

# Master of Science in Nutrition Science

(Program Code: NTSC)

The MS in Nutrition Science prepares students for careers in nutrition and related fields by developing their knowledge and skills in nutrition science, cultural competencies, and applied research methods. As part of the program, students will complete original or applied research, and write and present a thesis or a project. Only students jointly enrolled in the Individualized Supervised-Practice Pathway (ISPP) and the MS program have the option to complete a project that includes supervised-practice experience rather than a thesis. This project-based option requires students to complete the Accreditation Council for Education of Nutrition and Dietetics (ACEND) requirement of 1,200 hours of supervised-practice experience, complete an applied research project in one of the rotation sites, and present their findings.

1. Meet all university admissions requirements.
2. A minimum grade point average of 3.0 ("B") in the last 60 semester units of undergraduate coursework and in all post-graduate coursework.
3. Minimum prerequisites for the Master of Science in Nutrition Science include completion of the following college-level courses with a grade of "C" or better: General Chemistry series with lab (CHEM 2050 & 2050L), Organic and biochemistry series with lab (CHEM 2060 & 2060L), Nutritional Biochemistry (e.g., HSCI 4661), Anatomy & Physiology with lab (BIOL 2230 & 2240), Statistics (MATH 1201 or HSCI 3205), Fundamentals of Human Nutrition (HSCI 3601). Exposure to life cycle nutrition as part of another course or as a devoted course is highly recommended (HSCI 3602). Most students with a Bachelor of Science in Nutrition degree will meet the prerequisite requirements.
4. A copy of most recent resume or *curriculum vitae*.
5. Three letters of recommendations that highlight the applicant's (1) academic ability and potential to succeed in the graduate program and (2) professional experiences that make the candidate ideal for nutrition science.
6. A statement of purpose, double-spaced and no more than 1,000 words, detailing: (1) practical experience(s) in nutrition science and how it relates to the program (this is weighted most), (2) academic experience(s) in nutrition or related field, (3) immediate and long-term professional goals and how that relates to the program, (4) reasons for being interested in the Nutrition Science M.S. program at CSUSB, and (5) key skills the applicant can bring to the program.
7. Writing sample based on a nutrition topic of interest to the applicant, typed, approximately 1,000 words, double-spaced, with appropriate references (not counted in the word limit). The writing sample should highlight the applicant's basic understanding of human nutrition science and relevant concepts to solve health issues.

**Note** that students who apply for the dual MS and ISPP will require a DPD verification statement for this track. This will be part of the ISPP admissions review process, which is complementary but independent from the MS admissions process.

1. Completion of 18 semester units towards the MSNS including the core courses: HSCI 6601, HSCI 6602, HSCI 6603 and HSCI 6653, with a

minimum grade point average of 3.0 ("B") and a B (3.0) or higher in all required coursework.

2. Thesis or project primary advisor, topic and committee have been approved by the MSNS program director.
3. Submitting a formal program of study of graduate coursework prepared in consultation with the MSNS program director and receiving recommendation for candidacy.
  1. Advancement to candidacy for the degree and approval of the specific program of study.
  2. A GPA of 3.0 (grade of B) or better must be achieved in all courses taken to satisfy the program course requirements.
  3. Completion of 32 semester units of approved graduate-level coursework included in the formal program.
  4. The satisfactory completion of a thesis or project, including an exit seminar, is required prior to completion of the program.

HSCI 6601	Macronutrient Biochemistry	3
HSCI 6602	Micronutrient Biochemistry	3
HSCI 6603	Research Methods and Biostatistics in Nutrition Science	3
HSCI 6653	Nutrition Assessment	3
HSCI 6973	Graduate Thesis (must be taken twice)	6
or HSCI 6963	Graduate Project in Nutrition Science	
HSCI 6690	Nutrition Graduate Seminar (must be taken twice)	2
Electives in Area of Interest - take 12 units from options below		12
HSCI 6651	Complementary and Alternative Therapy	
HSCI 6652	Nutrition for Sports Performance	
HSCI 6654	Advanced Topics in Nutrition Across the Life Span	
HSCI 6656	Advanced Public Health Nutrition	
HSCI 6657	Management of Nutrition and Dietetic Services	
HSCI 6658	Advanced Topics in Medical Nutrition Therapy	
HSCI 6659	Topics in Global Nutrition	
HSCI 6660	Nutrition in Health & Disease	
HSCI 6220	Advanced Topics in Epidemiology	
HSCI 6280	Grant Writing for Health Sciences	
HSCI 6240	Advanced Study in Health Promotion	
HSCI 6250	Advanced Topics in Public Health Policy and Administration	
HSCI 6260	Health Education Program Planning and Evaluation	
HSCI 6300	Global Health	
HSCI 6310	Health Education Practice	
HSCI 6340	Information Literacy in Public Health	
HSCI 6360	Qualitative Methods in Public Health	
HSCI 6370	Survey Design in Public Health	
HSCI 6380	Maternal Child Health	
HSCI 6400	Health Science Data Science	

**Total Units**

**32**

## Thesis Option

The thesis will be based on supervised original research conducted by the student with close supervision from the student's major professor. The thesis concept (i.e., the proposed research prior to starting the work) must first be approved by the student's thesis committee, and the final thesis must be reviewed and approved by the students' thesis committee before submitting to Graduate Studies.

The following is an outline of the development and completion of the thesis.

1. **Thesis advisor and committee selection** - Within the first semester of the program, the student meets with faculty to learn about their research and finds a faculty member they would like to work with as a major professor. With the major professor, the student selects two additional faculty as the thesis committee (major professor plus two other faculty).
2. **Thesis proposal** - By the end of the first year, the student should complete a proposal for the thesis work, which must be approved by the student's thesis committee before the student can start the research. This proposal should include an in-depth literature review of the research topic, a problem statement, the hypothesis of the research, the research design, methods that will be used, and APA-formatted references.
3. **Register for HSCI 6973 - Thesis in order to conduct the thesis research and write the thesis** - In the second year of the program the student will need to register for a total of 6 units of HSCI 6973. During this year, the student will carry out the thesis research and write the thesis. The summer between the first and second year should be used to work on conducting the research and Fall and Spring semesters of the second year should be focused on writing the thesis.
4. **Approval of written thesis** - The thesis committee must approve a final version of the thesis that will then be submitted to graduate studies.
5. **Exit seminar** - Upon completion of the approved thesis, the student should schedule an exit seminar during a time that the thesis committee can attend.

## Project Option

The project will be based on the students'/interns' experience while completing the ACEND required hours, typically 1,200 hours, of supervised-practice experience to complete their ISPP Program training, which can be completed in 11 months. The interns will work closely with the ISPP Program Coordinator, preceptors, HSCI faculty, and Didactic Program in Dietetics (DPD) Director to complete the supervised-practice hours and competencies requirements including an applied research project to be conducted during a supervised-practice rotation. The applied research project proposal must be submitted and approved by the ISPP Program Coordinator prior to starting the project. The research project should focus on a question or problem relevant to applied nutrition or dietetic practice. The proposal and project should include a systemic approach and application of research methodology. After completion of HSCI 6603 in the first year, interns should have some idea of a research topic and method for data collection.

ISPP interns must register for HSCI 6963 in Fall and Spring semesters of their second year. Their rotation hours, sites, and preceptors must be approved by the ISPP Program Coordinator. The final portfolio, reflective

statement, and a research report must be submitted to the ISPP Program Coordinator prior to conferral of the degree.

Exit Seminar: The ISPP interns will present their supervised-practice experiences and research findings to their peers, preceptors, ISPP Program Coordinator, DPD Director, and program faculty.