

<b>Fiscal Unit/Academic Org</b>	Food, Agric & Biological Eng - D1123
<b>Administering College/Academic Group</b>	Food, Agric & Environ Science
<b>Co-administering College/Academic Group</b>	
<b>Semester Conversion Designation</b>	Re-envisioned with significant changes to program goals and/or curricular requirements (e.g., degree/major name changes, changes in program goals, changes in core requirements, structural changes to tracks/options/courses)
<b>Current Program/Plan Name</b>	Agricultural Systems Management Minor
<b>Proposed Program/Plan Name</b>	Agricultural Systems Management Minor
<b>Program/Plan Code Abbreviation</b>	AGMSYS-MN
<b>Current Degree Title</b>	

### Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		22	14.7	13	1.7
Required credit hours offered by the unit	Minimum	22	14.7	13	1.7
	Maximum	25	16.7	15	1.7
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	0	0.0
Required prerequisite credit hours not included above	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	0	0.0

### Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

**Program Learning Goals**                      •

### Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

**Is this a degree program (undergraduate, graduate, or professional) or major proposal?** No

### Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

### Pre-Major

**Does this Program have a Pre-Major?** No

**Attachments**

- ASM\_Minor\_Combined 8-2-2011 .pdf: Revised ASM minor proposal  
*(Program Proposal. Owner: Kaletunc, Gonul)*

**Comments**

- ASM minor was revised based on the feedback provided on 8/1/2011 *(by Kaletunc, Gonul on 08/02/2011 01:02 PM)*
- Feedback sent to Assistant Dean Pfister. *(by Vankeerbergen, Bernadette Chantal on 07/18/2011 03:39 PM)*

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Kaletunc, Gonul	12/28/2010 03:41 PM	Submitted for Approval
Approved	Kaletunc, Gonul	12/31/2010 09:44 AM	Unit Approval
Approved	Pfister, Jill Ann	01/14/2011 05:26 PM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	01/25/2011 09:43 AM	ASCCAO Approval
Submitted	Kaletunc, Gonul	06/09/2011 02:27 PM	Submitted for Approval
Approved	Kaletunc, Gonul	06/09/2011 02:27 PM	Unit Approval
Approved	Pfister, Jill Ann	06/10/2011 06:23 AM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	07/18/2011 03:39 PM	ASCCAO Approval
Submitted	Kaletunc, Gonul	07/27/2011 07:15 PM	Submitted for Approval
Approved	Kaletunc, Gonul	07/27/2011 07:15 PM	Unit Approval
Approved	Pfister, Jill Ann	07/27/2011 09:25 PM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	08/01/2011 02:16 PM	ASCCAO Approval
Submitted	Kaletunc, Gonul	08/02/2011 01:03 PM	Submitted for Approval
Approved	Kaletunc, Gonul	08/02/2011 01:04 PM	Unit Approval
Approved	Pfister, Jill Ann	08/15/2011 05:19 PM	College Approval
Pending Approval	Nolen, Dawn Jenkins, Mary Ellen Bigler Meyers, Catherine Anne Vankeerbergen, Bernadette Chantal Hanlin, Deborah Kay	08/15/2011 05:19 PM	ASCCAO Approval



**Department of Food, Agricultural  
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28 December 2010

Dr. Jill Pfister  
Assistant Dean, Academic Affairs  
College of Food, Agricultural and Environmental Sciences  
100 Agricultural Administration Building  
2120 Fyffe Rd  
Campus

Dear Dr. Pfister:

On behalf of the faculty of the Department of Food, Agricultural, and Biological Engineering, I am pleased to submit the semester conversion proposal for the Agricultural Systems Management (ASM) minor program. The Department of Food, Agricultural, and Biological Engineering will continue to offer the ASM minor program after the conversion to semesters but with a curriculum that is significantly revised from the current quarter based curriculum. This minor is one of two minors currently offered by the Department of Food, Agricultural, and Biological Engineering with the other being Landscape Construction. All of the courses used in the proposed revised minor are required in the semester-based ASM major to be offered by the Department of Food, Agricultural, and Biological Engineering as part of the BS in Agriculture. A brief history of the ASM minor and a discussion of the revisions follow. Advising sheets for the proposed semester curriculum and the current quarter curriculum are attached.

