



Twin Cities Campus

Nutrition M.S.

Food Science & Nutrition

College of Food, Agricultural and Natural Resource Sciences

Link to a [list of faculty](#) for this program.

Contact Information:

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Website: <http://fscn.cfans.umn.edu/graduate-programs/nutrition>

- Program Type: Master's
- Requirements for this program are current for Fall 2020
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Nutrition is the study of how nutrients, both essential and nonessential, affect health and all life processes. Consequently, nutrition is an extremely broad field that encompasses physiology, biochemistry, education, public health, and public policy. The nutrition graduate program is interdisciplinary. Advisors and financial support may come from any of the departments or schools in which nutrition graduate faculty reside, including the Department of Food Science and Nutrition (College of Food, Agricultural and Natural Resource Sciences); Division of Epidemiology (School of Public Health); Departments of Medicine, Surgery, Psychiatry, Lab Medicine and Pathology, and Family Medicine and Community Health (Medical School); Department of Kinesiology and Leisure Studies (College of Education and Human Development); Department of Biochemistry and Molecular Biology (University of Minnesota Duluth); University of Minnesota Extension; Hormel Institute (Austin, MN); and V.A. Medical Center and Park Nicollet Institute (Minneapolis, MN).

Three sub-specialty areas are offered in the program: human nutrition, nutritional biochemistry, and public health nutrition. Thesis work can be conducted locally or internationally in the laboratory, clinic, or field.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants to the program need a bachelor's degree in any field or its international equivalent.

Other requirements to be completed before admission:

A strong foundation in the biological and physical sciences is required. This background includes college mathematics, the equivalent of one semester of general chemistry, organic chemistry, general biology, biochemistry, physiology, and statistics. If there is evidence that the applicant has a good background in the sciences, some of the prerequisites can be met after admission.

The following nutrition courses, or equivalent, are required but may be completed after the student's admission to the program: Principles of Nutrition (FSCN 1112), Life Cycle Nutrition (FSCN 3612), and Human Nutrition (FSCN 4612).

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS



- Total Score: 6.5
- MELAB
- Final score: 80

Key to [test abbreviations](#) (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 24 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: The Plan B project is a combined total of approximately 120 hours (the equivalent of three full-time weeks) of work. The graduate faculty, including the student's advisor and director of Graduate Studies, specify both the nature and extent of the course and project work necessary to satisfy this requirement.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

All students are expected to obtain teaching experience, subject to the policies of the advisor's department or division.

Required Coursework

Orientation Course (1 credit)

Take the following course:

[NUTR 8621](#) - Presentation Skills (1.0 cr)

Core Courses (11 credits)

Take the following courses:

[NUTR 5625](#) - Nutritional Biochemistry (3.0 cr)

[NUTR 5626](#) - Nutritional Physiology (3.0 cr)

[NUTR 5622](#) - Vitamin and Mineral Biochemistry (3.0 cr)

[NUTR 5624](#) - Nutrition and Genetics (2.0 cr)

Advanced Topics Course (2 credits)

Take the following course after completing 2 semesters in the program:

[NUTR 8620](#) - Advances in Nutrition (2.0 cr)

Outside Coursework (6 credits)

Statistics Course

Select 1 of the following courses in consultation with the advisor:

[PUBH 6450](#) - Biostatistics I (4.0 cr)

[PUBH 6451](#) - Biostatistics II (4.0 cr)

[PUBH 6414](#) - Biostatistical Literacy (3.0 cr)

[STAT 5021](#) - Statistical Analysis (4.0 cr)

Additional Outside Coursework

Select coursework from the following, in consultation with the advisor, to meet the 6-credit minimum.

