

Equine Science and Management

Martin-Gatton College of Agriculture, Food and Environment

The horse industry is a dynamic industry that encompasses not only the breeding, raising and training of horses but also the development of activities for the use of the horse in sports and recreation. The industry has a significant economic impact across the U.S. and world-wide.

Equine science and management involves the study and application of science and business concepts to the horse industry. Additional course work supports learning in areas that aid in breeding and raising horses and marketing the industry. Students come from varied equine backgrounds but have a common interest in the horse. Regardless of which breed of horse or activity focus students have, equine science and management majors will have the opportunity to combine their interest in the horse with a desire to become active participants in the horse industry.

Students in equine science and management considering a career in veterinary medicine or graduate research can meet those goals in the degree program as well. Interested students need to consult with an advisor to ensure all specific academic requirements are met.

Career Opportunities

The horse industry is continually changing. Equine science and management graduates are needed in all aspects of the industry including production, business management and other related support industries.

Graduation Requirements

To earn the Bachelor of Science in Equine Science and Management, the student must have a minimum of 120 credit hours with at least a 2.0 grade-point average. A minimum of 45 credit hours must be from upper division courses (300 level and above). Remedial courses may not be counted toward the total hours required for the degree.

Students must complete the following:

UK Core Requirements

See the UK Core section of the 2021-2022 Undergraduate Bulletin for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list.....3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list.....3

III. Intellectual Inquiry in the Social Sciences

Choose one course from approved list.....3

IV. Intellectual Inquiry in Natural, Physical, And Mathematical Sciences

Choose one course from approved list.....3-5

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I.....3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II.....3

VII. Quantitative Foundations

MA 109 College Algebra

or

MA 123 Elementary Calculus and Its Applications

or

MA 113 Calculus I

or

MA 137 Calculus I with Life Science Application.....3-4

VIII. Statistical Inferential Reasoning

STA 210 Making Sense of Uncertainty: An Introduction to Statistical Reasoning

or

STA 296 Statistical Methods and Motivations.....3

IX. Community, Culture and Citizenship in the USA

AFE 100 Issues in Agriculture, Food and Environment.....3

X. Global Dynamics

Choose one course from approved list.....3

UK Core hours.....30-33

Graduation Composition and Communication Requirement (GCCR)

EQM 305 Equine Industry Issues.....3

Graduation Composition and Communication Requirement hours (GCCR).....3

Premajor Requirements

BIO 148 Introductory Biology I.....3

BIO 152 Introductory Biology II.....3

*CHE 105 General College Chemistry I

CHE 107 General College Chemistry II

CHE 111 General Chemistry I Laboratory

CHE 113 General Chemistry II Laboratory.....10

OR

CHE 104 Introduction General Chemistry

CHE 108 Introduction to Inorganic, Organic and

Biochemistry without laboratory.....6

OR

*CHE 105 General College Chemistry I

CHE 108 Introduction to Inorganic, Organic and

Biochemistry without laboratory.....7

**CHE 105 can be satisfied with CHE 109 and CHE 110*

ECO 201 Principles of Economics I.....3

MA 109 College Algebra

or

MA 123 Elementary Calculus and Its Applications

or

MA 113 Calculus I

or

MA 137 Calculus I with Life Science Application.....3-4

Subtotal: Premajor hours.....18-23

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Major Requirements

ASC 101 Domestic Animal Biology.....	3
EQM 101 Introduction to the Horse and Horse Industry.....	3
EQM 106 Introduction to Careers in the Equine Industry.....	1
EQM 105 Equine Behavior and Handling.....	2
or	
EQM 204 Equine Behavior and Handling 1.....	1
and	
EQM 205 Equine Behavior and Handling 2.....	1
AEC 302 Agricultural Management Principles.....	4
ASC 310 Equine Anatomy.....	3
ASC 320 Equine Management.....	3
EQM 305 Equine Industry Issues.....	3
EQM 351 Equine Health and Diseases.....	3
EQM 399 Equine Science and Management Internship	
or	
EQM 396 Equine Study Abroad (Subtitle required).....	3
EQM 490 Capstone in Equine Science and Management.....	3
Subtotal: Major hours.....	31

Emphasis Areas

Students must have one emphasis area. In order to have an emphasis area, students must take 12 credits in one area. Students will then select 9 additional credits from any emphasis area. 21 credit hours in emphasis area courses must be completed.

