

# BACHELOR OF SCIENCE IN NUTRITION (NUTRITIONAL SCIENCES)

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

The Bachelor of Science in Nutrition (Nutritional Sciences) program is planned for students who are interested in careers in academia and research in nutritional sciences. This degree emphasizes basic sciences and is ideal for students who plan to seek admission to professional studies in medicine, physician assistant, dentistry, physical therapy, occupational therapy, pharmacy, or veterinary professions. In addition, the degree provides a foundation for further education at the master and doctoral levels for the pursuit of careers in industry, research, and university-level teaching positions. The program includes courses in nutrition, biology, chemistry, and mathematics.

## Marketable Skills

Defined by the Texas Higher Education Coordinating Board's 60x30 Strategic Plan (<http://www.60x30tx.com/>) 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. Knowledge of and ability to identify safety guidelines.
2. Analyze and interpret blood profile data as it relates to specific health issues or concerns.
3. Read, understand, and present interpretations of scientific literature in the field to a lay audience and health care clients.
4. Apply food systems administration concept in decision-making process.
5. Function as a part of an overall health team.
6. Give or follow instructions to and from others.
7. Work on team presentations.

## Admissions

All applicants must meet the general undergraduate admission requirements (<http://catalog.twu.edu/archives/2020-2021/undergraduate/admission-information/>).

## Degree Requirements

**Total Semester Credit Hours (SCH):** 120

**Major:** 33 SCH

**Program Code:** NUTRITION.BS; **CIP Code:** 30.1901.00

## Texas Core Curriculum

Code	Title	SCHs
ENG 1013	Composition I	3
ENG 1023	Composition II	3
Mathematics		3
Life & Physical Sciences		6

Language, Philosophy, & Culture		3
Creative Arts		3
HIST 1013	History of the United States, 1492-1865	3
HIST 1023	History of the United States, 1865 to the Present	3
POLS 2013	U.S. National Government	3
POLS 2023	Texas Government	3
Social & Behavioral Sciences		3
CAO: Women's Studies		3
CAO: First Year Seminar, Wellness or Mathematics		3
<b>Total SCHs</b>		<b>42</b>

## Courses Required for Major

Code	Title	SCHs
NFS 2033 & NFS 2031 or BACT 3113 & BACT 3111	Food Microbiology and Food Microbiology Laboratory General Microbiology and General Microbiology Laboratory	4
NFS 2323	Introduction to Nutrition	3
NFS 3033	Nutrition throughout the Life Cycle	3
NFS 3083	Nutritional Biochemistry	3
NFS 3101	Advanced Nutrition Laboratory	1
NFS 3173 or NFS 3063	Culture and Food Ecology of Foods and Nutrition	3
NFS 3323 & NFS 3321	Food Science and Food Science Laboratory	4
NFS 4301	Principles of Nutritional Genomics	1
NFS 4313	Advanced Nutrition: Micronutrients	3
NFS 4303	Advanced Nutrition: Macronutrients	3
NFS 4601	Literature in Nutrition and Food Science Seminar	1
NFS 4911	Independent Study	1
NFS 4983	Research in Nutrition and Food Sciences (may be repeated up to 3 times)	3
<b>Total SCHs</b>		<b>33</b>

## Departmental Requirements

Code	Title	SCHs
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory (may be applied from core)	4
BIOL 1123 & BIOL 1121	Principles of Biology II and Principles of Biology II Laboratory (may be applied from core)	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 2213 & CHEM 2211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 3223 & CHEM 3221	Organic Chemistry II and Organic Chemistry Laboratory II	4
MATH 1303	Elementary Analysis I (may be applied from core)	3
MATH 1313	Elementary Analysis II	3

MATH 1703	Elementary Statistics I	3
ZOOL 2013 & ZOOL 2011	Human Anatomy and Physiology I and Human Anatomy and Physiology I Laboratory	4
ZOOL 2023 & ZOOL 2021	Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory	4
ZOOL 4243 & ZOOL 4241	Medical Physiology and Medical Physiology Laboratory	4
Total SCHs		45

