

Focus Areas:

Agribusiness, Agronomy,
Livestock Production,
Communications, Equine
Science, Ag Engineering,
Pre-Veterinarian,
Horticulture

AGRICULTURE & INDUSTRIAL TECHNOLOGY

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Potential Careers:

- Agronomist
- Ag & Food Science Technician
- Ranch Manager
- Agriculture Teacher/Professor
- Communications Specialist
- Professional Truck Driver
- Welder

DEGREES & CERTIFICATES

Commercial Drivers License16-hour certificate

Welding.....18-hour certificate

Production & Services16-hour certificate

Production & Services30-hour certificate

Production & Services45-hour certificate

Production & Services A.A.S. - 62 hours

Associate of General Studies A.G.S. - 62 hours

Associate of Science A.S. - 62 hours

Ag Education majors, refer to the Education Program

AGRICULTURE & INDUSTRIAL TECHNOLOGY

Program Learning Outcomes

Agriculture:

16-hour Certificate

1. Perform agricultural calculations.
2. Describe multiple career opportunities in agriculture.

30-hour Certificate:

1. Perform agricultural calculations.
2. Describe multiple career opportunities in agriculture.
3. Explain technology uses in agriculture.

45-hour Certificate:

1. Perform agricultural calculations.
2. Describe multiple career opportunities in agriculture.
3. Explain technology uses in agriculture.
4. Identify agricultural production inputs and outputs.

Associate of Applied Science:

1. Perform agricultural calculations.
2. Describe multiple career opportunities in agriculture.
3. Explain technology uses in agriculture.
4. Identify agricultural production inputs and outputs.
5. Identify and describe effective agricultural advertising and their effects on the market.

Associate of Science:

1. Perform agricultural calculations.
2. Describe multiple career opportunities in agriculture.
3. Explain technology uses in agriculture.
4. Identify agricultural production inputs and outputs.
5. Discuss global market issues.

Commercial Drivers License:

1. Demonstrate the safe operations of a commercial vehicle.
2. Demonstrate the skills to pass the State Commercial Driving License test.

Welding:

1. Develop the cognitive and physical skills necessary to pass American Welding Society certifications.
2. Identify safe welding practices and procedures conforming to American Welding Society standards.



AGRICULTURE & INDUSTRIAL TECHNOLOGY

COMMERCIAL DRIVERS LICENSE

16-Hour Certificate

Required CDL Courses		16 cr
TD250	CDL Class A Truck Driving Training I	8
TD251	CDL Class A Truck Driving Training II	7
TD252	Defensive Driving For the Professional Truck Driver	1

WELDING

18-Hour Certificate

Required General Education Courses		3 cr
<i>Mathematics Requirement</i>		3
MA104 Technical Math (3 cr) or Mathematics General Education Course		

Required Welding Courses		15 cr
IE117	OSHA 10-Hour General Industry Training	1
IE125	Blueprint Reading and Cutting Processes	2
IE126	Shielded Metal Arc Welding	3
IE127	Gas Metal Arc Welding	3
IE128	Flux Core Arc Welding	3
IE129	Gas Tungsten Arc Welding	3



AGRICULTURE & INDUSTRIAL TECHNOLOGY

AGRICULTURE PRODUCTION & SERVICES

16-Hour Certificate

Required General Education Courses 3 cr

<i>Mathematics Requirement</i>	3
MA110 Intermediate Algebra (3 cr) or	
MA104 Technical Math (3 cr) or	
Mathematics General Education Course	

Required Agriculture Courses 7 cr

AG101 Crop Science (4 cr) or	4
AG150 Introduction to Horticulture (4 cr)	
AG115 Animal Science (3cr) or	3
AG130 Principles of Ag Economics (3 cr)	

AG150	Introduction to Horticulture	4
AG166	Fundamentals of Livestock Nutrition	3
AG210	Ag Advertising & Design	3
AG220	Cooperative Ed Internship	1-4
AG225	Basic Equitation	3
AG226	Advanced Equitation	3
AG228	Focused Equitation	3

Elective Courses 6 cr

AG101	Crop Science	4
AG102	Intro to Plant Pest Control	3
AG105	Range Management	3
AG111	Animal Management	3
AG115	Animal Science	3
AG122	Introduction to Horsemanship	2
AG128	Animal Health & Nutrition	3
AG130	Principles of Ag Economics	3
AG132	Agricultural Management	3
AG134	Agricultural Marketing	3

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AGRICULTURE & INDUSTRIAL TECHNOLOGY

AGRICULTURE PRODUCTION & SERVICES

30-Hour Certificate

Required General Education Courses 6 cr

Mathematics Requirement 3
 MA110 Intermediate Algebra (3 cr) **or**
 MA104 Technical Math (3 cr) **or**
 Mathematics General Education Course

Natural Science Requirement (1 area required) 3
 Physical Science General Education
 Biological Science General Education

Required Agriculture Courses 10 cr

AG101 Crop Science (4 cr) **or** 4
 AG150 Introduction to Horticulture (4 cr)
 AG115 Animal Science (3cr) 3
 AG130 Principles of Agricultural Economics (3 cr) 3

