**Description**

The Ph.D. in Nutritional Sciences trains students to gain advanced knowledge and develop research expertise in such areas as nutritional physiology and biochemistry, cardiovascular disease, epidemiology, obesity, diabetes, human nutrition, and food systems. It prepares students for future careers in technical consulting, education, and research in academic, industrial, and government institutions.

**Admission Requirements:** Students applying for the program will be expected to present recent scores (within five years) from the general test of the Graduate Record Examination (GRE) and possess a background in basic sciences appropriate for advanced study in the proposed area of specialization (for example, courses in biology, chemistry, organic chemistry, biochemistry, and physics). Although not required for candidacy in the Ph.D. program, an M.S. degree is suggested for most students.

**Requirements**

Students with appropriate academic training at the baccalaureate or master’s degree level will design a program of study in conjunction with a faculty guidance committee. The student will advance to candidacy after successful completion of all relevant graduate courses and passing a qualifying examination conducted by the guidance committee, which will contain oral and/or written components at the discretion of the committee members. The guidance committee for doctoral students will consist of a minimum of five members, three of whom must be from within the Agriculture, Nutrition, and Food Systems Program; at least one member must be from outside the program. After the student’s advancement to candidacy for the Ph.D. degree, a doctoral committee (which can be different from the guidance committee) will be appointed to supervise and approve the dissertation.

The dissertation must be based on original, hypothesis-driven research of publishable quality. A public presentation of the dissertation research findings will be followed by a final examination, which will be primarily an oral defense of the dissertation. The candidate will be required to serve as a teaching assistant for a minimum of two semesters or to teach a course for one semester. Skills in communicating scientific information will be fostered by presenting one seminar during each year of enrollment. This requirement could include the dissertation defense seminar.

### Core Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>1</td>
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</tbody>
</table>

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

2. 1 cr per semester, to be taken at least twice by M.S. students.

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**Student Learning Outcomes**

**Nutrition knowledge-related**

- Demonstrate 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
- Independently 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 independently 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