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.
Required Degree Credits to Graduate: 128

General Education Requirements
First Year Experience (F):
AGRI 189  
Skills for Academic Success (Students transferring in 24 or more credits do not need to take AGRI 189.) 1

Communication (C):
ENGL 110  
College Composition I 3
ENGL 120  
College Composition II 3
COMM 110  
Fundamentals of Public Speaking 3
One Course in Upper Level Writing. Select from current general education list 3

Quantitative Reasoning (R):
STAT 330  
Introductory Statistics 3

Science & Technology (S):
CHEM 117 & 117L  
Chemical Concepts and Applications and Chem Concepts and Applications Lab 4
MICR 202 & 202L  
Introductory Microbiology and Introductory Microbiology Lab 3
PLSC 110  
World Food Crops 3

Humanities & Fine Arts (A): Select from current general education list 6

Social & Behavioral Sciences (B):
ECON 201  
Principles of Microeconomics 3
Select from current general education courses 3

Wellness (W): Select from current general education list 2

Cultural Diversity (D): Select from current general education list

Global Perspective (G):
PLSC 110  
World Food Crops

Total Credits 40

Major Requirements

General Education Requirements 40

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 3

### 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

### RNG 336
Introduction to Range Management 3

or PLSC 320
Principles of Forage Production 3

### ANSC 393
Undergraduate Research 2

or ANSC 396
Field Experience 2

### ANSC/ZOO 463
Physiology of Reproduction 3

### ANSC/ZOO 463L
Physiology of Reproduction Laboratory 1

### ANSC
Electives 6

### Supporting Courses

#### AGEC 242
Introduction to Agricultural Management 3

#### AGEC 244
Agricultural Marketing 3

Select one of the following (Students transferring in 24 or more credits may be exempt from this requirement):

- AGRI 150
  Agriculture Orientation 1

- ANSC 150
  Animal Science Orientation 1

- VETS 150
  Introduction to the Veterinary Profession 1

### ANSC 370
Fundamentals/Animal Disease 3

### CHEM 260
Elements of Biochemistry 4

### MATH 103
College Algebra (or higher level; except MATH 104) 3

### BIOL 111
Concepts of Biology 4

& 111L
Concepts of Biology Lab 4

or BIOL 150
General Biology I 3

& 150L
General Biology I Laboratory 3

### PLSC 315
Genetics 3

### VETS 135
Anatomy and Physiology of Domestic Animals 3

### Degree Requirements: Potential of 23 credits to reach degree minimum of 128.

Total Credits 128

### 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

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANSC 223</td>
<td>Introduction to Animal Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 260</td>
<td>Introduction to Equine Studies</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 260L</td>
<td>Equine Care and Management Practicum</td>
<td>1</td>
</tr>
<tr>
<td>or ANSC 261</td>
<td>Basic Equitation &amp; Horsemanship</td>
<td></td>
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<tr>
<td>ANSC 360</td>
<td>Equine Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>or ANSC 364</td>
<td>Equine Anatomy and Physiology</td>
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</tbody>
</table>

#### Elective Courses: Select a minimum of 8 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ANSC 235</td>
<td>Equine Evaluation</td>
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</table>
ANSC 300  Domestic Animal Behavior and Management
ANSC 357  Animal Genetics
or ANSC 358  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

Requirements

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<thead>
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<td>ANSC 260</td>
<td>Introduction to Equine Studies</td>
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</tr>
<tr>
<td>ANSC 260L</td>
<td>Equine Care and Management Practicum</td>
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<td>Introduction to Agricultural Management</td>
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<td>3</td>
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Total Credits 16