Elective Courses 14 cr

Economics

AG132 Agriculture Management 3
 AG134 Agricultural Marketing 3
 AG210 Agriculture Advertising and Design 3
 AG220 Cooperative Ed Internship 1-6

Agronomy

AG101 Crop Science 4
 AG102 Intro to Plant Pest Control 3
 AG103 Plants & Soils for Crop Production 3
 AG104 Soils 4
 AG105 Range Management 3
 AG106 Soil Classification and Evaluation 1
 AG107 Agronomy ID & Experimentation 1
 AG150 Introduction to Horticulture 4
 AG220 Cooperative Ed Internship 1-6

Animal Science

AG111 Animal Management 3
 AG118 Principles of Livestock Selection 2
 AG119 Principles of Livestock Selection II 1
 AG128 Animal Health & Nutrition 3
 AG139 Farm Animal Reproduction 3
 AG159 Equine Evaluation 1
 AG166 Fundamentals of Livestock Nutrition 3
 AG220 Cooperative Ed Internship 1-6

Equine Science

AG111 Animal Management 3
 AG122 Introduction to Horsemanship 2
 AG128 Animal Health & Nutrition 3
 AG139 Farm Animal Reproduction 3
 AG159 Equine Evaluation 1
 AG165 Equine Evaluation II 1
 AG166 Fundamentals of Livestock Nutrition 3
 AG220 Cooperative Ed Internship 1-6
 AG225 Basic Equitation 3
 AG226 Advanced Equitation 3
 AG228 Focused Equitation 3



AGRICULTURE & INDUSTRIAL TECHNOLOGY

AGRICULTURE PRODUCTION & SERVICES

45-Hour Certificate

Required General Education Courses 10 cr

<i>Communication Requirement</i>	3
CM115 Public Speaking (3 cr) or Interpersonal Communications (3 cr)	
<i>Mathematics Requirement</i>	3
MA110 Intermediate Algebra (3 cr) or MA104 Technical Math (3 cr) or Mathematics General Education Course	
<i>Natural Science Requirement (1 area required)</i>	4
Physical Science General Education Biological Science General Education	

Required Agriculture Courses 13 cr

AG101 Crop Science (4 cr) or AG150 Introduction to Horticulture (4 cr)	4
AG115 Animal Science (3cr)	3
AG130 Principles of Agriculture Economics	3
AG132 Agriculture Management or AG134 Agriculture Marketing	3

Elective Courses 22 cr

Business/Economics	
AG132 Agriculture Management	3
AG134 Agricultural Marketing	3
AG210 Ag Advertising and Design	3
BE161 Accounting I	3
BE162 Accounting II	3
BE188 Principles of Advertising	3
AG220 Cooperative Ed Internship	1-6

Agronomy

AG101 Crop Science	4
AG102 Intro to Plant Pest Control	3
AG103 Plants & Soils for Crop Production	3
AG104 Soils	4
AG105 Range Management	3
AG106 Soil Classification and Evaluation	1
AG107 Agronomy ID & Experimentation	1
AG150 Introduction to Horticulture	4
AG220 Cooperative Ed Internship	1-6

Animal Science

AG111 Animal Management	3
AG118 Principles of Livestock Selection	2
AG119 Principles of Livestock Selection II	1
AG128 Animal Health & Nutrition	3
AG139 Farm Animal Reproduction	3
AG159 Equine Evaluation	1
AG166 Fundamentals of Livestock Nutrition	3
AG220 Cooperative Ed Internship	1-6

Equine Science

AG111 Animal Management	3
AG122 Intro to Horsemanship	2
AG128 Animal Health & Nutrition	3
AG139 Farm Animal Reproduction	3
AG159 Equine Evaluation	1
AG165 Equine Evaluation II	1
AG225 Basic Equitation	3
AG226 Advanced Equitation	3
AG228 Focused Equitation	3



AGRICULTURE & INDUSTRIAL TECHNOLOGY

AGRICULTURE PRODUCTION & SERVICES

Associate of Applied Science - 62 Hours

Required General Education Courses 19 cr

Communication Requirement 6

CM101 English Composition I (3 cr) **or**
CM120 Survey of Technical Writing (3 cr)
CM115 Public Speaking (3 cr) **or**
CM240 Interpersonal Communications (3 cr)

Humanities Requirement (1 area required) 3

Art Humanities
Music Literature
Theatre Philosophy
Foreign Language History

Mathematics Requirement 3

MA110 Intermediate Algebra (3 cr) **or**
MA104 Technical Math (3 cr) **or**
Mathematics General Education Course

Natural Science Requirement 4

Science Gen Ed with Lab

Social/Behavioral Science Requirement 3

(1 area required)

Economics Anthropology
Psychology Political Science
Sociology Geography

Required Agriculture Courses 19 cr

AG101 Crop Science (4 cr) **or**
AG150 Introduction to Horticulture (4 cr) 4
AG115 Animal Science 3
AG130 Principles of Ag Economics 3
AG132 Agriculture Management 3
AG134 Agriculture Marketing 3
AG210 Agriculture Advertising and Design 3

