

POULTRY SCIENCE - BS, TECHNICAL EMPHASIS

Growth of the poultry industry has created the need for scientific, technical and business knowledge in the various fields important to successful poultry production. In few fields of science is an understanding of the basic sciences, nutrition, genetics, physiology, diseases, biotechnology, processing and marketing more rewarding than in the modern, intensive methods of poultry and food production. Students are trained in the necessary background, analytical skills, problem solving and leadership for complex production units, hatcheries, integrated feed mills, processing plants and research laboratories. Rapid industry growth provides many career opportunities for graduates. Students are given two emphasis areas in which to specialize their education toward their selected career goals. The University Core Curriculum courses and the Poultry Science Core courses are required for both emphases. Students then complete a BS degree in either emphasis area by completing the respective emphasis area courses. All students are strongly encouraged to get early and frequent academic counseling which is readily available.

Students completing a BS degree in the industry emphasis find employment with the poultry and food industries in positions such as corporate management, quality assurance, sales or technical support in live production, processing or marketing. Students in this emphasis also get positions with pharmaceutical and equipment companies, with industry trade publications and in various university and public service positions.

Students completing a BS degree in the technical emphasis are prepared for advanced study in biochemistry, nutrition, physiology, molecular genetics, reproduction, processing technology, microbiology or environmental science and for eventual professional employment in research, teaching or public service. This curriculum can be easily tailored to meet the veterinary medicine preprofessional requirements.

Program Requirements

First Year

Fall		Semester Credit Hours
CHEM 119	Fundamentals of Chemistry I	
POSC 201	General Avian Science	3
POSC 302	Avian Science Laboratory	1
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)		3
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics)		3
Semester Credit Hours		14
Spring		
BIOL 111 or BIOL 107	Introductory Biology I or Zoology	4
CHEM 120	Fundamentals of Chemistry II	4
POSC 319	Breeder and Hatchery Management	3

Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics)	3
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Semester Credit Hours 14

Second Year

Fall		Semester Credit Hours
CHEM 257	Organic Chemistry I - Structure and Function	
POSC 308	Avian Anatomy and Physiology	3
POSC 309	Poultry Meat Production	4
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ¹		3
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)		3

Semester Credit Hours 17

Spring

POSC 381	Investigation of Professional Development in Poultry Science	2
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ¹		3
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science)		3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) ¹		3
Social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences)		3

Semester Credit Hours 14

Third Year

Fall		Semester Credit Hours
BIOL 351 or VTPB 405	Fundamentals of Microbiology or Biomedical Microbiology	
POSC 326	Commercial Egg Industry	3
POSC 411	Poultry Nutrition	3
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science)		3
General elective ²		3

Semester Credit Hours 16

Spring

BICH 303	Elements of Biological Chemistry	3
POSC 412	Poultry Feed Formulation	1
POSC 429	Advanced Food Bacteriology	4
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) ¹		3
General elective ²		4

Semester Credit Hours 15

Fourth Year**Fall**

GENE 301 & GENE 312	Comprehensive Genetics and Comprehensive Genetics Laboratory	4
POSC 405	Egg and Poultry Meat Processing	3
POSC 427	Animal Waste Management	3
POSC 481	Poultry Science Systems	2
General elective ²		4
Semester Credit Hours		16

Spring

POSC 406	Poultry Further Processing	4
STAT 301 or STAT 302	Introduction to Biometry or Statistical Methods	3
VTPB 334	Poultry Diseases	4
General elective ²		3
Semester Credit Hours		14
Total Semester Credit Hours		120

¹ 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/>) courses and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) courses. A course satisfying a Core (<http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/>) category, a college/department requirement, or a free elective can be used to satisfy this requirement. See academic advisor.

² To be utilized by students to enhance the science and/or business aspects of their undergraduate program.