The current ASM minor evolved from the Agricultural and Construction Systems Management (ACSM) minor when the ACSM major was split into two majors; ASM and Construction Systems Management, in 2004. Required courses in the minor are a safety course and one course in each of the three major subject areas of the ASM discipline, including environmental hydrology, agricultural facilities, and agricultural machinery. The minor also includes the selection of two to three courses contributing to either depth or breadth based on the student's interests. Because all of the quarter ASM courses are being converted directly to a semester version, this minor was converted course for course and submitted to the College of FAES committee on academic affairs for feedback. The primary concern voiced by several departments was the lack of flexibility in course selection, which often led to significant scheduling challenges and impeded the selection of the ASM minor. In response, the minor was revised into the format shown on the attached curriculum sheet. Because of its importance, the Safety and Health course (ASM 4600) is still required for all of the students. Then, each student is required to select one of the major subject area courses and finally select courses to meet the credit

hour and course level requirements. A student can still complete the minor in its current form with appropriate breadth course selections or choose more depth in one of the subject areas. The revised version also provides scheduling flexibility in spite of the annual offering of the ASM courses, thus reducing the need for petitions when the inevitable, hard-to-resolve course scheduling conflict occurs.

The Department of Food, Agricultural, and Biological Engineering is pleased to offer the ASM minor to students for whom the minor complements their major or are just interested in ASM topics. If the proposed revision is approved, the department looks forward to continuing to serve these students.

Sincerely,

A handwritten signature in black ink, appearing to read "Sudhir Sastry", is centered below the word "Sincerely,". The signature is written in a cursive style with a large initial "S".

Sudhir Sastry  
Professor and Interim Chair

## AGRICULTURAL SYSTEMS MANAGEMENT MINOR (033)

2 August 11

College of Food, Agricultural  
and Environmental Sciences  
The Ohio State University

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The Agricultural Systems Management Minor is designed to provide students with an introduction to the physical systems and technology used in agriculture, food production and natural resources. The minor provides experiences in planning, installation, operation and support of systems such as machinery, electrical power, structures, soil and water management and precision agriculture that are used in modern agricultural production and associated industries. The minor contributes a basic understanding of the physical world in which we live and work. The minor will be attractive to students interested in agricultural science and extension education, agricultural business, animal and plant sciences, or the management of technology used in agriculture.

The Agricultural Systems Management minor consists of a minimum of 13 credit hours. Minor does not require any prerequisites. However, some courses require Math 1148 and a Physics course such as Physics 1103 or 1200 or 1250. Please check course catalog for prerequisites.

### Required: Credit Hours

AGSYSMGT	4600	Agricultural Safety and Health	3
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### Select one:

AGSYSMGT	2370	Environmental Hydrology	2
AGSYSMGT	3320	Facilities for Agriculture and Greenhouse Production	3
AGSYSMGT	3360	Agricultural Machinery Management	3

**Required Electives:** Select courses from the following electives list to meet the minimum total 13 credit hour requirement. At least 2 credit hours of electives must be at upper-level.

AGSYSMGT	2240	Basic Metal Fabrication for Agriculture	3
AGSYSMGT	2241	Building Materials and Construction for Agriculture	3
AGSYSMGT	2310	Electric Power for Agricultural and Residential Applications	2
AGSYSMGT	2370	Environmental Hydrology	2
AGSYSMGT	2371	Land Surveying for Agricultural and Environmental Systems	2
AGSYSMGT	3232	Engines and Power Transmission	3
AGSYSMGT	3320	Facilities for Agriculture and Greenhouse Production	3
AGSYSMGT	3360	Agricultural Machinery Management	3
AGSYSMGT	3550	Animal and Rural Waste Management	2
AGSYSMGT	4560	Fluid Power and Electronics for Agricultural Machinery	3
AGSYSMGT	4575	Applied Agricultural Water Management	2
AGSYSMGT	4580	Precision Agriculture	2

### Restrictions and General Information:

1. This minor is not available to students majoring in Agricultural Systems Management.
2. A minimum overall CPHR for courses comprising the minor shall be 2.0.
3. A minor should be declared by the time a student accumulates 60 hours.
4. A maximum of one course may overlap between the minor and the GE (Writing and Communication, Foreign Language, Literature, Visual and Performing Arts, Culture and Ideas, Historical Study, Quantitative Reasoning, Data Analysis, Natural Science, Social Science, Cross-Disciplinary Seminar, Service Learning, Education Abroad)
5. Courses taken on a pass/non pass basis may not be applied to the minor.
6. For students majoring in the College of Arts and Sciences, a grade of C- or better must be earned in all courses counted toward this minor and at least six credits must be at the upper-level.

