

**AGRICULTURAL SYSTEMS MANAGEMENT MAJOR (A.S.) INTERESTED IN
AGRICULTURAL SYSTEMS MANAGEMENT MAJOR (B.S.)**

This model plan of study is presented as a suggested path to graduate in 4 years with an Associate of Science Degree with a major in Agricultural Systems Management and a Bachelor of Science Degree in Agriculture with a major in Agricultural Systems Management. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet **should not** be used in isolation. In order to graduate in a timely manner, students must consult their academic advisor on a regular basis.

| Freshman Year (ATI) | Autumn Semester | | | | Spring Semester | | | |
|---|------------------------|-----------------|---|---------------------|--|-------------------------|--|--------------|
| Benchmarks | Department | Course # | Course Name | Hours | Department | Course # | Course Name | Hours |
| <i>MATH 1148 should be completed by the end of this year.</i> | CRPSOIL | 2300T | Intro. to Soil Science | 3 | AEDECON | 2001 | Principles of Food and Resource Economics ^a | 3 |
| <i>ENGLISH 1110 should be completed by the end of this year.</i> | | 2301T | Intro. to Soil Science Lab | 1 | | | | |
| <i>Begin to consider study abroad programs.</i> | ENGLISH | 1110.01 | First-Year English Composition | 3 | ANIMSCI | 2200.01 or 2202 or 2204 | Intro. Animal Sci. or Form & Function in Cultivated Plants or Ecology of Managed Plant Systems | 3-4 |
| | ENGTECH | 1201.03T | Exploring Agricultural Systems Management | .5 | HCS | | | |
| | ENGTECH | 2120T | Building Science: Methods & Materials | 4 | HCS | | | |
| | GENSTDS | 1201.01T | College Orientation | .5 | GENED | 1201 | GE Launch Seminar | 1 |
| | MATH | 1148 | College Algebra | 4 | | | GE Hist. & Cultural Studies | 3 |
| | | | | | | | GE Lit, Vis and Perf Arts | 3 |
| | | | | | | | Electives | 3 |
| | | | | | | | Total: | 16-17 |
| | | | | Total: 16 | | | Summer Semester | |
| | | | | | ENGTECH | 2191.04T | Internship | 2 |
| | | | | | | | Total: | 2 |
| | | | | | Spring Semester | | | |
| Sophomore Year (ATI) | Department | Course # | Course Name | Hours | Department | Course # | Course Name | Hours |
| Benchmarks | CRPSOIL | 2228T | Manure Management | 3 | AGRCOMM | 3130 | Oral Expression in Agriculture | 3 |
| <i>Apply to graduate from ATI at least one semester before the semester of your graduation.</i> | ENGTECH | 2240T | Welding & Metal Fabrication | 3 | AGSYSMT | 2305 | Professional Development I | 2 |
| <i>Maintain at least a 2.0 cumulative GPA.</i> | PHYSICS | 1200 | Mechanics, Kinematics, Fluids, Waves ^a | 4-5 | ENGTECH | 2040T | Soil and Water Conservation Systems | 4 |
| <i>Graduate with Associate of Science Degree.</i> | | | Electives | 3 | | | GE R.E. & G. Diversity | 3 |
| | | | | | | | Electives | 3 |
| | | | | Total: 13-14 | | | Total: | 15 |
| | | | | | Total credit hours for Associate of Science Degree: | | | |
| | | | | | 62-64 | | | |
| Junior Year (Columbus) | Autumn Semester | | | | Spring Semester | | | |
| Benchmarks | Department | Course # | Course Name | Hours | Department | Course # | Course Name | Hours |
| <i>Half of major hours should be completed by the end of this year.</i> | AGSYSMT | 3232 | Engines & Power Transmission | 3 | AGSYSMT | 2310 | Elec. Systems | 2 |
| <i>Apply to graduate from Columbus at least three semesters before the semester of your graduation.</i> | CSE | 1111 | Intro to Computer-Assisted Problem Solving | 3 | AGSYSMT | 3320 | Facilities for Agr. & Greenhouse Prod. | 3 |
| | | | Data Analysis | 3 | AGSYSMT | 3360 | Agr. Machinery Mgmt. | 3 |
| | | | GE Citizenship #1 | 3 | | | GE Citizenship #2 | 3 |
| | | | ASM Supporting Course Management Option | 3 | | | ASM Supporting Course Law Option | 3 |
| | | | | Total: 15 | | | Total: | 14 |
| | | | | | Spring Semester | | | |
| Senior Year (Columbus) | Department | Course # | Course Name | Hours | Department | Course # | Course Name | Hours |
| Benchmarks | AGSYSMT | 4575 | Applied Agricultural Water Management | 2 | AGSYSMT | 4560 | Fluid Power & Electronics in Agr. Machinery | 3 |
| <i>Maintain at least a 2.0 GPA in the major, minor, and cumulative.</i> | AGSYSMT | 4580 | Precision Agriculture | 2 | AGSYSMT | 4910 | Capstone II | 2 |
| <i>Graduate with Bachelor of Science Degree.</i> | AGSYSMT | 4900 | Capstone I | 2 | AGSYSMT | 5600 | Agr. Safety & Health | 3 |
| | AGSYSMT | 4605 | Prof. Development II | 1 | GENED | 4001 | GE Reflection | 1 |
| | | | GE Theme Choice #1 | 4 | | | ASM Supporting Course | 2-3 |
| | | | Open elective | 4 | | | ASM Supporting Course Accounting Option | 3 |
| | | | | Total: 15 | | | Total: | 14-15 |
| | | | | | Total credit hours for Bachelor of Science Degree: | | | |
| | | | | | 121 | | | |

