Modern nutrition is a multidisciplinary, integrative science, and the Interdepartmental Graduate Program in Nutritional Sciences (IGPNS) has been developed to meet this diversity in approach and objective. Thus, students can focus their training in one of three emphasis groups:

1. biochemical and molecular nutrition,
2. human nutrition, or
3. animal nutrition.

The degrees offered are the Master of Science and the Doctor of Philosophy in Nutritional Sciences.

It is the program's goal to provide graduate students interested in nutrition with an opportunity to obtain specialized training in a specific research area and also to obtain a general background in the science and practice of nutrition. The program is sufficiently flexible to allow students with a wide variety of undergraduate degrees to meet the background prerequisites. The program draws on the strengths of faculty in a number of the university's colleges and academic departments to enhance the instructional and research experience.

The training objectives of the IGPNS are to provide students with an understanding of basic nutritional principles as they apply to both humans and animals, to provide them with current knowledge in a specific area of emphasis, to make them aware of the integrative and multidisciplinary nature of nutrition research, and to direct them toward a successful career through the thesis and publications.

Biochemical and molecular nutrition. This emphasis group focuses on the application of biochemical and physiological approaches to the understanding of nutrient function and metabolism in systems ranging from the whole animal to the molecular level.

Human nutrition. This emphasis group takes a comprehensive view of human nutrition with emphasis on the maintenance and promotion of human health. It utilizes diverse research approaches to carry out studies on nutrient requirements, metabolism, and interactions. Research may involve physiological and biochemical studies, animal models and epidemiological, or educational or clinical interventions.

Animal nutrition. This emphasis group takes a comprehensive view of animal nutrition with a focus on expanding understanding of nutrient utilization. Research activities involve both the performance of domestic animals and general comparative nutrition across animal species. Studies may range from applied animal feeding trials to basic studies on nutrient metabolism or integrated whole-animal metabolism with an emphasis on quantification and regulation.

Thirty-three students from throughout the world are currently enrolled in the program. Twenty-four are doctoral candidates and nine are seeking master’s degrees.

The graduate faculty have well-developed, competitively funded research programs and have been recognized for their activities by receiving national awards. They are active in national and international nutrition activities, and serve on editorial boards, as society officers, and as participants in numerous workshops and on advisory committees.

Assistantships and fellowships are available to support students. Information about financial assistance may be obtained from the department office.

### REQUIREMENTS

#### MINIMUM DEGREE REQUIREMENTS AND SATISFACTORY PROGRESS

To make progress toward a graduate degree, students must meet the Graduate School Minimum Degree Requirements and Satisfactory Progress (http://guide.wisc.edu/graduate/#policiesandrequirements) in addition to the requirements of the program.

### DOCTORAL DEGREES

Ph.D. with available tracks in animal nutrition, biochemical and molecular, and human nutrition

#### MINIMUM GRADUATE DEGREE CREDIT REQUIREMENT

51 credits

#### MINIMUM GRADUATE RESIDENCE CREDIT REQUIREMENT

32 credits

#### MINIMUM GRADUATE COURSEWORK (50%) REQUIREMENT

At least 50% of credits applied toward the graduate degree credit requirement must be in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle).

#### PRIOR COURSEWORK REQUIREMENTS: GRADUATE WORK FROM OTHER INSTITUTIONS

With approval of the certification committee, students are allowed to count up to 19 credits of graduate coursework from other institutions. Coursework earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements.

#### PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNDERGRADUATE

With approval of the certification committee, students are allowed to count up to 7 credits from a UW–Madison undergraduate degree, numbered 400 and above, toward the Ph.D. degree, provided the course satisfies a requirement within the student’s core curriculum or IGPNS emphasis group. Coursework earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements.

#### PRIOR COURSEWORK REQUIREMENTS FROM: UW–MADISON UNIVERSITY SPECIAL

With program approval, students are allowed to count no more than 15 credits of coursework taken as a UW–Madison Special student, provided the course satisfies a requirement within the student’s core curriculum
or IGPNS emphasis group. Coursework earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements.

**CREDITS PER TERM ALLOWED**

Non-dissertators:

| Credits per term allowed | 12 credits: fall and spring semesters | 2 credits: per eight-week summer session |

