

Equine Science

Equine Science Major

The Equine Science major is designed to prepare students for careers in the equine industry and related fields. Course work includes practical husbandry and equitation skills, scientific principles related to management and study of equine industry and business practices.

Equine Science Minor

Students from other majors may minor in Equine Science by completing a minimum of 16 credits. A minimum of eight credits must be completed at NDSU.

Equine Science Certificate

The certificate program in Equine Science provides an opportunity for non-degree seeking students to enhance their horse knowledge. The program focuses on basic selection, management, and business concepts and requires completion of 16 credits. Prospective students are subject to the university's admission policies and procedures.

Major Requirements

Major: Equine Science

Degree Type: B.S.

Minimum Degree Credits to Graduate: 128

General Education Requirements for Baccalaureate Degree

- A list of approved general education courses is available here (<http://bulletin.ndsu.edu/past-bulletin-archive/2017-18/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).
- General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review the major, minor, and program emphases requirements for minimum grade restrictions, should they apply.

Code	Title	Credits
Communication (C)		12
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing [†]		
Quantitative Reasoning (R) [†]		3
Science and Technology (S) [†]		10
Humanities and Fine Arts (A) [†]		6
Social and Behavioral Sciences (B) [†]		6
Wellness (W) [†]		2
Cultural Diversity (D) ^{**†}		
Global Perspectives (G) ^{**†}		
Total Credits		39

* May be satisfied by completing courses in another General Education category.

† May be satisfied with courses required in the major. Review major requirements to determine if a specific upper division writing course is required.

Major Requirements

Code	Title	Credits
Required Core Courses for Equine Science		
ANSC 223	Introduction to Animal Nutrition	2
ANSC 235	Equine Evaluation	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L	Equine Care and Management Practicum	1

ANSC 261	Basic Equitation & Horsemanship	1
ANSC 357	Animal Genetics	3
or ANSC 358	Equine Genetics	
ANSC 360	Equine Nutrition	3
ANSC 364	Equine Anatomy and Physiology	3
ANSC 480	Equine Industry and Production Systems	3
ANSC 478	Research and Issues in Animal Agriculture	3
ANSC 393	Undergraduate Research	2
or ANSC 396	Field Experience	
ANSC/ZOO 463	Physiology of Reproduction	3
ANSC/ZOO 463L	Physiology of Reproduction Laboratory	1
RNG 136	Introduction to Range Management	3
or PLSC 320	Principles of Forage Production	
ANSC	Electives	6
Supporting Courses		
AGEC 242	Introduction to Agricultural Management	3
AGEC 244	Agricultural Marketing	3
AGRI 189	Skills for Academic Success ¹	1
Select one of the following (Not required for students transferring in 24 or more credits):		1
AGRI 150	Agriculture Orientation	
ANSC 150	Animal Science Orientation	
VETS 150	Introduction to the Veterinary Profession	
ANSC 370	Fundamentals/Animal Disease	3
BIOC 260	Elements of Biochemistry	4
BIOL 111	Concepts of Biology	4
& 111L	and Concepts of Biology Lab	
or BIOL 150	General Biology I	
& 150L	and General Biology I Laboratory	
CHEM 117	Chemical Concepts and Applications	4
& 117L	and Chem Concepts and Applications Lab (May satisfy general education category S)	
ECON 201	Principles of Microeconomics (May satisfy general education category B)	3
Select one of the following:		3
MATH 103	College Algebra	
MATH 105	Trigonometry	
MATH 107	Precalculus	
MATH 146	Applied Calculus I	
MICR 202	Introductory Microbiology	3
& 202L	and Introductory Microbiology Lab (May satisfy general education category S)	
PLSC 110	World Food Crops (May satisfy general education category S)	3
PLSC 315	Genetics (May satisfy general education category S)	3
STAT 330	Introductory Statistics (May satisfy general education category R)	3
VETS 135	Anatomy and Physiology of Domestic Animals	3
Total Credits		82

¹ AGRI189 is only required for first-time, first-year students—A first-time, first-year student is defined as a student who has not yet completed a college course as a college student. Students that are not first-time, first-year students that either transfer into the university or change their major are not required to take AGRI 189.

Degree Requirements and Notes:

- Students must earn at least a 2.00 GPA that is based on the courses that are used to satisfy major requirements.
- Transfer grades of 'C' or better to count towards major requirements.

Minor Requirements

Equine Science Minor

Minor Requirements

Required Credits: 16

Code	Title	Credits
Required Courses		
ANSC 223	Introduction to Animal Nutrition	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L or ANSC 261	Equine Care and Management Practicum Basic Equitation & Horsemanship	1
ANSC 360 or ANSC 364	Equine Nutrition Equine Anatomy and Physiology	3
Elective Courses: Select a minimum of 8 credits from the following:		8
ANSC 235	Equine Evaluation	
ANSC 300	Domestic Animal Behavior and Management	
ANSC 357 or ANSC 358	Animal Genetics Equine Genetics	
ANSC 361	Intermediate Horsemanship	
ANSC 362	Colts in Training	
ANSC 375	Methods of Horsemanship Instruction	
ANSC 461	Advanced Horsemanship and Equitation	
ANSC 463	Physiology of Reproduction	
ANSC 480	Equine Industry and Production Systems	
ANSC 496	Field Experience	
Total Credits		16

Minor Requirements and Notes:

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a minimum 2.00 GPA for the minor requirements.

Certificate Requirements

Equine Science Certificate

Certificate Requirements

Required Credits: 16

Code	Title	Credits
Requirements		
ANSC 235	Equine Evaluation	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L	Equine Care and Management Practicum	1
ANSC 261	Basic Equitation & Horsemanship	1
AGEC 242	Introduction to Agricultural Management	3
ANSC 360	Equine Nutrition	3
ANSC 361	Intermediate Horsemanship	1
ANSC 364	Equine Anatomy and Physiology	3
Total Credits		16