^a One possible course from approved CFAES GE list or B.S. major requirement that has multiple options, as outlined in corresponding *Degree Requirements* document.

^b This course requirement may also be completed at ATI, and may be used as an elective in the A.S. major. See corresponding *Degree Requirements* for details.

**AGRICULTURAL SYSTEMS MANAGEMENT MAJOR (A.S.) INTERESTED IN
AGRICULTURAL SYSTEMS MANAGEMENT MAJOR (B.S.)**

This advising sheet is for Ohio State ATI students that wish to earn both an Associate of Science (A.S.) Degree with a major in Agricultural Systems Management and a Bachelor of Science (B.S.) Degree with a major in Agricultural Systems Management. The tables below outline the complete degree requirements to earn a B.S. in Agriculture with a major in Agricultural Systems Management. The underlined courses are those that may also fulfill a requirement for the A.S. Agricultural Systems Management major. These courses can count toward both degree programs simultaneously.

NOTE: This sheet should not be used in isolation. In order to graduate in a timely manner, students must consult their academic advisor on a regular basis.

| Table 1. Degree Requirements | | | |
|--|--|------------|---|
| Subject | Course Options | Hours | ✓ |
| GE Launch Seminar | <u>GENED 1201</u> | 1 | |
| Writing and Information Literacy | <u>ENGLISH 1110.01</u> | 3 | |
| Mathematical & Quantitative Reasoning/Data Analysis | <u>MATH 1148</u> | 4 | |
| Literary, Visual and Performing Arts | <u>Student Choice</u> | 3 | |
| Historical & Cultural Studies | <u>Student Choice</u> | 3 | |
| Natural Science | <u>PHYSICS 1200</u> | 5 | |
| Social & Behavioral Sciences | <u>AEDECON 2001</u> or ECON 2001.01 | 3 | |
| Race, Ethnic and Gender Diversity | <u>Student Choice</u> | 3 | |
| Theme: Citizenship for a Diverse & Just World ^a | <u>Student Choice</u> | 4-6 | |
| Theme: Student Choice ^a | <u>Student Choice</u> | 4-6 | |
| GE Reflection | GENED 4001 | 1 | |
| Survey Courses | <u>GENSTDS 1201.01T*</u> OR FAES 1100 and <u>ENGTECH 1201.03T*</u> OR AGSYSMT 1100 | .5 .5 | |
| Oral Expression | <u>AGRCOMM 3130</u> OR COMM 2110 | 3 | |
| Additional Science | <u>CRPSOIL 2300T*</u> and <u>2301T*</u> OR ENR 3000 and 3001 | 4 | |
| Internship | <u>ENGTECH 2191.04T*</u> or FAES 3191 and AGSYSMT 3191 | 2 | |
| Major Coursework | See Table 2. | 43 | |
| Major Supporting Coursework | See Table 3. | 6 | |
| Minor Equivalents | See Table 4. | 18-21 | |
| Electives | (May include ENGTECH 2016T ^{ab}) | 2-4 | |
| Minimum Total Credit Hours | | 121 | |

