

Agriculture and Forestry

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Agriculture (AA)

Degree Type: Associate of Arts Degree—University Parallel Major

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Transfer. The Associate of Arts degree, Agriculture concentration, is designed for students who plan to transfer to a four-year college or university to major in Agribusiness, Agriculture Education, Agronomy, Animal Science, and Horticulture.

FIRST YEAR

Fall Semester			Hours	
AGRI	120	Plant Science	4	
AGRI	130	Animal Science	3	
ENGL	111	College Writing	3	
MATH	163	College Algebra for Calculus	3	
SCOM	110	Public Speaking	3	
TOTAL HOURS			16	

Spring Semester			Hours	
AGRI	110	Soils & Soil Fertility	3	
AGRI	232	Advanced Animal Science	3	
BIOL	101	General Biology -or-	5	
BIOL	102	Environmental Science		
ENGL	112	Advanced College Writing	3	
GOVT	121	National and State Government	3	
TOTAL HOURS			17	

SECOND YEAR

Fall Semester			Hours	
AGRI	240	Agriculture Economics & Marketing	3	
CHEM	111	Introductory Chemistry – or - General Chemistry I	5	
CHEM	121			
HIST	111	American History to 1877 - or - American History since 1877	3	
HIST	112			
AGRI		Agriculture Elective	3	
		Humanities Gen Ed course	3	
TOTAL HOURS			17	

Spring Semester			Hours	
CPST	290	General Education Capstone	1	
HPER	110	Lifetime Wellness –or- Two P. E. Activity	2	
		Fine Arts Gen Ed course	3	
		General Education course	3	
		Humanities Gen Ed course	3	
		Social and Behavioral Sciences Gen Ed course	3	
TOTAL HOURS			15	

Agriculture Electives

AGRI	122	Natural Resources Management	3	
AGRI	172	Integrated Pest Management	3	
AGRI	234	Equine Science	3	
AGRI	260	General Horticulture	3	

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

One of the Life or Physical Science General Education courses must include a lab.

Electives should be selected from courses that are transfer eligible. Students are urged to consult the course requirements of the college or university to which transfer is contemplated.

Agriculture Systems (AAS)

Agriculture Science Option

Degree Type: Associate of Applied Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career & Technical Education. This program is for students who want to develop management and technical skills to enter agricultural related industry or production. The curriculum is constructed so that students may concentrate in one of three areas: Agribusiness, Agritechnology or Agriculture Science.

FIRST YEAR

Fall Semester				Hours
ENGL	111	College Writing		3
AGRI	120	Plant Science		4
AGRI	130	Animal Science		3
MATH	163	College Algebra for Calculus		3
AGRI	194	Career Portfolio Development		1
SCOM	110	Public Speaking		3
TOTAL HOURS				17

Spring Semester				Hours
AGRI	110	Soils & Soil Fertility		3
AGRI	232	Advanced Animal Science		3
GOVT	121	National & State Government		3
ENGL	112	Advanced College Writing		3
BIOL	100	Survey of Biology - or -		3
BIOL	101	General Biology		5
TOTAL HOURS				15-17

SECOND YEAR

Fall Semester				Hours
AGRI	240	Agriculture Economics & Marketing		3
AGRI		Agriculture Elective ⁽³⁾		3
CHEM	111	Introductory Chemistry ⁽¹⁾ - or - General Chemistry I ⁽¹⁾		5
CHEM	121			
HIST	111	American History to 1877 - or - American History since 1877		3
HIST	112			
Humanities & Fine Arts Elective ⁽²⁾				3
TOTAL HOURS				17

Spring Semester				Hours
AGRI		Agriculture Elective ⁽³⁾		3
Humanities & Fine Arts Elective ⁽²⁾				3
Humanities & Fine Arts Elective ⁽²⁾				3
AGRI	190	World Food & Society		3
HPER	110	Lifetime Wellness		2
CPST	290	General Education Capstone		1
Social & Behavioral Science Elective ⁽²⁾				3
TOTAL HOURS				18

Recommended Electives

AGRI	122	Natural Resources Management		3
AGRI	172	Integrated Pest Management		3
AGRI	234	Equine Science		3
AGRI	260	General Horticulture		3

⁽¹⁾Students should consult with an advisor for the appropriate biology and chemistry classes.

⁽²⁾Refer to the College catalog for the list of humanities and fine arts electives and social & behavior science electives.

