NUTRITION AND FOOD SCIENCES BS

The Bachelor of Science in Nutrition and Food Sciences prepares students to apply their knowledge and skills for careers that require a Registered Dietitian Nutritionist (RDN) credential, other nutrition-related careers, and careers in nutrition management.

The option in food and nutrition communication. Food impacts all of our lives in many ways, and students in this program explore the role of food in our lives, with a focus on nutrition and food to promote healthy living. Graduates develop skills in working in communication, such as public health and promotion, outreach and education, community nutrition, sports nutrition, and cultivating healthy living throughout the lifecycle. Majors can pursue specific areas of interest within the broad scope of food and nutrition. This option also serves students pursuing health care careers, including nursing and physician assistants.

The option in food and nutrition management. Students are prepared for exciting careers in nutrition and foodservice management in both commercial and health care settings. Graduates acquire the skills and knowledge for management of nutrition and foodservice operations, financial management, food safety and sanitation, meal planning for regular diets and various disease conditions, and marketing. This option prepares students to serve culturally diverse clientele and work with culturally diverse employees and engages students in hands-on foodservice-related experiences. Employment opportunities include but are not limited to certified dietary manager, school nutrition specialist, child nutrition director, foodservice director in a health care setting, quality assurance/food safety inspector, health inspector, food and beverage supervisor, and foodservice consultant.

The option in general dietetics. This option provides a broad educational background to develop competent and productive students in preparation for a dietetic internship (DI) leading to eligibility for the Commission on Dietetic Registration (CDR) credentialing exam to become a registered dietitian nutritionist (RDN). Students are prepared to serve a culturally diverse community by engaging in pre-professional nutrition-related activities that serve Northern California while sustainably using resources. Employment opportunities include but are not limited to hospitals or other health care facilities, sports nutrition or corporate wellness, food and nutrition-related business and industries, private practice, and community and public health settings.

Advising Requirement

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

E-advising Tools

Use the interactive e-advising tools designed to help students graduate within four years. These tools can be accessed through the Student Center in the Portal (https://portal.csuchico.edu).

Grading Requirement

All courses taken to fulfill program course requirements must be taken for a letter grade except those courses specified by the department as credit/no credit grading only.

Course Requirements for the Major: 67-75 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Courses in this program may complete more than one graduation requirement.

A maximum of 15 units of externship courses may be applied to a bachelor's degree at California State University, Chico.

Course	Title	Units
Major Core		
BIOL 104	Human Physiology	4
BIOL 211	Allied Health Microbiology	4
CHEM 107	General Chemistry for Applied Sciences	4
CHEM 108	Organic Chemistry for Applied Sciences	4
MATH 105	Introduction to Statistics	3
NFSC 120	Introduction to Food Science	3
NFSC 122	Food Safety and Sanitation	2
NFSC 155	Introduction to Nutrition and Food Sciences	1
NFSC 230	Introduction to Foodservice Administration	3
NFSC 320	Science of Food	3
NFSC 340	Human Nutrition	3
NFSC 360	Nutrition Throughout the Life Cycle	3
NFSC 429W	Cultural Food (W)	3
Major Option		
Select one of the	following options:	27-35
Food and Nutrition Communication (p. 1)		
Food and Nutr	ition Management (p. 2)	
General Dietet	ics (p. 2)	
Total Units		67-75

Major Option Course Requirements

Students must select at least one of the following options for completion of the major course requirements.

The Option in Food and Nutrition Communication: 28-29 units

Students must complete a GE Oral Communication (Area 1C) (https://catalog.csuchico.edu/colleges-departments/undergraduate-education-academic-success/general-education/#1C) course before enrolling in the following Nutrition and Food Sciences (NFSC) required courses.

Course	Title	Units
Foundation		
NFSC 303	Nutrition and Physical Fitness	3
NFSC 318	Nutrition and Disease	3
NFSC 345W	Diet Supplements and Functional Foods (W)	3
NFSC 365	Nutrition Counseling and Education	3
NFSC 390	Research Methods in Nutrition and Food Science	s 2
NFSC 455	Futures in Nutrition and Food Science	1
NFSC 465	Community Nutrition	3
NFSC 489	Externship ¹	1
or NFSC 489C	Center for Healthy Communities Externship	
Select one of the	following:	3

CMST 233	Interpersonal Communication	
CMST 235	Intercultural Communication	
NFSC 560	Motivational Interviewing for Allied Health	
PHHA 369	Public Health Communication Techniques	
Area of Study (p	. 2)	
Select one of the	e following areas:	6-7
Lifecycle Nuti	rition (p. 2)	
Media and Wr	iting (p. 2)	
Sports Nutriti	on (p. 2)	
Total Units		28-29

Students are required to take one unit of externship in one of the areas of study. Please see the designated advisor of one of the core areas described below for recommendations on externship placements.

Area of Study

The following courses, or their approved transfer equivalents, are required depending upon the area of study chosen. Students must select one of the following areas of study for completion of the major course requirements.