Dissertators: 3 credits per semester

**PROGRAM-SPECIFIC COURSES REQUIRED**

<table>
<thead>
<tr>
<th>Biochemical and Molecular Track</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NUTR SCI/ BIOCHEM 619</td>
<td>Advanced Nutrition: Intermediary Metabolism of Macronutrients</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NUTR SCI/ POP HLTH 621</td>
<td>Introduction to Nutritional Epidemiology</td>
<td>1</td>
<td></td>
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<tr>
<td>NUTR SCI/ M&amp;ENVTOX 623</td>
<td>Advanced Nutrition: Minerals</td>
<td>1</td>
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<tr>
<td>NUTR SCI 625</td>
<td>Advanced Nutrition: Obesity and Diabetes</td>
<td>1</td>
<td></td>
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<tr>
<td>NUTR SCI/ AN SCI 626</td>
<td>Experimental Diet Design</td>
<td>1</td>
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<tr>
<td>NUTR SCI 627</td>
<td>Advanced Nutrition: Vitamins</td>
<td>1</td>
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<tr>
<td>NUTR SCI 600</td>
<td>Introductory Seminar in Nutrition</td>
<td>1</td>
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<tr>
<td>NUTR SCI 931</td>
<td>Seminar-Nutrition</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOCHEM/ NUTR SCI 901</td>
<td>Seminar-Nutrition and Metabolism (Advanced)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NUTR SCI 799</td>
<td>Practicum in Nutritional Sciences Teaching (or equivalent experience)</td>
<td>1-3</td>
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</table>

Select 3 credits in BIOCHEM

Select additional coursework in nutrition, BIOCHEM, or related areas

Select a quantitative methods course

<table>
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</tbody>
</table>

Select a lab or advanced-level quantitative methods course

Select a statistics course

**DOCTORAL MINOR/BREADTH REQUIREMENTS**

All doctoral students are required to complete either a distributed minor, or a minor within a specific department.

**OVERALL GRADUATE GPA REQUIREMENT**

3.00 GPA required.

**OTHER GRADE REQUIREMENTS**

The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.

**PROBATION POLICY**

The IGPNS requires a cumulative 3.0 GPA for all courses taken in the UW Graduate School. Grades in research (Nutri Sci 991) are not included in the calculation of the GPA. A student who does not maintain a 3.0 GPA can continue on probationary status for two semesters at the recommendation of the major professor. If, at that time, the student does not achieve a cumulative 3.0 GPA, they will be dropped from the program.

The Graduate School regularly reviews the record of any student who earned grades of BC, C, D, F, or Incomplete in a graduate course (300 or above), or grade of U in research credits. This review could result in academic probation with a hold on future enrollment or in being suspended from the Graduate School.

**ADVISOR**

Every graduate student is required to have an advisor. An advisor is a faculty member, or sometimes a committee, from the major department.
Nutritional Sciences, Ph.D.

responsible for providing advice regarding graduate studies. An advisor generally serves as the thesis advisor. In many cases, an advisor is assigned to incoming students. Students can be suspended from the Graduate School if they do not have an advisor.

To ensure that students are making satisfactory progress toward a degree, the Graduate School expects them to meet with their advisor on a regular basis.

A committee often accomplishes advising for the students in the early stages of their studies.

ASSESSMENT AND EXAMINATIONS

Students must take and pass two preliminary exams. Students must take the first exam prior to the end of the fifth semester and the second exam by the end of the sixth semesters; summer session does not count as a semester. Students may choose the order of the research exam and the general knowledge exam.

Students must defend a final thesis.

TIME CONSTRAINTS

Doctoral degree students who have been absent for ten or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

A candidate for a Doctoral degree who fails to take the final oral examination and deposit the dissertation within five years after passing the preliminary examination may be required to take another preliminary examination and to be admitted to candidacy a second time.

A student's program may appeal these time limits through a written request to the Graduate School Office of Admissions and Academic Services.

LANGUAGE REQUIREMENTS

No language requirements.

LEARNING OUTCOMES

KNOWLEDGE AND SKILLS

• Articulates research problems, potentials, and limits with respect to theory, knowledge, and practice in nutritional sciences. Specific knowledge areas of focus include intermediary metabolism, functions and metabolism of vitamins and minerals, nutrition-related diseases such as obesity and diabetes, and fundamental principles of epidemiology and nutrition policy.
• Formulates ideas, concepts, designs, and/or techniques beyond the current boundaries of knowledge in nutritional sciences.
• Creates original research and scholarship that makes a substantive contribution to nutritional sciences.
• Demonstrates breadth of knowledge of nutritional sciences.
• Advances contributions of the field of nutritional sciences to society.
• Communicates complex ideas in a clear and understandable manner through both written and oral presentations.

PROFESSIONAL CONDUCT

• Fosters and practices ethical and professional conduct.

ADMISSIONS

Candidates for graduate study in nutritional sciences should have a strong background in mathematics, chemistry, and biological and medical sciences or social sciences. Specific prerequisites for the graduate program include five to six semesters of chemistry, three semesters of biological sciences including a course in animal physiology, mathematics through trigonometry, and a course in calculus or statistics. Students who have not completed all the requirements may be admitted, but deficiencies should be made up during the first year of graduate study.

In general, all applicants must have a minimum grade point average of at least 3.0 (on a 4.0 scale). Graduate Record Exam (GRE) scores are required as well as three references and a personal statement. Acceptance requires approval by the Department of Nutritional Sciences and the Graduate School.

Our faculty and academic staff are dedicated to shaping the future of nutrition and health. We are committed to providing a supportive and stimulating environment where students can explore their passions and achieve their full potential.