



DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT

New Program Report

Date Submitted:

02/23/2023

Institution

State Technical College of Missouri

Site Information

Implementation Date:

8/20/2024 12:00:00 AM

Added Site(s):

Selected Site(s):

State Technical College of Missouri, One Technology Drive, Linn, MO, 65051

CIP Information

CIP Code:

010101

CIP Description:

A general program that focuses on modern business and economic principles involved in the organization, operation, and management of agricultural enterprises.

CIP Program Title:

Agricultural Business and Management, General

Institution Program Title:

Agriculture Operations

Degree Level/Type

Degree Level:

Associate Degree

Degree Type:

Associate in Applied Science

Options Added:

Collaborative Program:

N

Mode of Delivery

Current Mode of Delivery

Classroom

Student Preparation



DEPARTMENT OF
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New Program Report

Special Admissions Procedure or Student Qualifications required:

None, however to be automatically admitted into the program students must have the following:

- 1.) Earned a High School GPA of at least 3.0;
- 2.) 18 on the Reading ACT or 250 on the Accuplacer Next Gen Reading Test or 81 on the Accuplacer Reading Comprehension Test; and
- 3.) 18 on the English ACT or 251 on the Accuplacer Next Gen Writing Test or 81 on the Accuplacer Sentence Skills Comprehension Test.
- 4.) 18 on the Math ACT or 241 on the Accuplacer-Next Generation

Specific Population Characteristics to be served:

n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:

All faculty appointed to teach in technical programs are hired based on experience in the discipline associated with their course/workload. Faculty that have not yet earned a bachelor's degree will be required to do so within 5 years of hire date. In addition, faculty that will teach in the Agriculture Operations program will need to earn a DESE Continuous Career Education Certificate within 6 years of hire date.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:

95-100% of credit hours will be assigned to full time faculty.

Expectations for professional activities, special student contact, teaching/learning innovation:

Students are required to complete a 4-credit internship. All technical courses are experiential learning, project based that require students to apply content and skills learned in each course. Additionally, this course will include second-year experience that is a cumulation (capstone) of their course work.

Student Enrollment Projections Year One-Five

Year 1	Full Time: 50	Part Time: 0	
Year 2	Full Time: 90	Part Time: 0	
Year 3	Full Time: 90	Part Time: 0	Number of Graduates: 38
Year 4	Full Time: 115	Part Time: 0	
Year 5	Full Time: 135	Part Time: 0	Number of Graduates: 56

Percentage Statement:

n/a

Program Accreditation



DEPARTMENT OF
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WORKFORCE DEVELOPMENT

New Program Report

Institutional Plans for Accreditation:

State Tech will seek ATMAE accreditation for the AAS in Agriculture Operations program.

Timeline:

Fall 2025- October- State Tech will request for ATMAE accreditation for the Agriculture Operations Program; November- Faculty and appropriate administrators will completed required ATMAE training; Prepare self-study reports and supporting materials

Spring 2026- January- Dean and program faculty will prepare for visit; February- State Tech submits self-study reports and supporting materials; April- Dean and program faculty host evaluation team

Fall 2026- ATMAE Board of Accreditation holds hearings on candidate institutions; State Tech is notified that the Agriculture Operations program is ATMAE accredited.

Program Structure

Total Credits:

72

Residency Requirements:

25% of credits must be conferred by State Technical College of Missouri

General Education Total Credits:

16

Major Requirements Total Credits:

28

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
AGR 280	3	Agriculture Leadership and Communications
AGR 235	3	Plant and Soil Science
AGR 110	4	Agriculture Internship
BUS 122	3	Advanced Microsoft Excel
AGR 205	3	Animal Science
AGR 105	3	Agriculture Safety and Awareness
AGR 100	3	Introduction to Agribusiness Systems
AGR 150	3	Food Systems Management
AGR 210	3	Natural Resources and Conservation Management

Free Elective Credits:

0

Internship or other Capstone Experience:

All Agriculture Operations students are required to complete the AGR 110 4-credit internship as listed above. Taken in the summer, this internship will be overseen by an experienced skilled employee of a MO agriculture production facility. Students will be expected to be exposed and complete work tasks characteristic of professionals in this field.

