). At least one day before the defense, the student must obtain a [Report on Comprehensive Exam/Thesis Defense](#). The form should be provided to the Major Advisor at the beginning of the “defense” presentation.

For Plan C, students complete a modified “defense” as part of the wrap-up to the graduate program requirements. This is a 30-45 minute reflective discussion with the graduate committee, with an invitation extended to the other AgEd department faculty if they’d like to attend. The “defense” should include a discussion of the student’s comprehensive exam responses, experience in the program, relevance of courses, and future application to their career.

The Defense: Plan A and B

Each student must successfully defend her/his thesis or professional paper/project. It is the responsibility of the student to schedule the defense, reserve a meeting room, and work with the Departmental administration to advertise the location, time, and subject of their presentation at least two weeks before the defense. At least one day before the defense, the student must obtain a [Report on Comprehensive Exam/Thesis Defense](#). The form will be provided to the Major Advisor at the beginning of the research presentation.

The defense will begin with a public (all interested persons are invited to attend) presentation approximately 30 minutes in length, with a short question and answer period following the seminar. After a reasonable amount of time, the Major Advisor will excuse the audience, and the Graduate Advisory Committee will continue the defense.

If the student is remote or has a committee member who is unable to attend their defense, they may use video conferencing. The MSU Graduate School allows students to video conference with committee members using the following requirements:

- Must be a two-way video.
- Conference process is initiated and completed by the student and/or department.
- All costs incurred are the responsibility of the department and/or student.
- If communication is broken during the defense and cannot be retrieved, the defense must be terminated and rescheduled to a later time/date.

At the conclusion of the defense, the student will be asked to leave the room to allow deliberation by the Graduate Advisory Committee. The committee votes to pass or fail the student, and a majority vote is required. In the event of an equal vote, the department head will consult with the Graduate Advisory Committee and make the final decision. Students who fail their original defense may repeat the exam a second time in an attempt to pass. If a student fails twice, he/she will not be eligible to receive their M.S. degree from the Department of Agricultural and Technology Education.

Corrections

All corrections to the final thesis and journal article (Plan A) or professional paper and periodical (Plan B) will be given to the student at the defense. In collaboration with their Major Advisor and Graduate Advisory Committee, the student will then edit their documents and prepare them for submission/publication.

Submission

For students pursuing Plan A, the completed, revised thesis should be submitted to the [Graduate School ETD](#) Formatting Advisor through the online submission portal. Your ETD must be approved on or before the [deadline date](#) of the semester in which you plan to graduate. To ensure your ETD is approved by the deadline, it is highly recommended that you submit a draft for initial review in advance of the deadline. Please do not submit your ETD for the first time on the deadline day; this may result in your having to take a one-credit extension or graduating in the following semester.

Paying for Your Graduate Program

Acceptance into a graduate program does not imply a commitment from the department to provide financial assistance. However, students of high scholastic standing are encouraged to consult the Department for information about Assistantships and tuition waivers.

Assistantships

A limited number of graduate assistantships supported by state-appropriated research and teaching funds are available to qualified Agricultural Education graduate students. When available, Assistantships are awarded primarily based on the student's academic qualifications and the research topic. Departmental **research** (GRA) assistantships are normally awarded for two years, while **teaching** (GTA) assistantships are awarded by semester. Graduate assistantships are generally 0.5 FTE or 19 hours of research or teaching per week, but can vary depending on the needs of the Department and available funding.

Research conducted by **GRAs** is a significant portion of the total sponsored research at MSU. GRAs often conduct research in a relevant area of their major course of study under the direction of a faculty member. The research is usually a component of the faculty advisor's research that is directly supported by external funding. GRAs are generally expected to carry out a specific research project, which may or may not form the basis for their thesis. GRA general duties include: performing experiments, calculations, analyzing results, and disseminating knowledge orally or in written publications, reflecting on the state of the field and proposing new research problems, attending conferences to present results and collaborate with other researchers, and training and supervision of less experienced research personnel.

GTAs are those graduate students who are involved in instruction. GTAs perform instructional duties in an area of their expertise, most often within their home departments, although qualified GTAs may perform outside their departments. MSU faculty members oversee all GTA teaching duties. General duties include: actual instruction in a classroom setting, instruction in recitation sections, assisting with laboratory setup, conducting help sessions, and holding office hours to advise students on class assignments, grading papers, exams, lab reports, and homework.