| Table 2. Major Coursework | | |
|--|-------|-----------|
| Course(s) | Hours | ✓ |
| <u>ENGTECH 2240T*</u> Welding & Metal Fabrication OR AGSYSMT 2240 Basic Metal Fabrication for Agriculture | 3 | |
| <u>ENGTECH 2120T*</u> Building Science: Methods & Materials OR AGSYSMT 2241 Building Materials & Construction in Agriculture | 3 | |
| <u>AGSYSMT 2305</u> Professional Development I | 2 | |
| AGSYSMT 2310 Electrical Systems for Agr. & Residential Applications | 2 | |
| <u>ENGTECH 2040T*</u> Soil & Water Conservation Systems OR AGSYSMT 2370 and 2371 Environmental Hydrology and Land Survey for Agricultural & Environmental Systems | 4 | |
| <u>ENGTECH 2011T^{ab}</u> Small Engine Basics OR AGSYSMT 3232 Engines and Power Transmission | 3 | |
| AGSYSMT 3320 Facilities for Agricultural & Greenhouse Production | 3 | |
| AGSYSMT 3360 Agricultural Machinery Management | 3 | |
| <u>CRPSOIL 2228T*</u> Manure Management OR AGSYSMT 3550 Animal and Rural Waste Management | 2 | |
| AGSYSMT 4560 Fluid Power & Electronics in Agricultural Machinery | 3 | |
| AGSYSMT 4575 Applied Agricultural Water Management | 2 | |
| AGSYSMT 4580 Precision Agriculture | 2 | |
| AGSYSMT 4605 Professional Development II | 2 | |
| AGSYSMT 4900 Capstone in AGSYSMT I | 2 | |
| AGSYSMT 4910 Capstone in AGSYSMT II | 2 | |
| AGSYSMT 5600 Agricultural Safety and Health | 3 | |
| CSE 1111 Computer Problem Solving in Business or CSE 1112 Computer Problem Solving for CSM | 3 | |
| Total Major Coursework Credit Hours | | 43 |

| Table 3. Major Supporting Coursework | | |
|--|-------|----------|
| Course(s) | Hours | ✓ |
| <u>Natural Science</u> (choose one from below) | 3 | |
| <u>ANIMSCI 2200.01</u> Introductory Animal Sciences | | |
| HCS 2200 The World of Plants | | |
| <u>Data Analysis</u> (choose one from below) | 3 | |
| COMLDR 3537 ^b Data Analysis in the Applied Sciences | | |
| ANIMSCI or HCS 2260 Data Analysis & Interpretation for Decision Making | | |
| AEDECON 2005 Data Analysis for Agribus. & Applied Econ. | | |
| ENR 2000 Natural Resources Data Analysis | | |
| STAT 1450 Introduction to the Practice of Statistics | | |
| Total Major Supporting Course Credit Hours | | 6 |

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

^b May be completed as a Technical Elective in the A.S. major

* courses are only offered at the Wooster (ATI) Campus

Note: A capital OR separates a pair of *equivalent* courses, a lowercase or separates a choice between *different* courses that fulfill the same requirement.