⁽³⁾Students receiving an AAS degree may take more than the number of hours required.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Agriculture Systems (AAS)

Agribusiness Option

Degree Type: Associate of Applied Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career & Technical Education. This program is for students who want to develop management and technical skills to enter agricultural related industry or production. The curriculum is constructed so that students may concentrate in one of three areas: Agribusiness, Agritechnology or Agriculture Science.

FIRST YEAR

Fall Semester			Hours	
ENGL	111	College Writing	3	
AGRI	120	Plant Science	4	
AGRI	130	Animal Science	3	
ENGR MATH	106 103/153	Technical Math I ⁽¹⁾ - or - Intermediate Algebra or higher ⁽¹⁾	3-5	
AGRI	194	Career Development Portfolio	1	
		Business Elective ⁽³⁾	3	
TOTAL HOURS			17-19	

Spring Semester			Hours	
AGRI	110	Soils & Soil Fertility	3	
AGRI	232	Advanced Animal Science	3	
GOVT	121	National & State Government	3	
		Business Elective ⁽²⁾⁽³⁾	3	
		Business Elective ⁽²⁾⁽³⁾	3	
TOTAL HOURS			15	

SECOND YEAR

Fall Semester			Hours	
AGRI	122	Natural Resources Management	3	
AGRI	240	Agriculture Economics & Marketing	3	
AGRI	260	General Horticulture	3	
		Business Elective ⁽²⁾⁽³⁾	3	
		Business Elective ⁽²⁾⁽³⁾	3	
TOTAL HOURS			15	

Spring Semester			Hours	
AGRI	172	Integrated Pest Management	3	
AGRI	234	Equine Science	3	
AGRI	297	Agriculture Internship	6	
SCOM AGRI	110 100	Public Speaking - or - Introduction to Agribusiness Systems	3	
TOTAL HOURS			15	

⁽¹⁾Students planning to transfer to a four-year institution should substitute MATH 163.

⁽²⁾Choose courses with the following prefixes: ACCT, BUAD, BLAW, BMGT, ECON, MKTG, or AGRI 100.

⁽³⁾Students receiving an AAS degree may take more than the number of hours required.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Agriculture Systems (AAS)

Agritechnology Option

Degree Type: Associate of Applied Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career & Technical Education. This program is for students who want to develop management and technical skills to enter agricultural related industry or production. The curriculum is constructed so that students may concentrate in one of three areas: Agribusiness, Agritechnology or Agriculture Science.

FIRST YEAR

Fall Semester			Hours	
ENGL	111	College Writing	3	
AGRI	120	Plant Science	4	
AGRI	130	Animal Science	3	
ENGR MATH	106 103/153	Technical Math I ⁽¹⁾ Intermediate Algebra or higher ⁽¹⁾	3-4	
AGRI	194	Career Portfolio Development	1	
		Technology Elective ⁽²⁾⁽³⁾	3	
TOTAL HOURS			17-18	

Spring Semester			Hours	
AGRI	110	Soils & Soil Fertility	3	
AGRI	232	Advanced Animal Science	3	
GOVT	121	National & State Government	3	
		Technology Elective ⁽²⁾⁽³⁾	3	
		Technology Elective ⁽²⁾⁽³⁾	3	
TOTAL HOURS			15	

SECOND YEAR

Fall Semester			Hours	
AGRI	122	Natural Resources Management	3	
AGRI	240	Agriculture Economics & Marketing	3	
AGRI	260	General Horticulture	3	
		Technology Elective ⁽²⁾⁽³⁾	3	
		Technology Elective ⁽²⁾⁽³⁾	3	
TOTAL HOURS			15	

Spring Semester			Hours	
AGRI	172	Integrated Pest Management	3	
AGRI	234	Equine Science	3	
AGRI	297	Agriculture Internship	6	
SCOM AGRI	110 100	Public Speaking - or - Introduction to Agribusiness Systems	3	
TOTAL HOURS			15	

⁽¹⁾Students planning to transfer to a four-year institution should substitute MATH 163.

⁽²⁾Choose courses with the following prefixes: ENGR, ELEC, EOSH, GIS, MAFT, or AGRI 100.

