

NUTRITIONAL SCIENCE MS

More Information

Advising Requirement

Advising is mandatory for this program. Consult your department advisor or program coordinator for information.

The Master of Science in Nutritional Science provides educational experiences for students to increase their expertise in the science of nutrition and nutrition education. Through two available options, students gain confidence in conducting and analyzing research and are prepared to become competent, evidence-based nutrition professionals and practitioners.

The option in general nutritional science. This option is designed for students who wish to study more basic than applied science and may not go on to become registered dietitian nutritionists. Most students who complete this option apply to PhD programs or find jobs in research, teaching, or industry.

The option in nutrition education. This option is designed for students who wish to work with individuals and groups in community or private agencies that address health behavior as well as to promote optimal nutritional status. Most students who complete this option become registered dietitian nutritionists and find jobs in health care, state or federally funded programs, or education.

The MS in nutritional science provides an opportunity for students to

- Specialize in nutrition, food science, clinical nutrition, or community nutrition.
- Complete a master's degree and concurrently qualify for membership in the Academy of Nutrition and Dietetics.
- Increase competence in food and nutrition subject matter in preparation for college teaching, research, graduate study beyond the master's degree, and administrative positions in public and private agencies.

Requirements for the MS in Nutritional Science

Completion of all requirements as established by the program graduate committee, the graduate advisory committee, and Graduate Studies, to include:

1. Completion of 30-32 units of approved 400/500/600-level course work as follows:
 - a. 21 core units plus the units required for the selected option.
 - b. At least 18 of the units required for the degree must be in 600-level courses.
 - c. At the discretion of the academic program, a maximum of 30 percent of the units counted toward the degree requirements may be special session credit earned in non-matriculated status combined with all transfer coursework. This applies to special session credit earned through Open University, or in courses offered for academic credit through Regional and Continuing Education. Correspondence courses and UC Extension coursework are not acceptable for transfer.

- d. Not more than a total of 10 units of Independent Study (697), Professional Paper (697P); not more than 3 units of Professional Paper (697P).
2. Completion and final approval of a professional paper as specified by the graduate advisory committee.
3. Completion of a comprehensive final oral examination in the field of study.
4. Approval by the graduate advisory committee and the Graduate Council on behalf of the faculty of the University.

Culminating Activity

1. Professional Paper. The candidate shall submit an acceptable professional paper based on original research developed by the student and agreed to by the student's graduate advisory committee.
 - a. Professional paper proposal: A proposal of the professional paper must be submitted and approved by the graduate advisory committee before the student begins the research. The proposal includes a literature review, a statement of the problem and purpose or hypothesis of the research, research design, and methods to be used. The proposal is a formal document that must have appropriate attention given to matters of format, documentation, and quality of writing.
 - b. Registration in NFSC 697P.
 - c. Approval of professional paper: Members of the graduate advisory committee shall approve the professional paper.
 - d. Oral defense: the candidate's graduate advisory committee shall conduct an oral defense of the professional paper. The oral defense is generally limited to matters within the scope of the paper.

The following courses, or their approved transfer equivalents, are required of all candidates for this master's.

Course	Title	Units
Core Requirements		
NFSC 600	Research Methods in Nutritional Sciences	4
NFSC 601	Nutritional Epidemiology	2
NFSC 643	Advanced Topics in Macro and Micronutrients	4
NFSC 644	Nutritional Genomics	2
NFSC 663	Public Health Nutrition	3
NFSC 671	Advanced Clinical Nutrition	3
NFSC 697P	Professional Paper	3
Option		
Select one of the following options:		9-11
General Nutritional Science (p. 1)		
Nutrition Education (p. 2)		
Total Units		30-32

The Option in General Nutritional Science

Course	Title	Units
NFSC 691	Application in Nutrition Research	1
NFSC 697	Independent Study	1
Select seven to eight units from the following:		7-8
BIOL 409	Molecular Biology	
BIOL 411	Cell Biology	
BIOL 416	Vertebrate Physiology	
BIOL 426	Developmental Biology	

BIOL 466	Immunology
CHEM 451	Biochemistry I
CHEM 452	Biochemistry II
CHEM 453L	Biochemistry Laboratory
MATH 615	Statistical Methods for Graduate Research

