

# Agricultural Systems Management

**A**gricultural systems management (ASM) pursue an Associate of Science degree that prepared them to enroll in a Bachelor of Science degree program at The Ohio State University.

Students in this program take courses in the fundamentals of agricultural machinery and machinery management, soil and water systems, and agricultural buildings and facilities. Supporting these areas are specialized classes in small engines, metal fabrication, and wood and concrete construction.

Graduates of the ASM program have developed the technical and managerial skills necessary to fill a wide range of positions within companies and agencies providing inputs and support to agricultural production.

## Career Prospects

ASM graduates are often employed by companies providing physical materials and services for agricultural production. They are employable as territory managers, engineering technicians, sales managers, or chief inspectors. They can work as production managers, sales managers, grain merchants, and plant supervisors for companies and agencies handling, storing, processing, and distributing agricultural products and foods. Other employment opportunities include extension associates, reclamation inspectors, soil conservationists, or appraisers for companies and agencies providing materials and services for rural and urban communities. Starting salaries for ASM majors range from \$35,000 to over \$40,000, depending on the candidate's qualifications and experience.

## At Ohio State CFAES

All ASM students are required to complete at least one ten-week internship experience to gain practical, hands-on experience to augment their on-campus course work. The College of Food, Agricultural, and Environmental Sciences' Career Services Office can assist students in locating internship opportunities through the Hire-a-buckeye web site, [cfaes.osu.edu/career](http://cfaes.osu.edu/career), and through career fairs held during autumn and winter quarters. Many internships are found through networking.

## Sample Courses

**Introduction to Soil Science**  
**Building Science: Methods and Materials**  
**Introduction to Animal Sciences**  
**Drafting and Computer-Aided Design**  
**Managerial Records and Analysis**  
**Welding Technology**  
**Small Engines Basics**  
**Soil and Water Conservation Systems**  
**Principles of Farm Business Management**

## Specializations with the Degree

### Soil & Water

Topics covered within this major include surveying, hydrology, and the impact of alternative uses of land. You'll also learn how to plan, select and manage drainage and irrigation systems in an effort to reduce soil erosion and to improve water quality.

### Structures & Facilities

Students interested in structures and facilities learn the basic principles of ventilation and insulation, wood and concrete construction, crop storage, greenhouses, waste management, and energy.

### Power & Machinery

Instructors of power and machinery systems teach students basic principles, selection, calibration, performance evaluation, power requirements and the economics of various agricultural machines. Additional topics include hydraulic and electronic systems. Other topics include recent advances in the developing area of precision agriculture, like soil and plant sensors, yield monitors, GPS, GIS, and mapping, variable rate controllers and vehicle guidance.