Assurances



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WORKFORCE DEVELOPMENT

New Program Report

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

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Agriculture Operations, A.A.S.

Total Credits: 72

Core Requirements Total Credits: 28

Course Number	Credits	Course Title
<i>AGR 100</i>	<i>3</i>	<i>Introduction to Agribusiness Systems</i>
<i>AGR 105</i>	<i>3</i>	<i>Agriculture Safety and Awareness</i>
<i>AGR 110</i>	<i>4</i>	<i>Agriculture Internships</i>
<i>AGR 150</i>	<i>3</i>	<i>Food Systems Management</i>
<i>AGR 205</i>	<i>3</i>	<i>Animal Science</i>
<i>AGR 210</i>	<i>3</i>	<i>Natural Resources and Conservation Management</i>
<i>AGR 235</i>	<i>3</i>	<i>Plant and Soil Science</i>
<i>AGR 280</i>	<i>3</i>	<i>Agriculture Leadership and Communications</i>
<i>BUS 122</i>	<i>3</i>	<i>Advanced Microsoft Excel</i>

Option: Agriculture Production Total Credits: 24

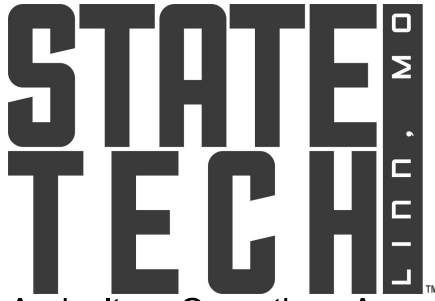
Course Number	Credits	Course Title
<i>AGR 120</i>	<i>3</i>	<i>Equipment and Operations</i>
<i>AGR 130</i>	<i>3</i>	<i>Animal Health and Nutrition</i>
<i>AGR 220</i>	<i>4</i>	<i>Agriculture Mechanics</i>
<i>AGR 230</i>	<i>3</i>	<i>Animal Production</i>
<i>AGR 240</i>	<i>3</i>	<i>Precision Agriculture Technology</i>
<i>AGR 260</i>	<i>3</i>	<i>Crop Science and Agronomy</i>
<i>PST 160</i>	<i>2</i>	<i>Two-Stroke & Four-Stroke Gas Engines</i>
<i>WLT 128</i>	<i>3</i>	<i>Basic Welding</i>

Option: Agriculture Business Total Credits: 24

Course Number	Credits	Course Title
<i>ACC 103</i>	<i>3</i>	<i>Accounting I</i>
<i>ACC 104</i>	<i>3</i>	<i>Accounting II</i>
<i>ACC 110</i>	<i>3</i>	<i>Accounting and Business Information Systems</i>
<i>BUS 254</i>	<i>3</i>	<i>Agribusiness Economics</i>
<i>BUS 258</i>	<i>3</i>	<i>Agribusiness Finance</i>
<i>BUS 262</i>	<i>3</i>	<i>Agribusiness Management</i>
<i>BUS 266</i>	<i>3</i>	<i>Marketing Agricultural Products</i>
<i>BUS 290</i>	<i>3</i>	<i>Essentials of Entrepreneurship</i>

Graduation Requirements Total Credits: 4

Course Number	Credits	Course Title
<i>CPP 101 OR</i>	<i>3</i>	<i>Introduction to Microcomputer Usage OR</i>
<i>CPP 102</i>		<i>Advanced Microcomputer Usage</i>
<i>COM 125</i>	<i>1</i>	<i>Job Search Strategies</i>



Agriculture Operations Associate of Applied Science Degree (AAS)

Catalog Program Description

This program prepares students to be successful in a variety of agriculture-related careers. The curriculum, designed to be hands-on learning intensive, will emphasize a comprehensive understanding and utilization of current and emerging practices in animal, plant, and soil science, crop management, and production strategies.

