

ABM	130	<b><u>Farm Management I</u></b> General farm management including record keeping, income tax management, farm finance, and operational management of agricultural resources.	Face to face	Fall	3 credits
AE	131	<b><u>Agricultural Water Resource Management</u></b> A basic knowledge, skills and tools course on water resources use and protection in agricultural production. Online course. Field trip required.	Hybrid	Spring	3 credits
AE	143	<b><u>Application of Precision Agriculture Technologies</u></b> Practical application of the use of the tools of precision farming with a focus on widely adopted guidance, monitoring and global positioning systems. Online course. Field trip required.	Hybrid	Spring	3 credits
AT	202	<b><u>Agricultural Regulation, Compliance and Safety</u></b> Regulation, laws, compliance and safety as it relates to Michigan's agricultural sector. Michigan Occupational Safety and Health Administration safety standards, food safety, water protection, pesticide and fertilizer application and voluntary programs for agricultural producers. Preparation for the pesticide core exam.	Online	Fall	3 credits
AT	293	<b><u>Professional Internship in Agricultural Technology</u></b> Supervised professional experience in agencies, business and industry related to a student's major field of study.			3 credits
CSS	101	<b><u>Introduction to Crop Science</u></b> Principles of crop production including crop and soil management and improvement. International and sustainable agriculture. Water quality issues.	Online	Spring	3 credits
CSS	105	<b><u>Agricultural Industries Seminar</u></b> Preparation for academic and professional success. Introduction to opportunities in the agriculture industry.	Face to face	Fall	1 credit
CSS	135	<b><u>Crop Scouting and Investigations</u></b> Crop production, pest scouting and other production problems, and field diagnoses. Interaction with agriculture clientele. Offered first ten weeks of semester.	Online	Spring	3 credits
CSS	143	<b><u>Intro to Soil Science</u></b> Soil and its impact on plant growth, plant and water relations, drainage, nutrients, soil as a resource, and erosion control techniques.	Online	Fall & Spring	2 credits
ENT	110	<b><u>Applied Entomology of Economic Plants</u></b> Arthropod pests of horticultural plants and turf grasses. Groups and species of economic importance to Michigan.	Face to face	Fall	3 credits
PLP	105	<b><u>Fundamentals of Applied Plant Pathology</u></b> Diseases of major agronomic and horticultural plants. Disease management. Offered first ten weeks of the semester	Face to face	Fall	2 credits

Michigan State University reserves the right to make changes in its programs, policies, rules, regulations, procedures, fees, tuition, organizational structure, faculty, and staff through the appropriate university processes. Every effort will be made to give as much advance notice as possible in the event of such changes.

MSU is an affirmative-action, equal-opportunity employer.

03/2017

# Agricultural Operations

## A unique partnership with Kellogg Community College

The Institute of Agricultural Technology (IAT) has partnered with Kellogg Community College (KCC) in Battle Creek, Mich. to offer a unique way to help students earn an MSU Certificate while also working toward their Associate of General Studies (AGS) degree. This unique partnership allows students to access resources in academics, financial aid, career services, and student life at Michigan State University and Kellogg Community College.

**For more information contact:**

**Dr. Randy Showerman**  
**Director**  
**MSU Institute of Agricultural Technology**  
**517-355-0190, showerma@msu.edu**



Agricultural Operations

55 Total Credits for Certificate

### Required MSU Courses

#### 34 credits

AT 293	Professional Internship in Agricultural Technology	3 cr.
ABM 130	Farm Management I	3 cr.
AE 131	Agricultural Water Resource Management	3 cr.
AE 143	Application of Precision Agriculture Technologies	3 cr.
AT 202	Agricultural Regulation, Compliance and Safety	3 cr.
CSS 101	Introduction to Crop Science	3 cr.
CSS 105	Agricultural Industries Seminar	1 cr.
CSS 135	Crop Scouting and Investigations	3 cr.
CSS 143	Introduction to Soil Science	2 cr.
ENT 110	Applied Entomology of Economic Plants	3 cr.
PLP 105	Plant Diseases and Their Pathogens	2 cr.
	MSU approved electives	5 cr.

**In addition to the MSU courses listed above, completion of 21 credits from Kellogg Community College approved by the Program Coordinator is required to earn the MSU Certificate. All of these courses will count toward the KCC Associate of General Studies degree.**

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