

BACHELOR OF SCIENCE IN FOOD SCIENCE

Web Site: <https://twu.edu/nutrition-food-sciences/undergraduate-programs/>

The Bachelor of Science in Food Science provides students with coursework and experience to make them more employable in the food production industry. Graduates will be able to pursue employment in quality control and quality assurance, food product development, food and nutrition management software, sales, marketing, or research.

Marketable Skills

Defined by the Texas Higher Education Coordinating Board's 60x30 Strategic Plan (<https://reportcenter.highered.texas.gov/agency-publication/miscellaneous/the60x30-strategic-plan/>) as, "Those skills valued by employers that can be applied in a variety of work settings, including interpersonal, cognitive, and applied skills areas. These skills can be either primary or complementary to a major and are acquired by students through education, including curricular, co-curricular, and extracurricular activities."

1. Written and verbal communication skills and adaptability with the ability to work collaboratively, including the development of new products.
2. Understand core science relating to food production, including food chemistry, microbiology, and food safety.
3. Have a working knowledge of marketing.
4. Knowledge management with the ability to access, create, and store information for internal access while maintaining confidentiality.
5. Creativity and ideation training with the ability to use facts to drive decision-making.
6. Strategic agility and organizational skills allowing to creatively identify alternative paths in problem-solving.

Admissions

All applicants must meet the general undergraduate admission requirements (<https://catalog.twu.edu/undergraduate/admission-information/>).

Degree Requirements

Total Semester Credit Hours (SCH): 120

Major: 49 SCH

Program Code: _____; **CIP Code:** 01.1001.00

Texas Core Curriculum

Code	Title	SCHs
ENG 1013	Composition I (10)	3
ENG 1023	Composition II (10)	3
Mathematics (20)		3
Life & Physical Sciences (30)		6
Language, Philosophy, & Culture (40)		3
Creative Arts (50)		3
HIST 1013	History of the United States, 1492-1865 (60)	3

HIST 1023	History of the United States, 1865 to the Present (60)	3
POLS 2013	U.S. National Government (70)	3
POLS 2023	Texas Government (70)	3
Social & Behavioral Sciences (80)		3
CAO: Multicultural-Women's Studies (90)		3
CAO: First Year Seminar, Wellness or Mathematics (91)		3
Total SCHs		42

Courses Required for Major

Code	Title	SCHs
NFS 1302 & NFS 1301	Food Preparation Principles and Food Preparation Principles Laboratory	3
NFS 2033 & NFS 2031	Food Microbiology and Food Microbiology Laboratory	4
NFS 2323	Introduction to Nutrition	3
NFS 3173	Culture and Food	3
NFS 3323 & NFS 3321	Food Science and Food Science Laboratory	4
NFS 3393	Principles of Culinary Science	3
NFS 4024	Food Product Development	4
NFS 4943	Trends and Controversies in Nutrition and Food Sciences	3
NFS 4123	Sensory Evaluation of Food	3
NFS 4503	Food Processing and Unit Operations	3
NFS 4033	Food Chemistry	3
NFS 4043	Food Safety Systems	3
NFS 4053	Food Analysis	3
NFS 4913	Independent Study (Laboratory Experience)	3
Electives		4
Total SCHs		49

Departmental Requirements

Code	Title	SCHs
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory	4
CHEM 1113 & CHEM 1111	General Chemistry I and General Chemistry Laboratory I	4
CHEM 1123 & CHEM 1121	General Chemistry II and General Chemistry Laboratory II	4
CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4
MATH 1313	Trigonometry	3
MATH 2014	Calculus I	4
MATH 1703	Elementary Statistics I	3
MKT 3113	Principles of Marketing	3
MKT 4213	Consumer Behavior	3
SPCH 1013	Oral Communication	3
Select 3 SCH from the following		3
UNIV 1231	Learning Frameworks: First-Year Seminar	
KINS 1901	Fitness and Health Laboratory	

KINS 1902	Health and Wellbeing: Enhancing Personal Wellness	
Total SCHs		38

Plan of Study

First Year

Fall		TCCN	SCHs
NFS 1302 & NFS 1301	Food Preparation Principles and Food Preparation Principles Laboratory		3
ENG 1013	Composition I	ENGL 1301	3
HIST 1013	History of the United States, 1492-1865	HIST 1301	3
Select 3 SCH from the following			3
KINS 1902	Health and Wellbeing: Enhancing Personal Wellness	PHED 1338	
KINS 1901	Fitness and Health Laboratory	PHED 1164	
UNIV 1231	Learning Frameworks: First-Year Seminar	EDUC 1100, EDUC 1200, EDUC 1300	
Mathematics Core			3
SCHs			15
Spring		TCCN	
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory	BIOL 1406 & BIOL 1106	4
ENG 1023	Composition II	ENGL 1302	3
HIST 1023	History of the United States, 1865 to the Present	HIST 1302	3
MATH 1313	Trigonometry	MATH 1316	3
SCHs			13

Second Year			
Fall		TCCN	
NFS 2323	Introduction to Nutrition	BIOL 1322	3
CHEM 1113 & CHEM 1111	General Chemistry I and General Chemistry Laboratory I	CHEM 1311 & CHEM 1111	4
POLS 2013	U.S. National Government	GOVT 2305	3
SPCH 1013	Oral Communication	SPCH 1311	3
MATH 1703	Elementary Statistics I	MATH 1342	3
SCHs			16
Spring		TCCN	
NFS 3173	Culture and Food		3
CHEM 1123 & CHEM 1121	General Chemistry II and General Chemistry Laboratory II	CHEM 1312 & CHEM 1112	4
POLS 2023	Texas Government	GOVT 2306	3
Creative Arts Core			3
Women's Studies CAO Core			3
SCHs			16

Third Year			
Fall		TCCN	
NFS 2033 & NFS 2031	Food Microbiology and Food Microbiology Laboratory		4

NFS 3393	Principles of Culinary Science		3
NFS 4943	Trends and Controversies in Nutrition and Food Sciences		3
MATH 2014	Calculus I	MATH 2413	4
MKT 3113	Principles of Marketing		3

SCHs		17
Spring		TCCN
MKT 4213	Consumer Behavior	3
NFS 3323 & NFS 3321	Food Science and Food Science Laboratory	4
CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4
Social/Behavioral Core		3

SCHs		14
Fourth Year		
Fall		TCCN
NFS 4033	Food Chemistry	3
NFS 4043	Food Safety Systems	3
NFS 4053	Food Analysis	3
NFS 4503	Food Processing and Unit Operations	3
NFS 4913	Independent Study	3
Elective		1

SCHs		16
Spring		TCCN
NFS 4024	Food Product Development	4
NFS 4123	Sensory Evaluation of Food	3
Language, Philosophy, Culture Core		3
Elective		3

SCHs		13
Total SCHs:		120