[ANSC 5091](#) - Research Proposals: From Ideas to Strategic Plans (3.0 cr)

[APEC 5751](#) (~~Inactive~~) (3.0 cr)

[APEC 5831](#) - Food and Agribusiness Marketplace (2.0 - 3.0 cr)

[BIOC 5361](#) - Microbial Genomics and Bioinformatics (3.0 cr)

[BIOC 8006](#) - Biochemistry: Metabolism and Control (2.0 cr)

[BIOC 8008](#) - Molecular Biology of the Transcriptome (2.0 cr)

[GCD 8008](#) - Mammalian Gene Transfer and Genome Engineering (2.0 cr)

[KIN 5141](#) - Nutrition and Exercise for Health Promotion and Disease Prevention (3.0 cr)

[KIN 5142](#) - Applied Nutrition for Sport Performance and Optimal Health (3.0 cr)

[NR 5021](#) - Statistics for Agricultural and Natural Resource Professionals (3.0 cr)

[NURS 8173](#) - Principles and Methods of Implementing Research (3.0 cr)

[PHSL 5115](#) - Clinical Physiology I (3.0 cr)

[PHSL 5116](#) - Clinical Physiology II (3.0 cr)



PHSL 5197 - Stress Physiology (1.0 - 3.0 cr)
PUBH 6101 ~~{Inactive}~~(2.0 cr)
PUBH 6113 ~~{Inactive}~~(3.0 cr)
PUBH 6131 - Working in Global Health (2.0 cr)
PUBH 6134 - Sustainable Development and Global Public Health (2.0 cr)
PUBH 6154 - Climate Change and Global Health Modeling (3.0 cr)
PUBH 6320 - Fundamentals of Epidemiology (3.0 cr)
PUBH 6325 - Data Processing with PC-SAS (1.0 cr)
PUBH 6341 - Epidemiologic Methods I (3.0 cr)
PUBH 6348 - Writing Research Grants (2.0 cr)
PUBH 6803 - Conducting a Systematic Literature Review (3.0 cr)
PUBH 6806 - Principles of Public Health Research (2.0 cr)
PUBH 6901 - Foundations of Public Health Nutrition Leadership (2.0 cr)
PUBH 6904 - Nutrition and Aging (2.0 cr)
PUBH 6906 - Global Nutrition (2.0 cr)
PUBH 6933 - Public Health Nutrition for Adults (2.0 cr)
VMED 5440 - Using Risk Analysis Tools: Estimating Food Safety Risks on the Farm to Table Continuum (2.0 cr)
VMED 5915 - Essential Statistics for Life Sciences (3.0 cr)

Plan Options

Plan A

Thesis Credits

Take at least 10 master's thesis credits.

NUTR 8777 - Thesis Credits: Master's (1.0 - 18.0 cr)

-OR-

Plan B

Additional Coursework (10 credits)

Select 10 credits from the following, in consultation with the advisor. Other coursework may be applied to this requirements with advisor approval.

NUTR 8695 ~~{Inactive}~~(1.0 - 10.0 cr)

NUTR 5xxx

NUTR 8xxx

Program Sub-plans

A sub-plan is not required for this program.

Students may not complete the program with more than one sub-plan.

Integrated BS/MS-Nutrition

This sub-plan is limited to students completing the program under Plan B.

The Department of Food Science and Nutrition offers an integrated bachelor of science (BS) and master of science (MS) in nutrition. The integrated BS/MS program offers students the opportunity to earn both degrees in five years by working toward a master's degree while simultaneously working toward their undergraduate degree.

Nutrition undergraduate students in the DPD or nutrition studies sub-plans are welcome to apply to this program during their 3rd year of undergraduate study. During the 4th year, students take undergraduate and graduate courses concurrently and are advised by an undergraduate and graduate program advisor.

Students in this program will complete the 120 undergraduate credits required for a BS degree in nutrition by the end of the 4th year and must be awarded an undergraduate degree at the 4th year mark. During the 4th and 5th years, students will complete 30 graduate credits and a Plan B research project with a final oral defense as required for the nutrition MS degree. Students who satisfy the Didactic Program in Dietetics (DPD) verification requirements can begin the Emily Program Dietetic Internship in August following their 5th year. Students cannot double-count credits to meet credit requirements for both the undergraduate and graduate degrees.