# NUTRITION AND METABOLISM, MS

#### THE STUDENT EXPERIENCE

Modern nutrition is a multidisciplinary, integrative science, and the Nutrition and Metabolism graduate program has been developed to meet this diversity in approach and objective. 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.

## LEARN THROUGH YOUR RESEARCH

The training objectives of the Nutrition and Metabolism graduate program are to provide students with an understanding of basic nutritional principles as they apply to humans, animals, and molecular models, to provide them with current knowledge in each 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.

Throughout their graduate careers, Nutrition and Metabolism students partner with a faculty mentor for in-depth research and career guidance.

### BUILD COMMUNITY AND NETWORKS

The Nutrition and Metabolism graduate program offers opportunities to work with over 50 faculty members from 19 different departments at UW–Madison. The graduate faculty have well-developed, competitively-funded research programs and have been nationally recognized for their activities. 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.

Network within your field(s) by attending international and national conferences and scientific meetings with professional development funds provided to accepted students.

#### **ADMISSIONS**

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Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. *Applicants must meet* the minimum requirements (https://grad.wisc.edu/apply/requirements/) of the *Graduate School as well as the program(s)*. Once you have researched

the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply/).

| Requirements                             | Detail  |
|--|---|
| Fall Deadline                            | December 1*   |
| Spring Deadline                          | This program does not admit in the spring.  |
| Summer Deadline                          | The program does not admit in the summer.   |
| GRE (Graduate<br>Record<br>Examinations) | Not required.   |
| English Proficiency<br>Test              | Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: https://policy.wisc.edu/library/UW-1241 (https://policy.wisc.edu/library/UW-1241/). |
| Other Test(s) (e.g.,<br>GMAT, MCAT)      | n/a   |
| Letters of<br>Recommendation<br>Required | 3   |

\* Students are only directly admitted to the MS program if they have a mentor pre-arranged. Contact the program with questions.

#### PREPARATORY COURSEWORK

Candidates for graduate study in nutrition and metabolism should have a strong background in mathematics, chemistry, biological sciences, medical sciences, or social sciences.

Specific prerequisites for the graduate program include the following:

- · 2 semesters of general chemistry
- 2 semesters of biological sciences
- 1 semester of organic chemistry
- · Biochemistry with an organic chemistry prerequisite
- · 1 semester of statistics or calculus
- 1 semester of physiology

Students who have not completed all the requirements may be admitted, but deficiencies should be made up during the first year of graduate study.

All applicants must have a minimum grade point average of at least 3.0 (on a 4.0 scale), as well as three references, and a personal statement. Acceptance requires approval by the Department of Nutritional Sciences and the Graduate School.

Applicants interested in the PhD degree should apply directly to the program. A master's degree is not required for entry.

#### **FUNDING**

# FUNDING GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School.

Be sure to check with your program for individual policies and restrictions related to funding.

#### **PROGRAM RESOURCES**

Nutrition and Metabolism MS students receive an annual stipend in addition to tuition remission. The application for the Nutrition and Metabolism MS is also the application for funding. If incoming students are qualified for additional fellowships/funding, the graduate program coordinator will assist the accepted student with the application process.

The stipend appointment may take the form of traineeships, research assistantships, or fellowships and are guaranteed for all Nutrition and Metabolism candidates who make satisfactory academic progress.

#### **REQUIREMENTS**

## MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS MODE OF INSTRUCTION

| Face to Face | Evening/<br>Weekend | Online | Hybrid | Accelerated |
|--------------|---------------------|--------|--------|-------------|
| Yes          | No                  | No     | No     | No          |

#### **Mode of Instruction Definitions**

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face–to–face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

#### **CURRICULAR REQUIREMENTS**

#### Requirement Detail

Minimum 30 credits

Credit

Requirement

Minimum 16 credits

Residence

Credit Requirement

Minimum 15 credits must be graduate-level coursework. Refer to Graduate the Graduate School: Minimum Graduate Coursework Coursework (50%) Requirement policy: https://policy.wisc.edu/library/ UW-1244 (https://policy.wisc.edu/library/UW-1244/). Requirement Overall 3.00 GPA required. Refer to the Graduate School: Grade Point Average Graduate **GPA** (GPA) Requirement policy: https://policy.wisc.edu/library/ Requirement UW-1203 (https://policy.wisc.edu/library/UW-1203/). Other Grade n/a Requirements Assessments Students must complete either a research-based thesis or and literature-based report that passes scholarly review. Examinations

No language requirements.