Total Units **9-10**

The Option in Nutrition Education

Course	Title	Units
NFSC 560	Principles of Motivational Interviewing in Nutrition Counseling	3
NFSC 691	Application in Nutrition Research	1
NFSC 697	Independent Study	1
Select four to six units from the following:		4-6
MATH 615	Statistical Methods for Graduate Research	
NFSC 530	Nutrition Program Management and Administration	
NFSC 664	Nutrition Communication and Leadership	
NFSC 667	International Issues in Nutrition	
NFSC 689	Graduate Internship	

Total Units **9-11**

Graduate Grading Requirements

All courses in the major (with the exceptions of Independent Study - 697, Comprehensive Examination - 696, Master's Project - 699P, and Master's Thesis - 699T) must be taken for a letter grade, except those courses specified by the department as ABC/No Credit (400/500-level courses), AB/No Credit (600-level courses), or Credit/No Credit grading only. A maximum of 10 units combined of ABC/No Credit, AB/No Credit, and Credit/No Credit grades may be used on the approved program (including 697, 696, 699P, 699T, and courses outside the major). While grading standards are determined by individual programs and instructors, it is also the policy of the University that unsatisfactory grades may be given when work fails to reflect achievement of the high standards, including high writing standards, expected of students pursuing graduate study.

Students must maintain a minimum 3.0 grade point average in each of the following three categories: all course work taken at any accredited institution subsequent to admission to the master's program, all course work taken at California State University, Chico subsequent to admission to the program, and all courses on the approved master's degree program.

Dietetic Internship

A postbaccalaureate Dietetic Internship (DI) is available for students who wish to become eligible to sit for the registration examination to become Registered Dietitian Nutritionists (RDNs). The DI program is accredited by the Commission on Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND).

The DI program follows a pre-select process. It does not participate in the Dietetic Internship Centralized Application Services (DICAS) match process. Chico State graduate students are given priority. Chico State undergraduate students who complete the option in general dietetics may apply if there are any remaining slots available. The DI is a full-time non-degree program consisting of 1200 hours of supervised practice with an emphasis in nutrition education and consists of

rotations in medical nutrition therapy, foodservice administration, and community nutrition.

Continuous enrollment is required. At the discretion of the academic program, a maximum of 30 percent of the units counted toward the degree requirements may be special session credit earned in non-matriculated status combined with all transfer coursework. This applies to special session credit earned through Open University, or in courses offered for academic credit through Regional and Continuing Education.

Graduate Time Limit

All requirements for the degree are to be completed within five years of the end of the semester of enrollment in the oldest course applied toward the degree. See Master's Degree Requirements (<https://catalog.csuchico.edu/graduate-requirements/masters-degree-requirements/>) for complete details on general degree requirements.

Graduate Requirement in Writing Proficiency

All students must demonstrate competency in writing skills as a requirement for graduation. Nutritional science majors will demonstrate their writing competence through successful completion of a midterm and final exam where students critically evaluate the scientific literature in NFSC 663.

Prerequisites for Admission to Conditionally Classified Status

1. Satisfactory grade point average as specified in Graduate and Postbaccalaureate Admission Requirements (<https://catalog.csuchico.edu/graduate-requirements/graduate-postbaccalaureate-admission-requirements/>).
2. Approval by the department and Graduate Studies.
3. An acceptable baccalaureate from an accredited institution, or an equivalent approved by Graduate Studies, which includes a minimum of 24 upper-division units among the subject areas of biochemistry, chemistry, nutrition and food science, mathematics, microbiology, physiology, and statistics. Computer literacy is also required. Students with deficiencies in undergraduate preparation may be required to take prerequisite course work at the discretion of the Graduate Coordinator after consultation with the student and faculty in the subject matter area(s) considered deficient. In addition, prerequisites for graduate-level courses must have been completed within the five years prior to taking the graduate courses. Outdated prerequisites must be validated either by examination or by registration (credit will not be earned for validating this course work).
4. Approval by the Nutrition and Food Science Graduate Coordinator.

Prerequisites for Admission to Classified Status

In addition to any requirements listed above:

1. Development and submission of an approved program plan in consultation with the Graduate Advisor and a faculty member of the student's choice.
2. Completion of 12 departmentally specified units of letter-graded 400/500/600-level course work (of which 9 units must be in residence)

and part of the approved program) with a minimum grade point average of 3.0.

Advancement to Candidacy

In addition to any requirements listed above:

Classified graduate standing and completion at the University of at least 15 units of approved coursework.