

Agricultural Operations, AAS

Award Granted: Associate in Applied Science in Agricultural Operations
Credits/Contacts Required: **61/62**

Major code: 03/304
CIP Code: 010102

Description

The primary purpose of the AAS in Agricultural Operations is to develop technically prepared, career-ready graduates in agricultural operations. Upon completion, students would also receive a Certificate in Agricultural Operations through Michigan State University. Through a consortium between Bay College and Michigan State University's Institute of Agricultural Technology, the program goal is to engage students in intensive and practical skill development that will serve to address the needs of the agricultural workforce.

General Education Requirements (Min 17 Credits)

- ENGL 101 - Rhetoric & Composition **Credits: 3**
- MATH 105 - Intermediate Algebra **Credits: 4 ***
- XXXX-xxx - Humanities Elective **Credits: 3**
- BIOL 103 - Essential Biology **Credits: 4 OR**
- BIOL 110 - Evolution & Diversity **Credits: 4**
- ECON 131 - Macroeconomics **Credits: 3 OR**
ECON 132 - Microeconomics **Credits: 3**

Program Requirements (Min 10 credits)

In consultation with the program coordinator, select a minimum of 10 credits from the following courses. Note that only one of the communications options can count toward the required 10 credits.

- ENGL 102 - Research Writing **Credits: 3 OR**
- ENGL 145 - Technical and Report Writing **Credits: 3**
OR
- COMM 103 - Interpersonal Communication **Credits: 3**
OR
- COMM 104 - Public Speaking **Credits: 3**
- ACCT 100 - Practical Accounting **Credits: 4**
- BIOL 107 - Environmental Science **Credits: 3**
- BIOL 108 - Environmental Science Lab **Credit: 1**
- BIOL 112 - Cells & Molecules **Credits: 4**
- BIOL 202 - Plants & Animals **Credits: 4**
- BUSN 160 - Introduction to Business **Credits: 3**
- BUSN 195 - Business Communications **Credits: 3**
- BUSN 253 - Marketing **Credits: 3**
- CHEM 102 - Introduction to Chemistry **Credits: 4**
- CHEM 104 - Introduction to Chemistry Lab **Credits: 1**
- CIS 101 - Computer Concepts & Apps **Credits: 4**
- CIS 121 - Microsoft Excel **Credit: 1**
- POLI 262 - State & Local Government **Credits: 3**
- SPAN 101 - Spanish I **Credits: 3**
- WELD 110 - Metal Processing Fundamentals **Credits: 3**
- WELD 120 - Arc Welding **Credits: 4**

MSU Program Requirements

- AE 131 - Agricultural Water Resource Management **Credits: 3**
- AE 143 - Application of Precision Agriculture Technologies **Credits: 3**
- AFRE 130 - Farm Management I **Credits: 3**
- AT 100 – Agricultural Technology Career Seminar **Credit: 1**
- AT 202 - Agricultural Regulation, Compliance, and Safety **Credits: 3**
- AT 293 - Professional Internship in Agricultural Technology **Credits: 3-6**
- CSS 101 - Introduction to Crop Science **Credits: 3**
- CSS 126 - Intro to Weed Management **Credits: 2**
- CSS 203 - World of Soils **Credits: 2**
- ENT 110 - Applied Entomology of Economic Plants **Credits: 3**
- PLP 105 - Fundamentals of Applied Plant Pathology **Credits: 2**
- PLP 105L - Fundamentals of Applied Plant Pathology Lab **Credit: 1**

Suggested Sequence Per Semester

First Semester

- ENGL 101 - Rhetoric & Composition **Credits: 3**
- MATH 105 - Intermediate Algebra **Credits: 4**
- AT 100 – Agricultural Technology Career Seminar **Credit(s): 1-3**
- CSS 203 - World of Soils **Credits: 2**
- AT 202 - Agricultural Regulation, Compliance, and Safety **Credits: 3**

First Semester Total - Credit(s): 13

Second Semester

- ECON 131 - Macroeconomics **Credits: 3 OR**
- ECON 132 - Microeconomics **Credits: 3**
- XXXX-xxx - Humanities Elective **Credits: 3**
- AFRE 130 - Farm Management I **Credits: 3**
- PLP 105 - Fundamentals of Applied Plant Pathology **Credits: 2**
- PLP 105L - Fundamentals of Applied Plant Pathology Lab **Credit: 1**
- CSS 101 - Introduction to Crop Science **Credit(s): 3**

Second Semester Total - Credit(s): 14

Third Semester

- Program Required Course(s) **Credits: 3-4**
- AT 293 - Professional Internship in Agricultural Technology **Credits: 3-6**

Third Semester Total - Credit(s): 6-7

Fourth Semester

- BIOL 103 - Essential Biology **Credits: 4**
- BIOL 110 - Evolution & Diversity **Credits: 4**
- Program Required Course(s) **Credit(s): Vary**
- MSU Elective Course **Credit(s): Vary**
- ENT 110 - Applied Entomology of Economic Plants **Credits: 3**

Fourth Semester Total - Credit(s): 13+

Fifth Semester

- Program Required Course(s) **Credits(s): 3-4**
- AE 131 - Agricultural Water Resource Management **Credit(s): 3**
- AE 143 - Application of Precision Agriculture Technologies **Credit(s): 3**
- CSS 126 - Introduction to Weed Management **Credit(s): 2**
- MSU Elective Course **Credits(s): 3**

Fifth Semester Total - Credit(s): 14-15

NOTES:

* Other mathematics credits may be accepted if higher level

** Student must also complete a minimum of 6 elective credits in the College of Agriculture and Natural Science Resources within the following disciplines: CSS, HRT, ANS, ABM, AT or AE as approved by the program coordinator in the institute of Agricultural Technology.