Students who complete the AAS Agriculture Operations, Agriculture Business Option will have a comprehensive understanding of agribusiness principles, identify the economic drivers that impact farm operations, and apply accounting rules and practices utilized in the agriculture industry. Students who complete the AAS Agriculture Operations, Agriculture Production Option will have a comprehensive understanding of mechanics, operations, precision agriculture, maintenance, and safety for food systems, livestock, and crop production management.

Students will receive Occupational Safety and Health Administration (OSHA) 10-hour training to prepare them for certification in requisite OSHA safety standards. Students in the Agriculture Business Option will have the opportunity to earn the Quick Books certification. Students in the Agriculture Production Option will have the opportunity to earn a Missouri Category 1a Pesticide Applicator's License.

Program Mission Statement

The agriculture program will support State Tech's mission of providing career-ready graduates in high-need in demand jobs.

Program Goals - The goals of the program are to provide the opportunity for students to develop:

Discern current and emerging practices in animal, plant, and soil science, crop management, and production strategies

Obtain skills needed to manage agricultural operations in a variety of settings

Identify procedures necessary to ensure sanitation, food quality, and compliance

Examine the relationship between plant physiology and soil fertility to crop yield

Apply techniques to assist in the collection of field data

Find and research relevant government programs that provide resources that assist agricultural operations to promote natural resource stewardship

Curriculum Requirements

<i>Total Program Credits</i>		72.0
<i>Core Curriculum</i>		28.0
AGR 100	Introduction to Agribusiness Systems	3.0
AGR 105	Agriculture Safety and Awareness	3.0
AGR 110	Agriculture Internship	4.0
AGR 150	Food Systems Management	3.0
AGR 205	Animal Science	3.0
AGR 210	Natural Resources and Conservation Management	3.0
AGR 235	Plant and Soil Science	3.0
AGR 280	Agriculture Leadership and Communications	3.0
BUS 122	Advanced Microsoft Excel	3.0
<i>General Education Requirements</i>		19.0
Refer to the General Education Courses in the College Catalog.		
Written Communication General Education Requirement		3.0
Oral Communication General Education Requirement		3.0
Mathematics General Education Requirement		3.0
Natural Science General Education Requirement		4.0
Social and Behavior Science General Education Requirement		3.0
Technical Literacy General Education Requirement		3.0
<i>Program Requirements</i>		24.0
<i>Agriculture Production</i>		24.0
AGR 120	Equipment and Operations	3.0
AGR 130	Animal Health and Nutrition	3.0
AGR 220	Agricultural Mechanics	4.0
AGR 230	Animal Reproduction	3.0
AGR 240	Precision Agriculture Technology	3.0
AGR 260	Crop Science and Agronomy	3.0
PST 150	Two-Stroke & Four-Stroke Gas Engines	2.0
WLT 128	Basic Welding	3.0
OR		
<i>Agriculture Business</i>		24.0
ACC 103	Accounting I	3.0
ACC 104	Accounting II	3.0
ACC 110	Accounting and Business Information Systems	3.0
(same as BUS 108)		
BUS 254	Agribusiness Economics	3.0
BUS 258	Agribusiness Finance	3.0
BUS 262	Agribusiness Management	3.0
BUS 266	Marketing Agricultural Products	3.0
BUS 290	Essentials of Entrepreneurship	3.0
(same as BUS 290)		

Graduation Requirements 1.0

COM 125 Job Search Strategies 1.0

It is a graduation requirement of the Agriculture Operations (AGR) program for students to earn a grade of "C" or better in all "Core Curriculum" and "Program Requirements" courses.

Total: 72.0