## ASM Minor Program Rationale

### **Credit Hour Explanation**

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
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	Maximum	25	16.7	15	1.7
Required credit hours offered outside of the unit	Minimum		0.0		0.0
	Maximum		0.0		0.0
Required prerequisite credit hours not included above	Minimum		0.0		0.0
	Maximum		0.0		0.0

### **Course Changes affecting the Minor**

All of the courses on the semester version of the minor are semester equivalents of a quarter courses with the exception of ASM 2371 and ASM 4600. ASM 371 with two quarter credit hours converted to ASM 2371 with two semester credit hours. 2/3 credit hours increase was implemented for semester course to expand the course content to include new developments in surveying. Quarter course ASM 371 had 1 lecture hour and 1 lab period. Two credit hour semester course ASM 2371 also maintains the same teaching structure of 1 lecture hour and 1 lab period. The safety course (4600) was also expanded 1 credit hour (from 3 credit hours under quarters to 3 semester credits) due to the increasing importance of safety and health in the farm business. The ASM semester curriculum has slightly fewer total credit hours (13 instead of 14.7 but above the University requirement of 12) required for completing the minor.

Quarter curriculum was more rigid which consisted of 4 required courses and at least 2 elective courses. Semester ASM minor curriculum offers more flexibility for course choices. Instead of 10 elective courses available in Quarter curriculum, there are 12 elective courses available in the Semester ASM curriculum. Semester curriculum also provides opportunity to students to select more upper-level courses.

ASM 576 was not converted to a semester course due to low enrollment numbers. ASM 4575 which is a conversion from ASM 575 covers similar concepts with the exception of minimal landscapes applications.

### **University Requirements**

This minor exceeds the University's requirement of 12 credit hours of coursework at the 2000 level and above. Additional requirements for students from Colleges of the Arts and Sciences were implemented as a response to the request by Colleges of the Arts and Sciences. The

additional requirements are clearly stated in part 6 under the Restrictions and General Information.

### **Transition Policy**

All students pursuing ASM minor after implementation of the semester curriculum are expected to follow the semester requirements to prevent the delay of student's graduation due to conversion to semesters. The ASM semester curriculum has slightly fewer credit hours (13 instead of 14 but above the University requirement of 12) required for completing the minor and more flexibility in selecting courses. Because the semester and the quarter versions of the ASM curriculum include the same courses, with the exception of ASM 576 and the added time to ASM 2371, substitution of courses between the quarter and the semester versions of the minor will be straightforward for students who have started the minor before the transition. For the two courses that changed from quarter to semester version, ASM 576 will count as an elective (4000 level) in the semester version and ASM 371 will substitute for ASM 2371.

## AGRICULTURAL SYSTEMS MANAGEMENT MINOR (033)

College of Food, Agricultural  
and Environmental Sciences  
The Ohio State University

Mike Lichtensteiger, Coordinating Adviser  
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The Agricultural Systems Management Minor is designed to provide students with a basic understanding of the physical principles underlying and the technology serving agriculture, food production, and natural resources. The minor provides experiences in the planning, installation, operation and support of systems such as machinery, electrical power, structures, soil and water and precision agriculture, that are used in modern agricultural production and associated industries. The minor contributes to a basic understanding of the physical world in which we live and work. The minor will be attractive to students majoring in Agricultural and Extension Education, Agribusiness and Applied Economics, animal and plant sciences, or others who may anticipate management of the technology used in agriculture.

The Agricultural Systems Management minor consists of 22-25 hours.

Required:	Credit Hours
AGSYSMGT 320 Facilities for Agriculture and Greenhouse Production	5
AGSYSMGT 360 Agricultural Machinery	5
AGSYSMGT 370 Principles of Hydrology	3
AGSYSMGT 600 Agricultural Safety and Health	3

Required Electives: Select courses to meet credit hour requirements (22-25) from the following. At least one course must be 500 level.

AGSYSMGT 232 Small Air-Cooled Engines	4
AGSYSMGT 240 Basic Metal Fabrication for Agriculture	4
AGSYSMGT 241 Building Materials and Construction in Agriculture	4
AGSYSMGT 310 Electric Power for Agricultural and Residential Applications	3
AGSYSMGT 371 Land Surveying for Agricultural and Environmental Systems	2
AGSYSMGT 550 Pollution Control and Waste Utilization	3
AGSYSMGT 560 Fluid Power and Electronics in Agricultural Machinery	4
AGSYSMGT 575 Soil and Water Systems	3
AGSYSMGT 576 Water Management in the Landscape Environment	4
AGSYSMGT 580 Precision Agriculture	3

### Restrictions and General Information

1. This minor is not available to students majoring in Agricultural Systems Management, Construction Systems Management or Agricultural and Construction Systems Management.
2. A minimum overall CPHR for courses comprising the minor shall be 2.0.
3. A minor should be declared at the time a student accumulates 90 hours.
4. A maximum of five credit hours may overlap between the minor and the GEC (foundations, natural sciences, arts and humanities and social sciences).
5. Courses taken on a pass/non pass basis may not be applied to the minor.