

Agricultural Systems Management

Agricultural Systems Management (ASM) is the study of the application, operation, and management of modern agricultural systems, including agricultural equipment, buildings, materials handling, natural resources, and processing elements. 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, wood and concrete construction, electrical systems, and safety and health. Systems sources apply the fundamental principles to open-ended problems in each of these areas. 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.

Pursuing Agricultural Systems Management at Ohio State

The criteria for admission to the ASM program and the college include completion of the applicant's high school college preparatory program, superior class rank and/or grade point average, and acceptable performance on either the ACT or SAT. All freshmen applicants are considered within a competitive admission process for the Columbus campus. Admitted students who indicate their major as ASM on their application are directly enrolled in the College of Food, Agricultural, and Environmental Sciences. ASM students receive their academic advising from an ASM faculty member and the Academic Program Coordinator for the Department of Food, Agricultural, and Biological Engineering.

During the first quarter at Ohio State, ASM students are required to take a survey course designed to teach academic policies and procedures, university resources and services, career and advanced study opportunities in agriculture, academic requirements, and study skills helpful to new members of the university community.

The student's first academic year at Ohio State will also include courses that meet the General Education Curriculum (GEC) requirements, a body of courses designed to ensure that each student becomes acquainted with basic areas of academic study. Credit hours must be completed from the

following GEC areas before graduation: writing and related skills, social sciences, arts and humanities, diversity, and contemporary issues.

Courses in the ASM major begin with the principles of physical structures and systems, followed by core courses where the fundamental approaches of managing a variety of agricultural situations are studied. Professional support courses in computer graphics and applications are also required, and every student is required to complete one of the many minors available at Ohio State. A minor in agricultural business is highly recommended for students majoring in ASM. A minimum of 183 quarter credit hours must be earned to receive a Bachelor of Science in Agriculture degree with an ASM major from the College of Food, Agricultural, and Environmental Sciences.

Co-Curricular Opportunities

The Agricultural Systems Management Student Club offers students many opportunities to participate in professional and social activities with their peers both locally and nationally. Club meetings may feature guest speakers, industry-oriented programs, and/or social and recreational activities.

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 Hireabuckeye web site, cfaes.osu.edu/career, and through career fairs held during autumn and winter quarters.

Departmental scholarships up to \$1,000 annually, are awarded to students on the basis of academic achievement, leadership qualities and experience, special interests noted on their scholarship application, home location, or for international study/research.

ASM courses are taught in the Agricultural Engineering Building with 97,000 square feet of classrooms, teaching and research laboratories, student activity areas, computer facilities, and faculty and administrative offices.

For more information, check these web sites:

Food, Agricultural, and Biological Engineering:

fabe.osu.edu

Ohio State: osu.edu

College of Food, Agriculture, and Environmental Sciences:

cfaes.osu.edu

Admissions: undergrad.osu.edu

Curriculum Sample

This is a sample list of classes a student will take to pursue the ASM major. Since university students need more than a specific education in a narrow field, they will also take classes to complete the General Education Curriculum (GEC). The GEC allows students to develop the fundamental skills essential for collegiate success across major programs. Course options satisfying the GEC come from a variety of academic areas of study and allow students to tailor their GEC toward their own interests. Note: This sample curriculum represents one of several possible paths to a degree in Agricultural Systems Management. Consult the college web site, fabe.osu.edu, for details on each specific track.

Freshman Year:

Agriculture Survey	1
ASM Core	8
Biological sciences	5
GEC (science)	5
Economics	5
Engineering Graphics	3
GEC (English composition)	5
GEC (social science)	5
Math	4
Physics	5
Total hours	46

Sophomore Year:

ASM Core	10
Computer Applications for Agriculture	4
Data Analysis	5
Electives	4
GEC (second writing course)	5
Minor	8
Oral Communications	5
GEC (science)	5
Total hours	46

Junior Year:

ASM Core	16
Electives	6
GEC (literature)	5
GEC (history)	5
GEC (natural science)	5
Minor	8
Total hours	45

Senior Year:

ASM Core and professional support sources	15
Electives	8
GEC (contemporary issues)	5
GEC (social science)	5
GEC (visual and performing arts)	5
Internship	3
Minor	5
Total hours	46

Honor & Scholars Programs

Incoming first year students in the top 10% of their high school graduating class with an ACT composite of 30 or higher, or combined SAT Critical Reading and Math scores of 1340 or higher, are offered admission to the University Honors program. The honors program is designed to challenge superior ability students. It is based on the concepts of flexibility in course selection, accelerated or advanced classes, and an honors research or scholarly project. Honors program students are given priority scheduling. Course flexibility enables the honors student to achieve breadth and depth in their academic program and to define academic growth in a more personal way. Students completing honors courses have these designated on their transcripts with an "H" before the course, and those who complete the honors program satisfactorily, meeting all requirements, will graduate "with distinction" in their area of specialization. Already enrolled students may also apply to the Honors program by submitting an Individualized Honors Curriculum after earning at least a 3.5 CPHR after 30 hours at Ohio State. Student must maintain a minimum 3.5 CPHR to remain in the honors program.

Those upper level students in the Agricultural Systems Management program who maintain a record of superior academic achievement at Ohio State are invited to become members of Alpha Mu, the ASM national honorary student organization. Learn more at fabe.osu.edu/acsm/alpha_mu.htm.

Career Prospects in Agricultural Systems Management

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.

Revised July 2007. For the most up-to-date information on the agricultural systems management program, please visit fabe.osu.edu.

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