

FEED SCIENCE & MANAGEMENT CURRICULUM GUIDE

KSU Department of Grain Science & Industry

Fall 2018 / Spring 2019

1 st Semester			2 nd Semester		
Freshman					
BIOL 198	Prin of Biology	4	ASI 318	Fund of Nutrition	3
ENGL 100	Expos Writing I	3	CHM 210	Chemistry I	4
^f GRSC 100	Grain Sci Orientation	1	COMM 105	Public Speaking	2
^f GRSC 101	Intro to Grain Sci	3	ECON 110	Prin of Macro Econ	3
	Social Sci Elect	3	MATH 205	Gen Calc & Algebra	3
14			15		
Sophomore					
AGEC 120	Ag Econ & Ag Bus	3	BIOCH 265	Intro to Org & Bio	5
<u>or</u> ECON 120	Prin of Micro Econ		<u>or</u> CHM 350/351	Gen Org Chem & Lab	
CHM 230	Chemistry II	4	^s GRSC 310	Materials Handling	3
ENGL 200	Expos Writing II	3	PHYS 114	Gen. Physics II	4
GRSC 210	CAD Flow Sheets	3	STAT 325	Intro to Statistics	3
PHYS 113	Gen. Physics I	4		FP/PF Emphasis	3
17			18		
Junior					
ACCTG 231	Acct Bus Opr	3	^s GRSC 561	Qual. Food/Feed In	4
BIOL 455	Gen Microbiology	4	^s GRSC 612	Feed Tech II & Lab	4
^f GRSC 510	Feed Tech I	3	^s GRSC 651	Food/Feed Prod Pro	4
^f GRSC 620*	Extrusion Processing	4		Free Elective	3
	Management Elective	3			
17			15		
Senior					
^f GRSC 530	Mgmt Appl Grain	3		FP/PF Emphasis	3
^f GRSC 591	Internship in Grain Sci	1		FP/PF Emphasis	3
^f GRSC 615	Animal Food Safety	3		Communication Elective	3
	FP/PF Emphasis	3		Free Elective	3
	FP/PF Emphasis	3		Management Elective	3
	Social Sci Elect	3			
16			15		

^f Fall only, ^s Spring only.

Minimum of 127 credits required for graduation.

*GRSC 620 is offered only in Fall of even years. Students and advisors need to put special attention to enroll either in Junior Fall or Senior Fall semester, whichever is the right fit.

Feed Production (FP) Emphasis (15 hrs):

Grain Science Electives	6
Specialization Electives	9

Pet Food (PF) Emphasis (15 hrs):

ASI 520 – Companion and Laboratory Animal Management	3
^f GRSC 645 - Pet Food Processing	4
GRSC 677 - Companion Animal Nutrition.....	1
Grain Science Electives	3
Specialization Electives	4

K-State 8 General Education requirements:

Students must meet the requirements of the K-State 8 General Education Program. FSM core curriculum fulfills some of the K-state-8 requirements. Advisors and students need to make the *right course choices* for the ELECTIVES to satisfy the remaining K-State 8 requirements.

K-State 8 tags:

- 1) Aesthetic Experience and Interpretive Understanding*
- 2) Empirical and Quantitative Reasoning
- 3) Ethical Reasoning & Responsibility*
- 4) Global Issues & Perspectives*
- 5) Historical Perspectives*
- 6) Human Diversity within the U.S.*
- 7) Natural and Physical Sciences
- 8) Social Sciences

Areas indicated with an () are not satisfied through the core course requirements. Special attention has to be given while selecting the elective courses to fulfill these K-State 8 areas.*

Please check the link below for complete list of courses tagged for the K-State 8 areas:

<http://www.k-state.edu/kstate8/lists/>

Pre-Vet Professional Track:

The pre-professional requirements for admission to the Doctor of Veterinary Medicine degree program may be met by appropriate course elective selection while completing a degree in Feed Science & Management.

Communication electives:

AGCOM 400 - Agricultural Business Communications 3
COMM 311 - Business and Professional Speaking..... 3
ENGL 516 - Written Communication for the Sciences..... 3

Management electives:

ACCTG241
AGEC202, 220, 300 or above
ECON.....500 or above
ENRTP340
FINAN.....450
LEAD212, 350
MANGT ..300 or above
MKTG390 or above

Grain Science electives:

GRSC 150 - Principles of Milling 2
GRSC 151 - Principles of Milling Laboratory 1
GRSC 491 - Faculty-Led Study Abroad (both) 1-3
GRSC 499 - Undergraduate Research in Grain Science..... 0-3
GRSC 555 – Cereal Food Plan Design 3
GRSC 560 - Electricity and Industrial Power Distribution 3
GRSC 592 - Extended Internship in Grain Science 1
GRSC 602 - Cereal Science..... 3
GRSC 645 - Pet Food Processing..... 4

Specialization electives:

ASI.....102, 300 or above
BIOCH.....521, 522
CHM.....531, 532
ENTOM...300 or above
FDSCI.....300 or above
FNDH.....711

FEED SCIENCE MINOR:

GRSC 101 - Introduction to Grain Science and Industry3
GRSC 510 - Feed Technology I3
GRSC 612 - Feed Technology II & Lab4
GRSC 561 - Quality of Feed Ingredients4
GRSC 530 - Management Applications in the Grain Processing Industry3
or
GRSC 310 – Material Handling3
TOTAL.....17

Grain science majors cannot use courses required in their major as part of a Feed Science Minor.

PET FOOD SCIENCE MINOR:

ASI 520 - Companion Animal Management3
GRSC 510 - Feed Technology I3
GRSC 645 - Pet Food Processing & Lab4
Choose from the following (6 hours):
ASI 675 - Monogastric Nutrition1
FDSCI 600 - Microbiology of Foods2
FDSCI 690 - Principles of HACCP2
GRSC 620* - Extrusion Processing in the Food and Feed Industries4
GRSC 561 - Quality of Feed Ingredients4
GRSC 612 - Feed Technology II & Lab3
FNDH 711 - Pet Food Sensory Analysis2
TOTAL.....16

Grain science majors cannot use courses required in their major as part of a Pet Food Science Minor.

* Even years only.