⁽³⁾Students receiving an AAS degree may take more than the number of hours required.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Precision Agriculture (One-Year Certificate)

Certificate Type: One-Year

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career and Technical Education. This certificate prepares students to work with global positioning satellite (GPS) systems, geographic information system (GIS) software, automatic tractor guidance systems, variable rate chemical input applicators, surveying equipment, and related computer software. Students will learn through hands-on, real world applications.

Fall Semester			Hours	
AGPR	115	Introduction to Precision Agriculture	3	
AGPR	116	Computer Application to Agriculture	3	
AGRI	120	Plant Science	4	
ENGR MATH	106 103/153	Technical Math I ⁽¹⁾ - or – Intermediate Algebra or higher ⁽¹⁾	3-5	
GIS	120	Introduction to Geographic Information Systems	3	
TOTAL HOURS			16-18	

Spring Semester			Hours	
AGPR	215	Advanced Precision Agriculture	3	
AGPR	225	Agriculture Chemical Application	3	
AGRI	110	Soils and Fertility	3	
AGRI	172	Integrated Pest Management	3	
AGRI	270	Agricultural Systems Management	3	
GIS	140	Geographic Information Systems	3	
TOTAL HOURS			18	

⁽¹⁾Students planning to transfer to a four year institution should take MATH 103/153 or higher.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

[Gainful Employment Disclosure](#)

Environmental Horticulture (AA)

Degree Type: Associate of Arts Degree—University Parallel Major

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Transfer. The Associate of Arts degree, Environmental Horticulture concentration, is designed for students who plan to transfer to a four-year college or university to major in Agriculture, Plant Sciences, and Environmental Horticulture.

FIRST YEAR

Fall Semester			Hours
BIOL	101	General Biology ⁽¹⁾	5
ENGL	111	College Writing	3
GOVT	121	National and State Government	3
MATH	163	College Algebra for Calculus	3
SCOM	110	Public Speaking	3
TOTAL HOURS			17

Spring Semester			Hours
AGRI	120	Plant Science	4
AGRI	260	General Horticulture	3
CHEM	121	General Chemistry I	5
ENGL	112	Advanced College Writing	3
		Fine Arts Gen Ed course	3
TOTAL HOURS			18

SECOND YEAR

Fall Semester			Hours
AGRI	110	Soils and Soil Fertility	3
BIOL	211	General Botany	5
ENGL	221	World Literature to 1600 <i>-or-</i>	3
ENGL	222	World Literature since 1600	
HIST	111	American History to 1877 <i>-or-</i>	3
HIST	112	American History since 1877	
TOTAL HOURS			14

Spring Semester			Hours
CPST	290	General Education Capstone	1
ECON	211	Principles of Macroeconomics	3
HIST	121	World Civilization to the Renaissance <i>-or-</i>	3
HIST	122	World Civilization since the Renaissance	
HPER	110	Lifetime Wellness <i>-or-</i>	2
HPER		Two P.E. Activity	
		Elective	3
		Humanities Gen Ed course	3
TOTAL HOURS			15

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Electives should be selected from courses that are transfer eligible. Students are urged to consult the course requirements of the college or university to which transfer is contemplated.

Forestry (AS)

Degree Type: Associate of Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Transfer. The Associate of Science degree is designed for students who plan to transfer to the University of Missouri-Columbia and major in Forestry. The curriculum may be completed in two years by the full-time student.

FIRST YEAR

Fall Semester			Hours	
AGRI	120	Plant Science	4	
ENGL	111	College Writing	3	
FRST	117	Introduction to Dendrology	3	
GIS	120	Introduction to Geographic Information Systems	3	
MATH	163	College Algebra for Calculus	3	
TOTAL HOURS			16	

Spring Semester			Hours	
AGRI	110	Soils and Soil Fertility	3	
FRST	115	Forest Utilization	3	
FRST	119	Forest Measurements	3	
FRST	225	Wildland Fire Management	3	
MATH	223	Probability and Statistics	3	
PHYS	150	Environmental Geology	4	
TOTAL HOURS			19	

SECOND YEAR

Fall Semester			Hours	
AGRI	122	Natural Resources Management	3	
AGRI	240	Agriculture Economics and Marketing	3	
FRST	215	Forest Management Practices	3	
GIS	240	Applications in GIS	3	
PHYS	100	Survey of Physics	3	
		Applied Calculus (or higher) – or - Humanities Gen Ed course ⁽¹⁾ – or – Fine Arts Gen Ed course	3	
TOTAL HOURS			18	