#### REQUIRED COURSES

Language

Requirements

| Code  | Title   | Credits |  |  |
|---|---|---------|--|--|
| Core Courses  |   |         |  |  |
| NUTR SCI 600  | Introductory Seminar in Nutrition   | 1       |  |  |
| NUTR SCI 618  | Research Approaches in the Era of<br>Precision Nutrition  | 3       |  |  |
| NUTR SCI/<br>BIOCHEM 619  | Advanced Nutrition: Intermediary<br>Metabolism of Macronutrients  | 3       |  |  |
| NUTR SCI 931  | Seminar-Nutrition   | 1       |  |  |
| NUTR SCI 745  | Grant Writing for Nutritional<br>Sciences Research <sup>1</sup>   | 2       |  |  |
| NUTR SCI 799  | Practicum in Nutritional Sciences<br>Teaching   | 1-3     |  |  |
| Research  |   |         |  |  |
| Typically, students complete a total of 12 credits of NUTR SCI 991 to meet the 30-credit minimum. |   |         |  |  |
| NUTR SCI 991  | Research Nutrition <sup>2</sup>   | 1-12    |  |  |
| Electives   |   |         |  |  |
| 300 and above with include additional st  | redits of elective courses numbered<br>the Grad 50% attribute, which may<br>attistics, biochemistry, and advanced<br>etermined by the thesis committee. | 6       |  |  |
| <b>Total Credits</b>  |   | 30      |  |  |

- With approval of their advisory committee, students may complete an alternative science communication course to meet this requirement.
- After enrolling in other coursework, students enroll in enough credits of NUTR SCI 991 Research Nutrition to reach a total of 12 credits per fall and spring semesters.

#### **POLICIES**

#### GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

### MAJOR-SPECIFIC POLICIES PRIOR COURSEWORK

#### **Graduate Credits Earned at Other Institutions**

With approval of the certification committee, students are allowed to transfer up to 14 credits of graduate coursework from other institutions. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

### Undergraduate Credits Earned at Other Institutions or UW-Madison

Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

#### Credits Earned as a Professional Student at UW-Madison (Law, Medicine, Pharmacy, and Veterinary careers)

Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

#### Credits Earned as a University Special student at UW-Madison

Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

#### **PROBATION**

The program requires a cumulative 3.0 GPA for all courses taken in the UW Graduate School. Grades in research (NUTR 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.

Refer to the Graduate School: Probation (https://policy.wisc.edu/library/ UW-1217/) policy.

#### ADVISOR / COMMITTEE

Refer to the Graduate School: Advisor (https://policy.wisc.edu/library/UW-1232/) and Graduate School: Committees (Doctoral/Master's/MFA) (https://policy.wisc.edu/library/UW-1201/) policies.

#### **CREDITS PER TERM ALLOWED**

12 credits: Fall and Spring semesters 2 credits: Per eight-week summer session

#### **TIME LIMITS**

Refer to the Graduate School: Time Limits (https://policy.wisc.edu/library/UW-1221/) policy.

#### **GRIEVANCES AND APPEALS**

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https:// hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https://facstaff.provost.wisc.edu/)

- Dean of Students Office (https://doso.students.wisc.edu/) (for all students to seek grievance assistance and support)
- Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, postdoctoral students, faculty and staff)
- Employee Disability Resource Office (https:// employeedisabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office of Student Conduct and Community Standards (https://conduct.students.wisc.edu/) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

### College of Agricultural and Life Sciences: Grievance Policy

In the College of Agricultural and Life Sciences (CALS), any student who feels unfairly treated by a member of the CALS faculty or staff has the right to complain about the treatment and to receive a prompt hearing. Some complaints may arise from misunderstandings or communication breakdowns and be easily resolved; others may require formal action. Complaints may concern any matter of perceived unfairness.