Equine Science

This area will provide the students with a strong background in basic sciences which will prepare them for careers such as animal health services, laboratory research assistants, breeding technicians, pharmaceutical sales representatives, and technical representatives for the feed industry.

ASC 220 Applied Animal Behavior and Welfare.....	3
ASC 311 Advanced Equine Evaluation.....	1
ASC 325 Animal Physiology.....	3
ASC 364 Reproductive Physiology of Farm Animals.....	4
ASC 378 Animal Nutrition and Feeding.....	3
ASC 380 Applied Animal Nutrition.....	3
ASC 389 Advanced Equine Nutrition and Feeding.....	2
ASC 410 Equine Science.....	3
EQM 300 Topics in Equine Science and Management (Subtitle required).....	1-6
PLS 366 Fundamentals of Soil Science.....	4
PLS 510 Forage Management and Utilization.....	3
VS 307 Genetics of Horses.....	3
VS 500 Advanced Equine Reproduction.....	3
VS 507 Advanced Horse Genetics.....	2
VS 575 Current Literature in Veterinary Parasitology.....	1
VS 597 Special Topics in Veterinary Science (Subtitle required).....	1-3

Subtotal: Emphasis hours.....21

Equine Management and Industry

Students will learn skills related to marketing, operations, and management of equine businesses. This will prepare students for careers as farm managers as well as business managers for equine enterprises, breed associations, and sales associates. This area also introduces them to the diversity of the equine industry through courses in equine law, sales, careers, event planning, marketing, and human resources.

AEC 305 Food and Agricultural Marketing Principles.....	3
AEC 312 Equine Markets.....	3
AEC 320 Agricultural Product Marketing and Sales.....	3
MKT 300 Marketing Management.....	3
AEC 324 Agricultural Law.....	3
AEC 325 Equine Law.....	3
AEC 340 Human Resource Management in Agriculture.....	3
EQM 210 Tools and Tack in the Equine Industry.....	3
EQM 300 Topics in Equine Science and Management (Subtitle required).....	1-6
EQM 301 Thoroughbred Sales.....	1
EQM 340 Equine Facility Design and Management.....	3
EQM 370 The Global Sport Horse Industry.....	3
EQM 375 Thoroughbred Investments.....	3

Subtotal: Emphasis hours.....21

Communications, Leadership and Education

This area will provide a diverse foundation to students who are interested in leadership roles in business, breed/discipline associations or non-profit equine organizations, careers in communications, or Cooperative Extension and other educational outlets.

+AEC 300 Topics in Agricultural Economics	
Agricultural Marketing Campaigns.....	3
AED 583 Designing Curriculum and Assessment in	
Career and Technical Education.....	3
*AFE 330 Peer Mentor Teaching.....	3
AFE 342 Agricultural Leadership Foundations.....	3
AFE 490 Agricultural Leadership Applications.....	3
*ASC 330 Peer Mentorship and Instruction in Animal Science.....	3
CLD 230 Intrapersonal Leadership.....	3
CLD 400 Agricultural Communications Campaigns.....	3
CLD 401 Principles of Cooperative Extension.....	3
EQM 300 Topics in Equine Science and Management (Subtitle required).....	1-6
EQM 302 Equine Event Planning.....	1
*EQM 303 Equine Leadership and Industry Outreach.....	1-6
*EQM 304 Mentorship Through Teaching in Equine	
Science and Management (Subtitle required).....	2-6

**A maximum of 6 credit hours from AFE 330, ASC 330, EQM 303 and EQM 304 can count towards emphasis area credit, with no more than 3 credit hours coming from any one of those courses.*

+AEC 300 Topics in Agricultural Economics: Agricultural Marketing Campaigns counts towards this emphasis area.

Subtotal: Emphasis hours.....21

Specialty Support Requirement

The student will choose, in consultation with an advisor, at least 18 hours of courses at the 200 level or above that will strengthen the program in an area of importance to the student. Specialty support courses can be used to meet graduate school, professional school, or University Scholars Program prerequisites, as well as requirements towards a minor and/or certificate. To aid in developing this area of study, a list of suggested courses is available from your advisor. The list includes courses in agricultural economics, animal sciences, community and leadership development, marketing, management, finance, plant and soil sciences plus other areas of study at UK.

Subtotal: Specialty Support.....18

Electives

Electives should be selected by the student to lead to the minimum total of 120 hours required for graduation.

Subtotal: Electives.....minimum of 3

Total Minimum Hours for Program.....120