# **Agricultural Operations, AAS**

Associate in Applied Science in Agricultural Operations

Award Granted Upon Completion: Credits/Contacts Required: 61/62 Major code: 03/304

#### CIP Code: 010102

2023-2024 Catalog

## 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 Credit(s): 3 •
- MATH 105 Intermediate Algebra Credit(s): 4 \*
- XXXX-xxx Humanities Elective Credit(s): 3 .
- BIOL 103 Essential Biology Credit(s): 4 OR

#### Program Requirements (Min 10 credits)

- BIOL 110 Evolution & Diversity Credit(s): 4 •
- ECON 131 Macroeconomics Credit(s): 3 OR •
- ECON 132 Microeconomics Credit(s): 3

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 Credit(s): 3 OR ٠
- ENGL 145 Technical and Report Writing Credit(s): 3 OR •
- COMM 103 Interpersonal Communication Credit(s): 3 OR •
- COMM 104 Public Speaking Credit(s): 3 •
- ACCT 100 - Practical Accounting Credit(s): 4
- BIOL 107 Environmental Science Credit(s): 3 •
- BIOL 108 Environmental Science Lab Credit(s): 1 .
- BIOL 112 Cells & Molecules Credit(s): 4 •
- BIOL 202 Plants & Animals Credit(s): 4 .
- BUSN 160 Introduction to Business Credit(s): 3 •

### MSU Program Requirements

- AE 131 Agricultural Water Resource Management Credit(s): 3
- AE 143 Application of Precision Agriculture Technologies . Credit(s): 3
- AFRE 130 Farm Management I Credit(s): 3
- AT 100 Agricultural Technology Career Seminar Credit(s): 1 .
- AT 202 Agricultural Regulation, Compliance, and Safety Credit(s): 3
- AT 293 Professional Internship in Agricultural Technology Credit(s): 3-6

#### Suggested Sequence Per Semester

#### **First Semester**

- AT 100 Agricultural Technology Career Seminar Credit(s): 1
- AT 202 Agricultural Regulation, Compliance, and Safety Credit(s): 3
- CSS 203 World of Soils Credit(s): 2
- ENGL 101 Rhetoric & Composition Credit(s): 3
- MATH 105 Intermediate Algebra Credit(s): 4 First Semester Total - Credit(s): 13

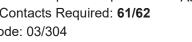
#### Second Semester

- ECON 131 Macroeconomics Credit(s): 3 OR
- ECON 132 Microeconomics Credit(s): 3
- XXXX-xxx Humanities Elective Credit(s): 3

- BUSN 195 Business Communications Credit(s): 3 •
- BUSN 253 Marketing Credit(s): 3 •
- CHEM 102 Introduction to Chemistry Credit(s): 4 •
- CHEM 104 Introduction to Chemistry Lab Credit(s): 1
- CIS 101 - Computer Concepts & Applications Credit(s): 4
- CIS 121 Microsoft Excel Credit(s): 1 •
- POLI 262 State & Local Government Credit(s): 3 •
- SPAN 101 Spanish I Credit(s): 3 •
- WELD 110 - Metal Processing Fundamentals Credit(s): 3
- . WELD 120 - Arc Welding Credit(s): 4
- CSS 101 Introduction to Crop Science Credit(s): 3
- CSS 126 Introduction to Weed Management Credit(s): 2
- CSS 203 - World of Soils Credit(s): 2
- ENT 110 Applied Entomology of Economic Plants Credit(s): •
- PLP 105 Fundamentals of Applied Plant Pathology Credit(s): 1
- PLP 105L Fundamentals of Applied Plant Pathology Lab • Credit(s): 1
- AFRE 130 Farm Management I Credit(s): 3
- CSS 101 Introduction to Crop Science Credit(s): 3 •
- PLP 105 Fundamentals of Applied Plant Pathology Credit(s): •
- PLP 105L - Fundamentals of Applied Plant Pathology Lab Credit(s): 1 Second Semester Total - Credit(s): 14

#### Third Semester

- Program Required Course(s) Credits(s): 3-4 .
- AT 293 Professional Internship in Agricultural Technology Credit(s): 3-6 Third Semester Total - Credit(s): 6-10



Fourth Semester

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

#### Fourth Semester Total - Credit(s): 13+

NOTES:

\* Other mathematics credits may be accepted if higher level

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

\*\* 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.