

MAJOR IN LIVESTOCK BUSINESS MANAGEMENT

The Livestock Business Management degree program develops active decision-making, communication, and practical management skills to prepare graduates to be effective leaders and agents within the livestock industry. Coursework within the program is selected to provide solid foundational understanding of biological processes and management opportunities within livestock systems as well as analytical and managerial principles in agricultural businesses across a range of scales and resource bases. On top of this fundamental foundation, students will be provided training in economic decision making and analysis that will explicitly integrate the biophysical dimensions with the financial dimensions to drive overall business decisions. Another important element of the program is the development of leadership skills to prepare graduates to not only work internally within the industry, but to also be effective in representing the industry and bringing broader social issues to the forefront within the industry. The integration of efficient livestock systems and business practices prepares students to be successful in a wide range of higher-level positions needed within contemporary animal agriculture.

Learning Outcomes

Upon successful completion, graduates will exhibit:

Professional Development: Graduates will embody a general awareness of issues relevant to the livestock industry and their implications in a larger societal context. Students will begin to develop a network of personal and professional connections which will foster an

understanding of the culture surrounding professional expectations and conduct.

Technical Competence: Graduates will demonstrate technical competency including the ability to appropriately use biophysical sciences, business management techniques, and economic theory in formulating analytical problems, identifying and gathering appropriate data, and employing appropriate methods to analyze those problems, utilizing appropriate resources and technologies available.

Problem-solving Skills: Graduates will demonstrate the ability to solve real-world livestock business management problems beyond the context of the classroom. Students will be able to identify a problem and its scope, evaluate resources available to address the problem, formulate alternative solutions, and select the solution(s) most consistent with a stated objective.

Communication Skills: Graduates will demonstrate proficiency in oral and written communication in terms of substance, organization, mechanics, documentation, and synthesis. Proficient students will have the ability to clearly communicate findings, critically and analytically, at a professional level within their chosen profession.

Leadership: Graduates will have developed leadership qualities that they will use in their professional, personal and community interactions leveraging the other competencies acquired in the program. These leadership qualities include vision, initiative, personal responsibility, team building, and motivating collective action.

Requirements Effective Fall 2023

Freshman

		AUCC	Credits
ANEQ 101	Food Animal Science		4
ANEQ 105	Introduction to Large Animal Anatomy		1
AREC 192	Orientation to Agricultural and Resource Econ		1
AREC 202	Agricultural and Resource Economics (GT-SS1)	3C	3
CO 150	College Composition (GT-CO2)	1A	3
LBM 133	Introduction to Livestock Business Management		1
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	4
MATH 117	College Algebra in Context I (GT-MA1)	1B	1
MATH 118	College Algebra in Context II (GT-MA1)	1B	1
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	1
Select one course from the following:			3-4
BUS 150	Business Computing Concepts and Applications		
CS 110	Personal Computing		
Select one course from the following:			4
CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A	
CHEM 111	General Chemistry I (GT-SC2)	3A	
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)			3
Total Credits			30-31

Sophomore

ACT 205	Fundamentals of Accounting		3
ANEQ 305	Functional Large Animal Physiology		3

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ANEQ 328	Foundations in Animal Genetics		3
AREC 310	Agricultural Marketing		3
LBM 233	Leadership in the Livestock Industry		2
SPCM 200	Public Speaking		3
Select one course from the following:			3
STAT 201	General Statistics (GT-MA1)	1B	
STAT 301	Introduction to Applied Statistical Methods		
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			6
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			3

Total Credits **29**

Junior

ANEQ 320	Principles of Animal Nutrition	4B	3
AREC 305	Agricultural and Resource Enterprise Analysis		3
LBM 333A	Livestock Business Engaged Research: Proposal Development		1
LBM 333B	Livestock Business Engaged Research: Field Experience		1
Animal Science Choice Block - select a minimum of 9 credits total from the following:			9
ANEQ 250	Live Animal and Carcass Evaluation		
ANEQ 310	Animal Reproduction	4B	
ANEQ 313	Prevention and Control of Livestock Diseases		
ANEQ 330	Principles of Animal Breeding	4B	
ANEQ 360	Principles of Meat Science	4B	
ANEQ 410	Applied Food Animal Behavior		
ANEQ 448	Livestock Manure Management and Environment		
ANEQ 460	Meat Safety		
SOCR 320 or RS 300	Sustainable Forage Management for Livestock Rangeland Conservation and Stewardship		

Up to two Production Systems courses not chosen in Senior year may be used in this block.

Ag Business Choice Block - Select a minimum of 6 credits from the following:			6
AREC 311	Agricultural and Resource Product Marketing		
AREC 325	Personnel Management in Agriculture		
AREC 340/ECON 340	Introduction-Economics of Natural Resources		
AREC 341	Environmental Economics		
AREC 342	Water Law, Policy, and Institutions		
AREC 346/ECON 346	Economics of Outdoor Recreation		
AREC 375	Agricultural Law		
AREC 415	International Agricultural Trade		
AREC 419	Commodity Market Trading Experience		
AREC 454/REL 454	Real Estate Appraisal		
AREC 460	Ag- and Resource-Based Economic Development		
AREC 461A	Study Abroad-Italy: Economics of the Renaissance in Modern Italy		
AREC 461B	Study Abroad-Italy: Food and Resource Economics		
AREC 478	Agricultural Policy		

Any Ag Business Analytic courses not chosen in Senior year may also be used in this block.

Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)			3
Electives			3

Total Credits **29**

Senior

AREC 428	Agricultural Business Management	4A,4C	3
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AREC 492	Senior Seminar in Ag and Resource Economics		1
LBM 333C	Livestock Business Engaged Research: Communications		1
LBM 433	Integrated Livestock Business Mgt Workshop	4A,4C	1
Ag Business Analytic Courses - Select two courses from the following:			6
AREC 405	Agricultural Production Management		
AREC 408	Agricultural Finance		
AREC 412	Agricultural Commodities Marketing		
Production System Courses - Select two courses from the following:			6-7
ANEQ 470	Meat Processing Systems		
ANEQ 472	Sheep Systems		
ANEQ 473	Dairy Systems		
ANEQ 474	Swine Systems		
ANEQ 476	Feedlot Systems		
ANEQ 478	Beef Systems		
Remaining Animal Science Electives (see Junior year list):			3
Remaining Ag Business Electives (see Junior year list):			3
Other Business-focused Elective ¹			3
Other Livestock-focused Elective ²			3
Electives ³			0-2
Total Credits			31-32
Program Total Credits:			120

¹ Select from upper division courses in AREC, ECON, BUS, MKT, FIN, ACT, MGT, or REL.

² Select from upper division courses in ANEQ, SOCR, AB, RS, BMS, MIP, LIFE.

³ Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).

Major Completion Map

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
ANEQ 101	Food Animal Science	X			4
AREC 192	Orientation to Agricultural and Resource Econ	X			1
AREC 202	Agricultural and Resource Economics (GT-SS1)	X		3C	3
LIFE 102	Attributes of Living Systems (GT-SC1)	X		3A	4
MATH 117	College Algebra in Context I (GT-MA1)	X		1B	1
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	1
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	1
Total Credits					15
Semester 2		Critical	Recommended	AUCC	Credits
ANEQ 105	Introduction to Large Animal Anatomy	X			1
Select one course from the following:					3-4
BUS 150	Business Computing Concepts and Applications				
CS 110	Personal Computing				
Select one course from the following:					4
CHEM 107	Fundamentals of Chemistry (GT-SC2)	X		3A	
CHEM 111	General Chemistry I (GT-SC2)			3A	
CO 150	College Composition (GT-CO2)	X		1A	3
LBM 133	Introduction to Livestock Business Management	X			1
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)				1C	3
Total Credits					15-16

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
ANEQ 305	Functional Large Animal Physiology	X			3
AREC 310	Agricultural Marketing	X			3
LBM 233	Leadership in the Livestock Industry	X			2
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			X	3D	3
Total Credits					14

Semester 4		Critical	Recommended	AUCC	Credits
ACT 205	Fundamentals of Accounting	X			3
ANEQ 328	Foundations in Animal Genetics	X			3
SPCM 200	Public Speaking	X			3
Select one course from the following:		X			3
STAT 201	General Statistics (GT-MA1)			1B	
STAT 301	Introduction to Applied Statistical Methods				
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
ANEQ 305 must be completed by the end of Semester 4.		X			
Total Credits					15

Junior

Semester 5		Critical	Recommended	AUCC	Credits
ANEQ 320	Principles of Animal Nutrition	X		4B	3
AREC 305	Agricultural and Resource Enterprise Analysis	X			3
Animal Science Choice Block (See List in Program Requirements)			X		3
Ag Business Choice Block (See List in Program Requirements)			X		3
Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)			X	2	3
Total Credits					15

Semester 6		Critical	Recommended	AUCC	Credits
LBM 333A	Livestock Business Engaged Research: Proposal Development	X			1
LBM 333B	Livestock Business Engaged Research: Field Experience	X			1
Animal Science Choice Block (See List in Program Requirements)			X		6
Ag Business Choice Block (See List in Program Requirements)					3
Elective			X		3
AREC 305, AREC 310, ANEQ 310, ANEQ 320, ANEQ 328, SPCM 200, STAT 201 or STAT 301, and Advanced Writing must be completed by the end of Semester 6.		X			
Total Credits					14

Senior

Semester 7		Critical	Recommended	AUCC	Credits
LBM 333C	Livestock Business Engaged Research: Communications	X			1
Select two Analytic Courses from the following:		X			6
AREC 405	Agricultural Production Management				
AREC 408	Agricultural Finance				
AREC 412	Agricultural Commodities Marketing				
Animal Science Choice Block (See List in Program Requirements):			X		3
Production Systems Choices (See List in Program Requirements):			X		6-7
Total Credits					16-17
Semester 8		Critical	Recommended	AUCC	Credits
AREC 428	Agricultural Business Management	X		4A,4C	3

AREC 492	Senior Seminar in Ag and Resource Economics				1
LBM 433	Integrated Livestock Business Mgt Workshop	X		4A,4C	1
Ag Business Choice Block (See List in Program Requirements)			X		3
Other Livestock-focused Elective (See List in Program Requirements):			X		3
Other Business-focused Elective (See List in Program Requirements):			X		3
Electives			X		0-2
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.		X			
Total Credits					14-16
Program Total Credits:					120