FOOD INDUSTRY OPTION, B.SC. - HUMAN NUTRITIONAL SCIENCES

Degree Requirements

Bachelor of Science (Human Nutritional Sciences) - Food Industry Option

Course	Title	Hours
AGRI 1600	Introduction to Agrifood Systems	3
AGRI 2400	Experimental Methods in Agricultural and Food Sciences [1]	3
One of the following [2]		3-6
BIOL 1410	Anatomy of the Human Body	
BIOL 1020 & BIOL 1030	Biology 1: Principles and Themes and Biology 2: Biological Diversity, Function and Interactions	
BIOL 1412	Physiology of the Human Body [2]	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1130	Introduction to Organic Chemistry [3]	3
or CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties	
CHEM/MBIO 2730	Elements of Biochemistry 1 [4]	3
CHEM 2740	Introduction to the Biochemistry Laboratory [5]	3
CHEM/MBIO 2750	Elements of Biochemistry 2 [6]	3
FOOD 4150	Food Microbiology 1	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3000	Introduction to Social Epidemiology	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000	Research Methods and Presentation	3
HNSC 2130	Nutrition Through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Principles of Food Preparation and Preservation	3
HNSC 4100	Current Issues in Food and Human Nutrition	3
PSYC 1200	Introduction to Psychology	3-6
or SOC 1000	Introduction to Sociology	
Total Hours		**63-69**

1. STAT 2000 (Basic Statistical Analysis 2) can be substituted for AGRI 2400 (Experimental Methods in Agricultural and Food Sciences).
2. Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the 3 additional credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.
3. Students can hold CHEM 2100 (Organic Chemistry 1: Foundations of Organic Chemistry) in place of CHEM 1130 (Introduction to Organic Chemistry).
4. Under required courses, students can use either CHEM 2700/MBIO 2700 (Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy) in place of CHEM 2730/MBIO 2730 (Elements of Biochemistry 1).
5. Under required courses, students can take either CHEM 2720 (Principles and Practices of the Modern Biochemistry Laboratory) in place of CHEM 2740 (Introduction to the Biochemistry Laboratory).
6. Under required courses, students can use CHEM 2710/MBIO 2710 (Biochemistry 2: Catabolism, Synthesis, and Information Pathway) in place of CHEM 2750/MBIO 2750 (Elements of Biochemistry 2).

Food Industry Option

Course	Title	Hours
ABIZ 1000	Introduction to Agribusiness Management	3
or GMGT 1010	Business and Society	
FOOD 4310	Introduction to HACCP	3
HNSC 3260	Food Quality Evaluation	3
HNSC 3300	Vitamins and Minerals in Human Health	3
or HNSC 3310	Macronutrients and Human Health	
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4280	Food Product Development	3
HNSC 4364	Foods Industry Option Practicum	6
MKT 2210	Fundamentals of Marketing	3
Free Electives [1,2]		9-15
One of the following concentrations:		15
Quality Assurance Concentration		
Food Product Development Concentration		
Food Industry Management Concentration		
Total Hours		**51-57**

1. Students selecting BIOL 1020 and BIOL 1030 are not required to complete BIOL 1410. If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours will be used towards free electives. Under required courses, students must take BIOL 1412. Students can substitute both BIOL 1410 and BIOL 1412 with both BIOL 2410 and BIOL 2420.
2. Students can apply for the Cooperative Education Program. Two work terms are required to graduate with Co-op designation. Co-op courses (3 credit hours each) are used towards free electives.