Applicants interested in assistantships should indicate as such on their program applications and attach a statement of interest. These applicants should also review the MSU Graduate School's established minimum requirements for the award of a teaching or research assistantship. Those guidelines can be reviewed [here](#).

Tuition Waivers

Tuition waivers are awarded by the department when available. These awards cover only tuition costs and not associated university fees. Remaining fees should be paid by the student in accordance with the University's fee payment deadline each semester. The Graduate School also offers tuition waivers for [faculty/staff](#) and [dependents](#).

Other Financial Aid

Graduate students may be eligible to receive federal loans. To determine your eligibility for federal financial aid, contact the MSU Financial Aid office at 406-994-2845 or fnaid@montana.edu. Fellowships and scholarships can also be obtained personally from outside funding sources and applied toward your MSU tuition.

Graduation

Application

MSU confers degrees and certificates three times a year: December, May, and August. Diplomas are dated the last day of the term in which the requirements for the degree are completed. Candidates must be enrolled in at least three credits at MSU in the term they intend to complete their degree. Students must complete a graduate application in MyMSU by the following deadlines:

- September 20th for Fall Semester
- February 5th for Spring Semester
- June 10th for Summer Semester

There is a non-refundable fee required each time this application is submitted. It is advised that the student not apply unless absolutely sure that they are set to complete their program that semester.

One Credit Extension

A One Credit Extension allows students additional time past the intended semester of graduation up to the first day of the following semester. Appropriate reasons to utilize the one credit extension are as follows:

- To satisfactorily complete all coursework (including "I" grade make-ups).
- Defense of thesis/dissertation past the published deadline for the intended semester.
- Satisfactory completion of all recommended corrections to the thesis or dissertation and submission of all required copies in final format to the DGE past the published deadline for the intended semester.
- Approval of the thesis/dissertation by the graduate Vice Provost.
- Successful completion of all other degree requirements as determined by the department and the MSU Graduate School, including submission of all documentation required for graduation.

To use the One-credit Extension, the student must do the following:

- [Withdraw their Graduation Application](#) for the original term of graduation on the Graduate School website by the end of the current term (if applicable);
- Submit a new [Graduation Application](#) for the following term, indicating you are using the One-credit Extension by the end of the current term; and
- Register for one credit the following term. To register for the one credit, you may be able to do this yourself or contact your department admin or committee chair to register you for the appropriate credit/course.

The degree will not be conferred until the end of the following term. If all degree requirements are not met by 5:00 p.m. on the first day of the subsequent term, the student will be required to register for an additional two credits to meet the minimum of three credits and to complete graduation requirements.

Commencement

MSU allows only those candidates who have completed all requirements for the degree (coursework, examinations, and final papers, including approval of the thesis or dissertation by the Graduate Dean) and who have applied to graduate by the deadline to participate in commencement exercises. Candidates listed in MSU's commencement book are those who have identified themselves as eligible to graduate. Being listed in the commencement book does not imply completion of the degree.

Candidates utilizing the one-credit extension and who have documentation from their committee chair that assures completion of degree requirements by the one-credit extension deadline may participate in the current term's ceremony.

Candidates who participate in commencement must wear appropriate academic caps and gowns. These may be purchased from the MSU Bookstore.

Appendix

Summary of Procedures

What	When	Procedure
Admission to the department and the MSU Graduate School.	Per departmental and MSU Graduate School deadlines.	Request an application packet from the appropriate department or apply online.
Selection of advisor and committee.	By the end of the second semester of registration.	See Major Advisor; submit the committee form to The Graduate School.
Graduate Program of Study.	By the end of the second semester of registration.	Consult advisor; submit the program in official format to The Graduate School.
Thesis or professional project proposal	As early as possible.	Submit a proposal to the Graduate Advisory Committee for approval. Set up a seminar date for the presentation.
Application for Advanced Degree	Submit on or before the third Friday of the semester of completion of degree requirements.	Complete the form obtained from the major department.
Final Changes to the Program of Study.	Submit on or before the third Friday of the semester of completion of degree requirements.	Submit the form to The Graduate School.
Defense.	At least 14 days before the end of the semester in which graduate work is completed.	Make arrangements with the Major Advisor.
Approval of thesis or professional paper.	After the defense-of-thesis examination and at least 14 working days before the end of the semester in which graduate work is completed.	Approval by the Graduate Vice Provost.
Commencement.	End of the spring semester.	See Commencement section.