Lifecycle Nutrition Area of Study: 6 units

Course	Title	Units
Select one of the	following:	3
NFSC 468	Child Nutrition	
NFSC 469	Nutrition and Aging	
Select one of the	following:	3
CHLD 252	Child Development	
CHLD 354	The School-Aged Child	
PHHA/SOSC 541	Health in the Later Years	
SWRK 474	Policy and Programs for Older Adults	
Total Units		6

Media and Writing Area of Study: 6 units

Course	Title	Units
Select two of the	following:	6
JOUR 130W	Professional Writing for Public Audiences (W)	
JOUR 255	Digital Literacy and Media Technology	
JOUR 260W	Writing for Mass Media (W)	
JOUR 325W	Magazine Writing (W)	
MADT 103W	Writing for Screen Media (W)	
MADT 206	Introduction to Commercial Photography and Digital Imaging	
MADT 219	Social Media Technologies	
MADT 371	Media and Learning	
Total Units		6

Sports Nutrition Area of Study: 6-7 units

Course	Title	Units
Select two of the	e following:	6-7
KINE 323	Exercise Physiology	
KINE 482	Exercise Pathophysiology	
NFSC 403	Sports Nutrition	
Total Units		6-7

The Option in Food and Nutrition Management: 27-28 units

Course	Title	Units
ACCT 201	Introduction to Financial Accounting	3
MKTG 305	Survey of Marketing	3
NFSC 318	Nutrition and Disease	3
NFSC 432	Foodservice Procurement and Production Management	4
NFSC 455	Futures in Nutrition and Food Science	1
NFSC 489	Externship ¹	2
or NFSC 489C	Center for Healthy Communities Externship	
NFSC 530	Nutrition Program Management and Administration	3
RHPM 420	Budgeting and Finance in Recreation, Hospitality, and Parks Management	3
Select one of the	following:	3
NFSC 468	Child Nutrition	
NFSC 469	Nutrition and Aging	
Select one of the	following:	2-3
BCOM 300W	Communication in Business (W)	
BLAW 414	Labor Law and Collective Bargaining	
MGMT 304	Human Resource Management	
MKTG 371	Consumer Behavior	
NFSC 390	Research Methods in Nutrition and Food Science	S
NFSC 499H	Honors Senior Thesis or Project	
NFSC 560	Motivational Interviewing for Allied Health	
PHHA 331	The Healthcare Delivery System	
PHHA/SOSC 541	Health in the Later Years	
SWRK 474	Policy and Programs for Older Adults	
Total Units	:	27-28

¹ At least two units are required.

The Option in General Dietetics: 35 units

Registered dietitian nutritionists (RDNs) are food and nutrition experts who have met these criteria to earn the RDN credential:

- Completed a minimum of a bachelor's degree or master's degree at a US regionally accredited university or college and coursework approved by the Commission on Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). Courses in the option in general dietetics meet the requirements of the Academy of Nutrition and Dietetics for an accredited Didactic Program in Dietetics (DPD).
- Completed a postbaccalaureate ACEND accredited supervised practice program.
- 3. Passed a national registration exam.

The Commission on Dietetics Registration (CDR) has mandated that beginning **January 1, 2024**, a minimum of a graduate degree will be required to sit for the RDN credential exam.

See Prerequisites for Admission to the Option in General Dietetics (p. 4) for additional information.

Additional Grading Requirement

All required courses must be passed with a grade of C or higher. Progression in the option in general dietetics depends upon maintaining a cumulative grade point average of 2.75 and a grade of C or higher in all courses listed in the major core and in the option in general dietetics.

By policy, a student receiving a grade of C- or lower is not eligible to progress in the dietetics program. The student may petition the General Dietetics Option Selection Committee to review the application of the policy in their situation if serious and compelling conditions contributed to the grade. Barring exceptional circumstances, students may only repeat one of NFSC 440, NFSC 457, NFSC 470, or NFSC 471, and such repetition is restricted to one occurrence.

Course	Title	Units
CHEM 350	Introductory Biochemistry ¹	3
CHEM 350L	Introductory Biochemistry Laboratory ¹	1
NFSC 345W	Diet Supplements and Functional Foods (W)	3
NFSC 365	Nutrition Counseling and Education	3
NFSC 390	Research Methods in Nutrition and Food Science	s 2
NFSC 432	Foodservice Procurement and Production	4
	Management	
NFSC 440	Advanced Human Nutrition	4
NFSC 457	Futures in Dietetics	1
NFSC 465	Community Nutrition	3
NFSC 470	Medical Nutrition Therapy I	4
NFSC 471	Medical Nutrition Therapy II	4
PSYC 101	Principles of Psychology	3
Total Units		35

It is highly recommended that CHEM 350 and CHEM 350L be in progress or completed the semester students apply for admission to the option. KINE 324 may be substituted for CHEM 350 and CHEM 350L with approval.

Clinical Nutrition

Students preparing for advanced degrees or careers in nutrition research should complete the required units of the option in general dietetics and also complete the following courses, which include a chemistry minor.

