

# AGRICULTURAL OPERATIONS - MSU - APPLIED

Students seeking an Associates of Applied Science in Agricultural Operations can move directly in the workforce or continue on to further studies. Students will take courses concurrently from Glen Oaks and Michigan State University Institute of Agricultural Technology to earn the AAS degree and certificate. Students will study in such fields as soil and water usage, plant nutrients, crop disease and pest management, natural resource and land management, emerging technologies, and regulations. Students are required to meet with advisors from Glen Oaks and IAT program coordinator on course selection.

## Program Outcomes

1. Think critically.
2. Communicate effectively.
3. Exhibit information competency.
4. Recognize diverse perspectives.

## Requirements

Code	Title	Credits
Students must earn a minimum grade of 2.0 in all Glen Oaks Community College courses that are to be transferred to MSU for completion of a certificate program.		
<b>English Composition</b>		<b>3.00</b>
ENG-121	ENGLISH COMPOSITION I	
<b>Communications</b>		<b>3.00</b>
COM-110	INTERPERSONAL COMMUNICATIONS	
	or COM-150 PUBLIC SPEAKING	
<b>Mathematics</b>		<b>3.00</b>
MATH-109	MATH FOR TECHNICIANS I	
<b>Humanities or Fine Arts/Social Sciences</b>		<b>3.00</b>
Complete one Humanities or Fine Arts or Social Sciences course from MTA Course listing <sup>2</sup>		
<b>General Education</b>		<b>3.00</b>
Complete 3 additional general education credits to meet a minimum of 15		
<b>Elective Courses</b>		<b>11.00</b>
Select 11 elective credits as needed to reach 26 total GOCC credit hours		
<b>Total Credits</b>		<b>26.00</b>

<sup>1</sup> Course has prerequisite(s).

<sup>2</sup> Michigan Transfer Agreement (MTA) Course Listings (<https://catalog.glenoaks.edu/earning-your-degree/student-learning-outcomes-MTA/>)

**Note:** No courses under 100 level are accepted toward this degree.

## Suggested Electives

Code	Title	Credits
ACCT Courses		2.00
AGT-101	HYDRAULIC THEORY & OPERATION	2.00
AGT-102	PRODUCTION AGRICULTURE	2.00

AGT-104	VEHICLE/EQUIPMENT ELEC FUNDAMENTALS	3.00
AGT-109	HEATING/VENTING/AC SYSTEMS	2.00
AGT-116	COMBINE MAINTENANCE & REPAIR	3.00
ART-115	INTRODUCTION TO GRAPHIC DESIGN	3.00
ART-116	COLOR THEORY FOR GRAPHIC DESIGN	3.00
ART-170	IMAGE MANIPULATION: PHOTOSHOP	3.00
ART-172	DIGITAL ILLUSTRATION <sup>1</sup>	3.00
ART-274	TYPOGRAPHY <sup>1</sup>	3.00
ART-276	ADVERTISING DESIGN <sup>1</sup>	3.00
BUS-104	INTRO TO BUSINESS <sup>1</sup>	4.00
COM Courses		3.00

<sup>1</sup> Course has prerequisite(s).

## MSU IAT Requirements

Code	Title	Credits
<b>MSU IAT REQUIREMENTS</b>		
AFRE 130	FARM MANAGEMENT I	3.00
AE 131	AGRICULTURAL WATER RESOURCE MANAGEMENT	3.00
AE 143	APPLICATION OF PRECISION AG TECHNOLOGIES	3.00
AT 100	CAREER DEVELOPMENT IN AGRICULTURAL TECHNOLOGY	1.00
AT 202	AGRICULTURAL REGULATION, COMPLIANCE AND SAFETY	3.00
AT 293	PROFESSIONAL INTERNSHIP IN AGRICULTURAL TECHNOLOGY	3.00
CSS 101	INTRODUCTION TO CROP SCIENCE	3.00
CSS 126	INTRODUCTION TO WEED MANAGEMENT	2.00
CSS 203	WORLD OF SOILS	2.00
ENT 110	APPLIED ENTOMOLOGY OF ECONOMIC PLANTS	3.00
PLP 105	FUNDAMENTALS OF APPLIED PLANT PATHOLOGY	1.00
PLP 105L	FUNDAMENTALS OF APPLIED PLANT PATHOLOGY LABORATORIES	1.00
MSU ELECTIVES		6.00
<b>Total Credits</b>		<b>34.00</b>

## Total Credit Hours: 60 credits

**MSU Courses are billed through MSU.**

GOCC Tuition is calculated on contact hours.

Current/Updated: 07/01/2023

Course	Title	Credits
<b>Fall 1</b>		
GOCC Courses		
COM-110 or COM-150	INTERPERSONAL COMMUNICATIONS or PUBLIC SPEAKING	3.00
ENG-121	ENGLISH COMPOSITION I	3.00
GOCC ELECTIVE COURSE		3.00
MSU COURSES		
AT 100	CAREER DEVELOPMENT IN AGRICULTURAL TECHNOLOGY	1.00
AT 202	AGRICULTURAL REGULATION, COMPLIANCE AND SAFETY COURSE	3.00
CSS 203	WORLD OF SOILS	2.00
		<b>Credits 15.00</b>
<b>Winter 1</b>		
GOCC ELECTIVE COURSES		5.00
MSU COURSES		
AFRE 130	FARM MANAGEMENT I	3.00
AE 131	AGRICULTURAL WATER RESOURCE MANAGEMENT	3.00

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CSS 101 INTRODUCTION TO CROP SCIENCE	3.00
<b>Credits</b>	<b>14.00</b>
<b>Summer 1</b>	
MSU COURSE	
AT 293 PROFESSIONAL INTERNSHIP IN AGRICULTURAL TECHNOLOGY	3.00
<b>Credits</b>	<b>3.00</b>
<b>Fall 2</b>	
GOCC COURSES	
MATH-109 MATH FOR TECHNICIANS I	3.00
GOCC ELECTIVE COURSE	3.00
MSU COURSES	
CSS 126 INTRODUCTION TO WEED MANAGEMENT	2.00
ENT 110 APPLIED ENTOMOLOGY OF ECONOMIC PLANTS	3.00
MSU ELECTIVE COURSES FROM THE COLLEGE OF AGRICULTURE AND NATURAL RESOURCES	3.00
<b>Credits</b>	<b>14.00</b>
<b>Winter 2</b>	
GOCC COURSES	
GEN EDU ELECTIVE	3.00
HUMANITIES or SOCIAL SCIENCE ELECTIVE	3.00
MSU COURSES	
AE 143 APPLICATION OF PRECISION AG TECHNOLOGIES	3.00
ELEC MSU FROM THE COLLEGE OF AGRICULTURE AND NATURAL RESOURCES	3.00
PLP 105 FUNDAMENTALS OF APPLIED PLANT PATHOLOGY	1.00
PLP 105L FUNDAMENTALS OF APPLIED PLANT PATHOLOGY LABORATORIES	1.00
<b>Credits</b>	<b>14.00</b>
<b>Total Credits</b>	<b>60.00</b>