Elective Courses 24 cr

Economics

AG217 Farm Computer Applications 3
AG220 Cooperative Ed Internship 1-6
BE100 Introduction to Business 3
BE160 Business Accounting 3
BE161 Accounting I 3
BE162 Accounting II 3
BE188 Principles of Advertising 3
MG102 Introduction to Entrepreneurship 3

Agronomy

AG101 Crop Science 4
AG102 Intro to Plant Pest Control 3
AG103 Plant & Soils for Crop Production 3
AG104 Soils 4
AG105 Range Management 3
AG106 Soil Classification 1
AG107 Agronomy Identification & Experimentation 1
AG112 Agronomy Identification & Experimentation II 1

AG150 Introduction to Horticulture 4
AG164 Advanced Soil Classification & Evaluation 1
AG220 Cooperative Ed Internship 1-6
BE152 Salesmanship 3
WE240 GIS/GPS 3

Animal Science

AG111 Animal Management 3
AG118 Principles of Livestock Selection I 2
AG119 Principles of Livestock Selection II 1
AG128 Animal Health and Nutrition 3
AG139 Farm Animal Reproduction 4
AG159 Equine Evaluation 1
AG166 Fundamentals of Livestock Nutrition 3
AG220 Cooperative Ed Internship 1-6

Equine Science

AG111 Animal Management 3
AG122 Introduction to Horsemanship 2
AG128 Animal Health & Nutrition 3
AG139 Farm Animal Reproduction 4
AG159 Equine Evaluation 1
AG165 Equine Evaluation II 1
AG166 Fundamentals of Livestock Nutrition 3
AG220 Cooperative Ed Internship 1-6
AG225 Basic Equitation 3
AG226 Advanced Equitation 3
AG228 Focused Equitation 3

Substitutions must be approved by the department chair.

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AGRICULTURE & INDUSTRIAL TECHNOLOGY

Associate of Science - 62 Hours

Required General Education Courses 32 - 34 cr

Communication Requirement	9
CM101 English Composition I (3 cr)	
CM102 English Composition II (3 cr)	
CM115 Public Speaking (3 cr) or	
CM240 Interpersonal Communications (3 cr)	
Humanities Requirement (2 areas required)	6
Art Humanities	
Music Literature	
Theatre Philosophy	
Foreign Language History	
Mathematics Requirement	3
Mathematics General Education Course	
Natural Science Requirement (2 areas required)	8-10
Physical Science (4-5 cr)	
Biological Science (4-5 cr)	
Social/Behavioral Science Requirement (2 areas required)	6
Economics Anthropology	
Psychology Political Science	
Sociology Geography	

Required Agriculture Courses 13 cr

AG101 Crop Science or	
AG150 Introduction to Horticulture	4
AG115 Animal Science	3
AG130 Principles of Ag Economics	3
AG210 Agriculture Advertising and Design	3

Elective Courses 11 cr

Agromony	
AG101 Crop Science	4
AG102 Intro to Plant Pest Control	3
AG103 Plant and Soils for Crop Prod.	3
AG104 Soils	4
AG105 Range Management	3
AG106 Soil Classification and Evaluation	1
AG107 Agronomy ID and Experimentation	1
AG108 Environmental Quality	3
AG109 Environmental Quality Lab	1
AG112 Agronomy ID and Experimentation II	1
AG150 Introduction to Horticulture	4
AG164 Advanced Soil Class and Evaluation	1
Animal Science	
AG111 Animal Management	3
AG118 Principles of Livestock Selection I	2
AG119 Principles of Livestock Selection II	1
AG123 Beef Science	3
AG128 Animal Health and Nutrition	3
AG139 Farm Animal Reproduction	4

Business

AG132 Agriculture Management	3
AG134 Agricultural Marketing	3
AG217 Farm Computer Application I	3
BE100 Introduction to Business	3
BE152 Salesmanship	3
BE153 Personal Finance	3
BE160 Business Accounting	3
BE161 Accounting I	3
BE162 Accounting II	3
BE188 Principles of Advertising	3
MG102 Introduction to Entrepreneurship	3

Communications

JN100 Mass Media in Society	3
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Equine

AG122 Introduction to Horsemanship	2
AG125 Horse Science	3
AG159 Equine Evaluation	1
AG165 Equine Evaluation II	1
AG166 Fundamentals of Livestock Nutrition	3
AG188 Varsity Sports: Equestrian/Rodeo I	1
AG189 Varsity Sports: Equestrian/Rodeo II	1
AG225 Basic Equitation	3
AG226 Advanced Equitation	3
AG228 Focused Equitation	3

Pre-Veterinarian

EC101 Principles of Macroeconomics	3
MA112 Trigonometry	3
MA114 Elementary Statistics	3
SC110 Principles of Biology I	5
SC111 Microbiology Lecture	3
SC112 Microbiology Lab	2
SC131 Chemistry I	5
SC132 Chemistry II	5
SC140 College Physics I	5
SC141 College Physics II	5
SC151 Principles of Biology II	5

Additional Electives

AG220 Cooperative Ed Internship	1-6
WE240 GIS/GPS	3

Open Electives 4-6 cr