To ensure a prompt and fair hearing of any complaint, and to protect the rights of both the person complaining and the person at whom the complaint is directed, the following procedures are used in the College of Agricultural and Life Sciences. Any student, undergraduate or graduate, may use these procedures, except employees whose complaints are covered under other campus policies.

- The student should first talk with the person at whom the complaint is directed. Most issues can be settled at this level. Others may be resolved by established departmental procedures.
- If the student is unsatisfied, and the complaint involves any unit outside CALS, the student should seek the advice of the dean or director of that unit to determine how to proceed.
  - a. If the complaint involves an academic department in CALS the student should proceed in accordance with item 3 below.
  - b. If the grievance involves a unit in CALS that is not an academic department, the student should proceed in accordance with item 4 below.
- 3. The student should contact the department's grievance advisor within 120 calendar days of the alleged unfair treatment. The departmental administrator can provide this person's name. The grievance advisor will attempt to resolve the problem informally within 10 working days of receiving the complaint, in discussions with the student and the person at whom the complaint is directed.
  - a. If informal mediation fails, the student can submit the grievance in writing to the grievance advisor within 10 working days of the date the student is informed of the failure of the mediation attempt by

- the grievance advisor. The grievance advisor will provide a copy to the person at whom the grievance is directed.
- b. The grievance advisor will refer the complaint to a department committee that will obtain a written response from the person at whom the complaint is directed, providing a copy to the student. Either party may request a hearing before the committee. The grievance advisor will provide both parties a written decision within 20 working days from the date of receipt of the written complaint.
- c. If the grievance involves the department chairperson, the grievance advisor or a member of the grievance committee, these persons may not participate in the review.
- d. If not satisfied with departmental action, either party has 10 working days from the date of notification of the departmental committee action to file a written appeal to the CALS Equity and Diversity Committee. A subcommittee of this committee will make a preliminary judgement as to whether the case merits further investigation and review. If the subcommittee unanimously determines that the case does not merit further investigation and review, its decision is final. If one or more members of the subcommittee determine that the case does merit further investigation and review, the subcommittee will investigate and seek to resolve the dispute through mediation. If this mediation attempt fails, the subcommittee will bring the case to the full committee. The committee may seek additional information from the parties or hold a hearing. The committee will present a written recommendation to the dean who will provide a final decision within 20 working days of receipt of the committee recommendation.
- 4. If the alleged unfair treatment occurs in a CALS unit that is not an academic department, the student should, within 120 calendar days of the alleged incident, take his/her grievance directly to the Associate Dean of Academic Affairs. The dean will attempt to resolve the problem informally within 10 working days of receiving the complaint. If this mediation attempt does not succeed the student may file a written complaint with the dean who will refer it to the CALS Equity and Diversity Committee. The committee will seek a written response from the person at whom the complaint is directed, subsequently following other steps delineated in item 3d above.

#### **OTHER**

n/a

#### PROFESSIONAL DEVELOPMENT

### PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

#### LEARNING OUTCOMES

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 Articulates, critiques, and elaborates the theories, research methods, and approaches to inquiry in nutrition and metabolism. 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.
- Identifies sources and assembles evidence pertaining to questions or challenges in nutrition and metabolism.
- Selects and/or utilizes the most appropriate methodologies and practices.
- 4. Evaluates or synthesizes information pertaining to questions or challenges in nutrition and metabolism.
- Communicates clearly in ways appropriate to the field of nutrition and metabolism. This includes the composition of primary research and review articles. Demonstrates competent communication in the form of oral and poster presentations.
- 6. Recognizes and applies principles of ethical and professional conduct.

#### **PEOPLE**

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See the program website (https://nutrisci.wisc.edu/people/nm-trainers-by-research-area/) for a list of faculty trainers.