Additional Bachelor's Degree Requirements:

1. A 2.00 cumulative CPHR is required as well as a 2.00 CPHR in the major and minor coursework.
2. Students must complete a minimum of 30 credit hours at The Ohio State University with at least 12 in the department in Columbus offering the major.
3. Applications to graduate must be submitted at least three semesters in advance.

| Table 4. Minor Equivalents | | |
|--|--------------|---|
| Course(s) | Hours | ✓ |
| Accounting (choose one from below) | 3 | |
| AEDECON 2105 ^b Managerial Records and Analysis | | |
| ACCT&MIS 2200 Introduction to Accounting I | | |
| ACCT&MIS 2000 Foundations of Accounting | | |
| Principles of Management (choose one from below) | 3 | |
| ANMLTEC 3800T ^{*b} Principles of Farm Business Management or BUSTEC 2241T ^{*b} Small Business Management OR AEDECON 3101 Principles of Agribusiness Management | | |
| BUSMHR 3100 Foundations of Management & HR | | |
| Business Law (choose one from below) | 3 | |
| BUSTEC 2247T ^{*b} Business Law OR AEDECON 3170 Agribusiness Law | | |
| BUSFIN 3500 Legal Environment of Business AND BUSFIN 4510 Legal Business Issue | | |
| ASM Electives: Select four courses, at least one in each category | | |
| <i>*Students are encouraged to take at least one ASM course per category</i> | | |
| Agricultural Management | | |
| AGSYSMT 3330 Grain Handling, Drying, and Milling | 3 | |
| AGSYSMT/FDSCTE 3400 Sustainability of the Food Supply Chain ❖ | 4 | |
| AEDECON 3102 Principles of Agribusiness Marketing OR BUSTEC 2231T ^{*b} Fundamentals of Marketing | 3 | |
| AEDECON 3103 Principles of Agribusiness Finance <i>Pre-req: AEDECON 2105 or ACCT&MIS 2200</i> OR BUSTEC 2249T ^{*b} Fundamentals of Business Finance | 3 | |
| AEDECON 3104 Farm Business Management | 3 | |
| AEDECON 3113 Commodity Futures & Options Markets | 2 | |
| AEDECON 3123 Grain Merchandising | 2 | |
| AEDECON 3160 Human Resource Mgt. in Small Business OR BUSTEC 2244T ^{*b} Human Resource Mgt. & Leadership | 3 | |
| AEDECON 4540 International Commerce & World Economy | 3 | |
| BUSMHR 2000 Introduction to International Business | 1.5 | |
| COMLDR 3530 ^b Foundations of Personal and Professional Leadership | 3 | |
| COMLDR 4430 Leadership in Teams and Community Organizations | 3 | |
| CONSYSM 2205 Introduction to Construction Systems Mgt. OR ENGTECH 2110T ^{*b} Construction Drawing and Basic Estimating AND 2170T ^{*b} Construction Project Management | 3 | |
| INTSTDS 3850 Introduction to Globalization | 3 | |
| XXXX 3797 Study Abroad | 1-5 | |
| XXXX 5797 Study Abroad | 1-5 | |
| Agricultural Science | | |
| AGSYSMT 2580 Introduction to Digital Agriculture | 2 | |
| AGSYSMT 3580 UAS and Remote Sensing in Agriculture | 3 | |
| AGSYSMT 5580 Data Analytics in Production Agriculture | 3 | |
| ENTMLGY 4601 General Insect Pest Management or BIOTECH 2218T ^{*b} General and Applied Entomology | 2 | |
| ENR 5270 Soil Fertility | 3 | |
| HCS 3420 Seed Science | 3 | |
| HCS 3521 Greenhouse Systems and Management OR HORTTEC 2500T ^{*b} Greenhouse Environment Control | 2 | |
| HCS 5411 Domestication and Utilization of Agronomic Crops | 3 | |
| HCS 5412 Agroecology of Grasslands and Prairies | 3 | |
| HCS 5422 Biology and Mgt. of Weeds and Invasive Plants | 3 | |
| Total AGSYSMT Supporting Course Credit Hours | 18-21 | |

^b May be completed as a Technical Elective in the A.S. major