## Recommended Plan of Study

### First Year

Fall	TCCN	SCHs
BIOL 1113 Principles of Biology I & BIOL 1111 and Principles of Biology I Laboratory	BIOL 1406 & BIOL 1106	4
CHEM 1113 General Chemistry I & CHEM 1111 and General Chemistry Laboratory I	CHEM 1311 & CHEM 1111	4
ENG 1013 Composition I	ENGL 1301	3
HIST 1013 History of the United States, 1492-1865	HIST 1301	3
Select 3 semester credit hours from the following:		3
KINS 1902 Fitness and Health: Enhancing & UNIV 123 Personal Wellness (required and Learning Frameworks: The First Year Experience for first year students)	PHED 1338 & EDUC 1100, EDUC 1200, EDUC 1300	
KINS 1902 Fitness and Health: Enhancing & KINS 190 Personal Wellness and Fitness and Health Laboratory	PHED 1338 & PHED 1164	
Elective		
SCHs		17

Spring	TCCN	SCHs
NFS 2323 Introduction to Nutrition	BIOL 1322	3
CHEM 1123 General Chemistry II & CHEM 1121 and General Chemistry Laboratory II	CHEM 1312 & CHEM 1112	4
ENG 1023 Composition II	ENGL 1302	3
HIST 1023 History of the United States, 1865 to the Present	HIST 1302	3
MATH 1013 Financial and Quantitative Literacy	MATH 1332	3
SCHs		16

### Second Year

Fall	TCCN	SCHs
BIOL 1123 Principles of Biology II & BIOL 1121 and Principles of Biology II Laboratory	BIOL 1407 & BIOL 1107	4
POLS 2013 U.S. National Government	GOVT 2305	3
MATH 1303 Elementary Analysis I	MATH 1314	3
ZOOL 2013 Human Anatomy and Physiology I & ZOOL 2011 and Human Anatomy and Physiology I Laboratory	BIOL 2401 & BIOL 2101	4
Elective		3
SCHs		17

Spring	TCCN	SCHs
NFS 3173 Culture and Food or 3063 or Ecology of Foods and Nutrition		3
POLS 2023 Texas Government	GOVT 2306	3
MATH 1313 Elementary Analysis II	MATH 1316	3
ZOOL 2023 Human Anatomy and Physiology II & ZOOL 2021 and Human Anatomy and Physiology II Laboratory	BIOL 2402 & BIOL 2102	4
SCHs		13

### Third Year

Fall	TCCN	SCHs
NFS 3033 Nutrition throughout the Life Cycle		3
CHEM 2213 Organic Chemistry I & CHEM 2211 and Organic Chemistry Laboratory I	CHEM 2323 & CHEM 2123	4
MATH 1703 Elementary Statistics I	MATH 1342	3
Select 4 SCH of the following		4
NFS 2033 Food Microbiology & NFS 2031 and Food Microbiology Laboratory		
BACT 3113 General Microbiology & BACT 3111 and General Microbiology Laboratory		
Elective		3
SCHs		17

Spring	TCCN	SCHs
NFS 3083 Nutritional Biochemistry		3
NFS 3323 Food Science & NFS 3321 and Food Science Laboratory		4
CHEM 3223 Organic Chemistry II & CHEM 3221 and Organic Chemistry Laboratory II		4
ZOOL 4243 Medical Physiology & ZOOL 4241 and Medical Physiology Laboratory		4
SCHs		15

### Fourth Year

Fall	TCCN	SCHs
NFS 4301 Principles of Nutritional Genomics		1
NFS 4303 Advanced Nutrition: Macronutrients		3
NFS 3101 Advanced Nutrition Laboratory		1
NFS 4911 Independent Study		1
Language, Philosophy, Culture Core		3
Social/Behavioral Sciences Core		3
SCHs		12

Spring	TCCN	SCHs
NFS 4313 Advanced Nutrition: Micronutrients		3
NFS 4601 Literature in Nutrition and Food Science Seminar		1
NFS 4983 Research in Nutrition and Food Sciences		3
Creative Arts Core		3
Multicultural Women's Studies		3
SCHs		13

Total SCHs: 120