# NUTRITIONAL SCIENCES (M.S.)

[https://colsa.unh.edu/agriculture-nutrition-food-systems/program/ms/nutritional-sciences](https://colsa.unh.edu/agriculture-nutrition-food-systems/program/ms/nutritional-sciences)

## Description

The program is for students who anticipate a professional career involving research or discovery, with a strong background in the basic biology and chemistry of nutrition. This degree may be most appropriate for students who expect to pursue further advanced studies, e.g., additional graduate studies or professional school, after graduation. Graduates of the Master of Science (M.S.) in Nutritional Sciences will be valued in the marketplace as they will have demonstrated capacity to engage in critical and systems thinking, convey and apply nutrition concepts in clinical, research and community settings, work as individuals and in teams, and identify strategies for lifelong learning.

In this thesis-based program students gain a comprehensive understanding of nutritional science through their coursework and engagement in research. Emphasis is placed on active participation in original hypothesis-driven research of publishable quality.

## Degree Requirements

### Core Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NUTR 899</td>
<td>Master’s Thesis</td>
<td>6</td>
</tr>
<tr>
<td>NUTR 960</td>
<td>Research Methods in Nutritional Science I</td>
<td>8</td>
</tr>
<tr>
<td>&amp; NUTR 961</td>
<td>and Research Methods in Nutritional Science II</td>
<td>4</td>
</tr>
<tr>
<td>ANFS 901</td>
<td>Introduction to Agriculture, Nutrition, and Food Systems Graduate Studies</td>
<td>1</td>
</tr>
<tr>
<td>ANFS 997</td>
<td>Agriculture, Nutrition, and Food Systems Seminar</td>
<td>2</td>
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</tbody>
</table>

Select a minimum of 8 credits from the following:

- NUTR 809  Nutritional Epidemiology: 4 credits
- NUTR 810  Advanced Diabetes Care: 2 credits
- NUTR 815  Advanced Sports Nutrition: 4 credits
- NUTR 820  Community Nutrition: 4 credits
- NUTR 830  From Seed to Sea: Examining Sustainable Food Systems: 4 credits
- NUTR 850  Nutritional Biochemistry: 4 credits
- NUTR 851  Nutritional Biochemistry of Micronutrients: 4 credits
- NUTR 855  Concepts and Controversies in Weight Management: 4 credits
- NUTR 860  Behavioral Nutrition and Counseling: 4 credits
- NUTR 927  Nutrition and Gut Microbes in Human Health: 4 credits

1. These courses provide students foundational and practical application related to science communication and experimental design and analysis, most students will complete the courses during their first year of studies.

2. To be taken at the earliest opportunity, typically in the initial fall semester of the graduate program.

3. All students are required to register and participate in this course (1 credit CR/Fail) for a minimum of 2 credits.

4. In consultation with their guidance committee, students are required to complete a minimum of 8 additional NUTR graduate credits.

## Competency Requirements

A thesis committee will be appointed early in the program and will consist of at least three members of the graduate faculty; one of these will be the primary mentor. Students will design a program of study in close consultation with their thesis committee, including their academic courses and scientific research project. The student’s committee may require certain undergraduate courses as part of the graduate program if additional competencies would be beneficial to the student. No more than 4 credits of NUTR 895 Investigations can apply toward the total credit count.

### Additional Requirements

All students in the Nutritional Sciences Graduate Programs are expected to:

- Present their research in ANFS 997 Agriculture, Nutrition, and Food Systems Seminar at least twice (exclusive of the thesis defense).
- Serve as a teaching assistant for at least one semester or have at least one significant teaching experience in nutrition.
- Defend their research proposal, both in written and oral form. Approval form must be on file with department.
- Write and defend an original thesis of publishable quality.

### 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 (if applicable);
- Develop annual goals.

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

## Accelerated Master’s

The accelerated path to a M.S. Nutritional Sciences requires a minimum of 34 graduate credits.

Qualified students who are admitted under the Accelerated Master’s program may complete up to 12 credits at the 800-level during their senior year, earning dual credit toward their B.S. and M.S. degrees.

During the fifth year (Sept-May), enrolled students will complete a minimum of 22 additional credits toward the program.
Nutritional Sciences (M.S.)

There are five core courses that include a year-long research experience (i.e. NUTR 960 Research Methods in Nutritional Science I and NUTR 961 Research Methods in Nutritional Science II) during the last year of the student’s program. Students will be required to earn a B- or better in graduate courses to earn credits toward their degree.

**Core Required Courses**

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<tr>
<td>NUTR 880</td>
<td>Critical Issues in Nutrition</td>
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**Student Learning Outcomes**

**Nutrition knowledge-related**

- Build knowledge and understanding in key content areas of nutritional sciences and public health nutrition issues

**Research design and analysis**

- Identify the strengths and weaknesses of study designs utilized in nutrition-related research
- Conduct nutrition-related data analyses
- Interpret the results and scientific literature to inform dietary recommendations, public policy, or chronic disease intervention

**Scientific method**

- Demonstrate the ability to design and defend an original, hypothesis-driven project to advance the field of nutritional sciences.

**Critical thinking**

- Integrate scientific evidence and critically evaluate research findings in specific fields related to nutritional sciences.

**Communication skills**

- Disseminate evidence-based information on nutritional sciences and public health
- Deliver nutrition research findings to multiple scientific audiences (i.e. research conference, academic journal).
- Incorporate critical feedback in their research and academic work

**Professionalism**

- Conduct research in an ethical manner
- Demonstrate collaboration and leadership skills
- Master concepts of equity, diversity, and inclusion in different settings (e.g., healthcare, education, community health)