Course	Title	Units
BIOL 303	Human Genetics	3
or BIOL 360	Genetics	
BIOL 416	Vertebrate Physiology	4
CHEM 270	Organic Chemistry I	4
CHEM 320	Quantitative Analysis	4
CHEM 370	Organic Chemistry II	3
CHEM 370L	Organic Chemistry Laboratory	1
CHEM 451	Biochemistry I	3

CHEM 453L	Biochemistry Laboratory	1
Total Units		23

Electives Requirement

To complete the total units required for the bachelor's degree, select additional elective courses from the total University offerings. You should consult with an advisor regarding the selection of courses which will provide breadth to your University experience and possibly apply to a supportive second major or minor.

Course	Title	Units
Suggested Ele	ctive Courses	
NFSC 489	Externship	1-6
NFSC 489C	Center for Healthy Communities Externship	1-6

Honors in the Major

Honors in the Major is a program of independent work in your major. It requires six units of honors coursework completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take six units of Honors in the Major coursework. All six units are honors courses (marked by a suffix of H), and at least three of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each course with a minimum grade of B.
- You must have completed 9 units of upper-division coursework or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Yourcumulative#GPA should be at least 3.5 or within the top 5% of majors in your department.
- Your GPAin your major#should be at least 3.5 or within the top 5% of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the six units of coursework over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

Honors in the Major is not part of the Honors Program. Each department administers its own program. Please contact your major department or major advisor to apply.

See Bachelor's Degree Requirements (https://catalog.csuchico.edu/undergraduate-requirements/bachelors-degree-requirements/) for

complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.

General Education Requirements: 43 units

See General Education (https://catalog.csuchico.edu/collegesdepartments/undergraduate-education-academic-success/generaleducation/#gerequirementstext) and the Class Schedule (http:// www.csuchico.edu/schedule/) for the most current information on General Education requirements and course offerings.

American Institutions Course Requirements: 6 units

The American Institutions graduation requirement, as mandated in Title 5, Section 40404 (https://govt.westlaw.com/calregs/ viewType=FullText&originationContext=documenttoc&transitionType=Category agence according to the Option requires that students satisfactorily complete courses in United In General Dietetics Document/I56C041434C6911EC93A8000D3A7C4BC3/? States history, the US Constitution, and government and American ideals (including California state and local government). At Chico State, HIST 130 meets the US history requirement (US-1), and POLS 155 meets the US Constitution and government requirement (US-2) and the California state and local government requirement (US-3). POLS 155 also fulfills three units of GE Area 4, Social and Behavioral Sciences. See Bachelor's Degree Requirements (https://catalog.csuchico.edu/ undergraduate-requirements/bachelors-degree-requirements/#amin) for more information.

Diversity Course Requirements: 6 units

You must complete a minimum of two courses that focus primarily on cultural diversity. At least one course must be in US Diversity (USD) and at least one in Global Cultures (GC). See Diversity Requirements (https://catalog.csuchico.edu/undergraduate-requirements/diversityrequirements/) for a full list of courses. Many courses taken to satisfy these requirements may also apply to General Education (https:// catalog.csuchico.edu/colleges-departments/undergraduate-educationacademic-success/general-education/).

Upper-Division Writing Requirement

Writing Across the Curriculum (EM 17-009 (https://www.csuchico.edu/ pres/em/2017/17-009.shtml/)) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See Writing and Math Requirements (https://catalog.csuchico.edu/ undergraduate-requirements/writing-math-requirements/) for more details on the four courses. The first of the major designated Writing (W) courses is listed below.

The Option in Food and Nutrition Communication and the Option in General Dietetics

· NFSC 345W Diet Supplements and Functional Foods (W)

The Option in Food and Nutrition Management

· Any upper-division Writing (W) course.

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) (EO 665 (https://calstate.policystat.com/ policy/9585618/latest/)). Students must earn a C- or higher to receive GW credit. The GE English Composition (1A) (https://catalog.csuchico.edu/ colleges-departments/undergraduate-education-academic-success/

general-education/#1A) requirement must be completed before a student is permitted to register for a GW course.

Notice to Prospective Applicants for Option in General Dietetics

A supplemental dietetics application must be submitted by March 1. A dietetics application is available from the Nutrition and Food Sciences Department office. In addition to the application, students must provide transcripts of all previous college or university level work, a resume, two letters of recommendation, and a one-page written personal statement about their career goals. Applications are reviewed by a committee that ranks all applications for placement. Students not selected for the option are encouraged to meet with an NFSC faculty advisor. Students not selected may reapply once.

- 1. The cumulative grade point average for all college-level work must be a minimum of 2.75.
- 2. The following prerequisites must be completed with a grade of C or higher. BIOL 104, BIOL 211, CHEM 107, CHEM 108, MATH 105, and NFSC 340.
- 3. It is highly recommended that CHEM 350 be in progress or completed the semester students apply for admission to the option.