Spring Semester			Hours	
AGRI	172	Integrated Pest Management	3	
CHEM	121	General Chemistry I	5	
FRST	217	Silviculture and Ecology	3	
GOVT	121	National and State Government	3	
		Humanities Gen Ed course ⁽¹⁾ – or – Fine Arts Gen Ed course	3	
TOTAL HOURS			17	

⁽¹⁾ Students planning to transfer to Missouri State University-Columbia must have a total of 9 credit hours of Humanities taken at Three Rivers College or MU.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Forestry Technology (AAS)

Geographical Information Systems Option

Degree Type: Associate of Applied Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career and Technical Education. This program is for students who want to develop management and technical skills to enter agricultural-related industry or production. The curriculum is constructed so that students may concentrate in one of two areas: **Forestry Technology – Surveying** or **Forestry Technology – Geographical Information Systems**.

FIRST YEAR

Fall Semester			Hours
ENGL	111	College Writing	3
GIS	120	Introduction to GIS	3
AGRI	120	Plant Science	4
ENGR MATH	106 103/153	Technical Math I ⁽¹⁾ Intermediate Algebra ⁽¹⁾ (or higher level MATH course)	3-4
AGRI	194	Career Portfolio Development	1
FRST	117	Introduction to Dendrology	3
TOTAL HOURS			17-18

Spring Semester			Hours
AGRI	110	Soils & Soil Fertility	3
GIS	110	Introduction to Mapping Principles	3
GIS		GIS Elective	3
FRST	115	Forest Utilization	3
FRST	119	Forest Measurements	3
FRST	225	Wildland Fire Management	3
TOTAL HOURS			18

SECOND YEAR

Fall Semester			Hours
AGRI	122	Natural Resources Management	3
AGRI	260	General Horticulture	3
GOVT	121	National and State Government	3
GIS		GIS Elective	3
FRST	215	Forest Management Practices	3
TOTAL HOURS			15

Spring Semester			Hours
AGRI	172	Integrated Pest Management –or– Agriculture Systems Management	3
AGRI	270		
AGRI	297	Agriculture Internship	6
SCOM	110	Public Speaking	3
FRST	217	Silviculture and Ecology	3
TOTAL HOURS			15

⁽¹⁾Students planning to transfer to a four-year institution should substitute MATH 163, MATH 164 or MATH 170.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

Forestry Technology (AAS)

Surveying Option

Degree Type: Associate of Applied Science Degree

Contact: Samantha Gerecke sgerecke@trcc.edu

Purpose: Career and Technical Education. This program is for students who want to develop management and technical skills to enter agricultural related industry or production. The curriculum is constructed so that students may concentrate in one of two areas: **Forestry Technology – Surveying** or **Forestry Technology – Geographical Information Systems**.

FIRST YEAR

Fall Semester			Hours	
ENGL	111	College Writing	3	
GIS	110 120	Introduction to Mapping Principles -or- Introduction to GIS	3	
AGRI	120	Plant Science	4	
ENGR MATH	106 103/153	Technical Math I ⁽¹⁾ - or - Intermediate Algebra ⁽¹⁾ (or higher level MATH course)	3-4	
AGRI	194	Career Portfolio Development	1	
FRST	117	Introduction to Dendrology	3	
TOTAL HOURS			17-18	

Spring Semester			Hours	
ENGR	107	Technical Math II ⁽¹⁾	3	
CIVL	116	Surveying I	3	
AGRI	110	Soils and Soil Fertility	3	
FRST	115	Forest Utilization	3	
FRST	119	Forest Measurements	3	
FRST	225	Wildland Fire Management	3	
TOTAL HOURS			18	

SECOND YEAR

Fall Semester			Hours	
AGRI	122	Natural Resources Management	3	
AGRI	260	General Horticulture	3	
GOVT	121	National and State Government	3	
CIVL	216	Surveying II	3	
FRST	215	Forest Management Practices	3	
TOTAL HOURS			15	

Spring Semester			Hours	
AGRI	172	Integrated Pest Management -or-	3	
AGRI	270	Agriculture Systems Management		
AGRI	297	Agriculture Internship	6	
SCOM	110	Public Speaking	3	
FRST	217	Silviculture and Ecology	3	
TOTAL HOURS			15	

⁽¹⁾Students planning to transfer to a four-year institution should substitute MATH 163, MATH 164 or MATH 170.

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.