The Master of Science (M.S.) in Agricultural Sciences graduate program offered by the Department of Agriculture, Nutrition, and Food Systems (ANFS) offers a flexible course of study that provides education and research experience in plant and animal agriculture, aquaculture, food systems, and related fields.

Emphasis is placed on acquiring basic and practical knowledge and research experience in one of the following core emphasis areas:

1. Diverse components of plant and animal agricultural systems including: breeding and genetics, physiology, environmental interactions, organismal health, agroecology, and pathology. Student are exposed to production systems, including field based, hydroponics, and aquaculture, as well as post-harvest practices.

2. Food systems analysis to address the social, economic, and environmental relationships that shape outcomes in plant and animal agricultural systems. Students work on food and agriculture related questions and challenges ranging from food production, processing, aggregation and distribution, access, consumption, and management of food waste.

The agricultural sciences graduate program prepares students to become highly knowledgeable and competent in professional fields related to agriculture and food, and leaders in collaborative and interdisciplinary efforts to address local, regional, national and/or global issues at the intersection of agriculture, food, and the environment.

The M.S. program is thesis-based, with the expectation of providing substantial research experience and the opportunity to publish new knowledge in the field of interest.

### Requirements

Master of Science (M.S.) in Agriculture Sciences students plan a program of study in conjunction with their advisor and Master’s Thesis Committee, including required courses and competencies. A minimum of 30 graduate credits, including 6-10 research credits (ANFS 899 Master’s Thesis), are required. A thesis proposal is developed within the first year for approval by the thesis committee. All M.S. students must write a thesis which must be accepted by the advisor(s), committee members, and the Graduate School. The degree is completed when the student has completed the required coursework, presented and passed a thesis defense, and the thesis is approved by the Master’s Thesis Committee and accepted by the Graduate School.

Up to 8 credits of graduate credit from another institution may be transferred, provided the credits were not counted toward another degree, and the course grade was a B or higher. Petitions requesting transfer credit must be supported by the advisor and graduate committee and approved by the UNH Graduate School.

### Additional Information:

Additional information can be found in the program graduate handbook, which includes expectations, guidelines, and detailed policies.

**Annual Evaluation:** The annual evaluation of graduate students ensures that students receive the mentorship they deserve and are making progress toward completion of their degrees. The annual evaluation of graduate students consists of a collaborative effort between faculty adviser and student to:

- Complete a self-assessment;
- Present a professional quality CV suitable for awards, job applications, and internships;
- Produce a narrative of service or other activities not captured on a CV;
- Develop annual goals.
Student Learning Outcomes

Students graduating with an M.S. in Agricultural sciences will meet objectives in the following areas:

**Discipline specific knowledge**
- Identify and explain discipline specific research methods
- Build knowledge and understanding in key areas of agricultural sciences including food systems, and animal and plant-based agricultural production systems

**Research design and analysis**
- Apply appropriate study design to answer a research question
- Use appropriate statistical methods to analyze and interpret research results

**Scientific method**
- Develop, defend, and execute a research idea to advance knowledge in the student’s specific field of study

**Critical thinking**
- Ability to collect and critically evaluate information from the primary research literature to expand knowledge of agricultural and food systems
- Develop skills to critically evaluate and analyze their research data

**Communication**
- Communicate effectively in writing through the development of an argument supported by evidence
- Communicate effectively in oral formats when addressing project-specific research and agriculture and food related issues
- Convey research results in written and oral format to both professionals and the public

**Professionalism**
- Conduct research in an ethical manner
- Deliver professional oral and written communications
- Demonstrate collaboration and leadership skills