

NUTRITION - BS, MOLECULAR AND EXPERIMENTAL TRACK

Nutritional sciences prepares majors with a comprehensive knowledge of the biological and social sciences to understand the relationships between nutrients, food components and human health. Prevention of diseases that are related to lifestyle, particularly diet and nutrition, is a focus of the curriculum. Core courses emphasize the role of nutrients in biochemistry, genetics, physiology, microbiology and immunology that promotes wellness and enhances the quality of life. The major also provides an excellent background for those interested in pursuing graduate degrees in biological, nutritional or food sciences; professional degrees in human or veterinary medicine; degrees in dentistry, pharmacy, physical therapy, nursing, public health and other health professions; or dietetic internships.

The Didactic Program in Dietetics (DPD) and the Graduate Degree/Dietetic Internship Program are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Students who successfully complete the DPD and a dietetic internship are eligible to take the Registration Examination to become a Registered Dietitian (RD).

Three curriculum tracks are offered (General Nutrition, Didactic Program in Dietetics and Molecular and Experimental Nutrition) to provide flexibility in one's chosen career path. The Nutrition major prepares one for graduate school, corporate wellness positions, health promotion programs, the food industry, public health programs, pharmaceutical sales, clinical dietetics, medical and research laboratories, biotechnology firms, government agencies and related fields. For more information, visit <http://nfs.tamu.edu>. (<http://nfs.tamu.edu>)

Molecular and Experimental Track

The Molecular and Experimental Track emphasizes a fundamental background in the biological and physical sciences that relate to human health and nutrition. This option offers students the opportunity to develop analytical and critical thinking skills through undergraduate research with department faculty, independent study and study abroad programs, and a science-based curricula that is essential for graduate studies and pre-professional schools. The goal of this track is to enable students to seek employment in specialized science-based fields in the biological or medical sciences, to pursue graduate degrees beyond the baccalaureate or to enter professional schools of medicine, veterinary medicine, dentistry, pharmacy or similar disciplines. See academic advisor for information on application procedures, GPA requirements, specific course listings and eligibility requirements.

Program Requirements

First Year

Fall		Semester Credit Hours
BIOL 111	Introductory Biology I	4
CHEM 119	Fundamentals of Chemistry I	4
ENGL 103 or ENGL 104	Introduction to Rhetoric and Composition or Composition and Rhetoric	3
NFSC 204	Perspectives in Nutrition and Food Science	1
NFSC 210	Horizons in Nutrition and Food Science	2

Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#Mathematics) ¹	3
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Semester Credit Hours 17

Spring

BIOL 112	Introductory Biology II	4
CHEM 120	Fundamentals of Chemistry II	4
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)	3	
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics) ¹	3	

Semester Credit Hours 14

Second Year

Fall

CHEM 227	Organic Chemistry I	3
CHEM 237	Organic Chemistry Laboratory	1
ENGL 210	Technical and Business Writing	3
NFSC 203	Scientific Principles of Human Nutrition	3
PHYS 201	College Physics	4
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)	3	

Semester Credit Hours 17

Spring

CHEM 228	Organic Chemistry II	3
CHEM 238	Organic Chemistry Laboratory	1
POLS 206	American National Government	3
Select two of the following:	6	

BIOL 413	Cell Biology	
BIOL 414	Developmental Biology	
COMM 203	Public Speaking	
COMM 315	Interpersonal Communication	
COMM 325	Persuasion	
HLTH 334	Women's Health	
HLTH 354	Medical Terminology for the Health Professions	
NFSC 485	Directed Studies	
NFSC 491	Research	
PHYS 202	College Physics	
PSYC 300-499 (http://catalog.tamu.edu/undergraduate/course-descriptions/psyc/)		
VTPP 425	Pharmacology	

Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) ²	3
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Semester Credit Hours 16

Third Year

Fall

BIOL 319 or VIBS 305	Integrated Human Anatomy and Physiology I or Biomedical Anatomy	4
NFSC 301	Nutrition Through Life	3

POLS 207	State and Local Government	3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) ²		3
Semester Credit Hours		13
Spring		
BIOL 320 or VTPP 423	Integrated Human Anatomy and Physiology II or Biomedical Physiology I	4
GENE 301	Comprehensive Genetics	3
GENE 312	Comprehensive Genetics Laboratory	1
NFSC 365	Nutritional Physiology of Vitamins and Minerals	3
Select one of the following:		3
STAT 301	Introduction to Biometry	
STAT 302	Statistical Methods	
STAT 303	Statistical Methods	
Semester Credit Hours		14
Fourth Year		
Fall		
BICH 410	Comprehensive Biochemistry I	3
BIOL 351	Fundamentals of Microbiology	4
NFSC 469	Experimental Nutrition Laboratory	3
NFSC 491	Research	4
Semester Credit Hours		14
Spring		
BICH 411	Comprehensive Biochemistry II	3
BICH 431/ GENE 431	Molecular Genetics	3
CHEM 316	Quantitative Analysis	2
CHEM 318	Quantitative Analysis Laboratory	1
NFSC 475	Nutrition and Physiological Chemistry	3
Social and behavioral science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences) ²		3
Semester Credit Hours		15
Total Semester Credit Hours		120

¹ MATH prefix required.

² The Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>). Selection must be from courses on the approved list. Selection can be courses that also satisfy the requirement for social and behavioral sciences; creative arts; language, philosophy and culture; or electives. For more information on core requirements visit the University Core Curriculum (<http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/>) catalog page.

A total of 120 hours is required for graduation; 36 hours of 300/400 level courses are required to meet the Texas A&M University residency requirement.