SUSTAINABLE AGRICULTURE (AAS)

Degree: Associate of Applied Science
Major: Sustainable Agriculture
Program Code: 1310

The Sustainable Agriculture curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. Students learn the fundamentals of sustainable agriculture, focusing on crop and animal production with farm business. Emphasis is placed on entrepreneurial and practical field training. Students will complete a business plan and an agricultural internship in a sector of the farming industry. Graduates are qualified for employment in a variety of positions associated with sustainable agriculture, including horticultural and livestock operations, wholesale and retail management, nursery operations, and environmental and agricultural education.

This program will provide the student with an understanding of Sustainable Agriculture and its principles of operation and control. The graduate will understand the technical aspects of the work, the responsibilities of the work and the importance of safety in this vitally important career.

For more information on what you can do with this major, visit CMU Tech's Programs of Study page.

All CMU/CMU Tech associate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, quantitative fluency, communication fluency, critical thinking, personal and social responsibility, and information literacy. In addition to these campus#wide student learning outcomes, graduates of this major will be able to:

1. Apply business communication using listening, verbal and written and electronic forms that are needed for entry level employment in agriculture. (Communication Fluency)
2. Apply mathematical and applied physics concepts for agriculture science to meet employment requirements. (Quantitative Fluency)
3. Research, evaluate, synthesize and apply information/data relevant to agriculture science careers. (Critical Thinking)
4. Demonstrate knowledge of agriculture terminology, symbols, business practices, and principles and application of technical skills. (Specialized Knowledge)
5. Perform the necessary applied skill sets to fulfill the needs of entry level employment in the agriculture insdustry. (Applied Learning)

Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select "Print Options." This will give you the options to either "Send Page to Printer" or "Download PDF of This Page." The "Download PDF of This Page" option prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

Institutional Degree Requirements

The following institutional degree requirements apply to all CMU and CMU Tech Associate of Applied Science (AAS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours minimum.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU/CMU Tech.
- 2.00 cumulative GPA or higher in all CMU/CMU Tech coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, and credit for prior learning, is limited by the institutional residency requirements for an associate of applied science degree.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

Specific to this degree:

- A minimum of 16 hours taken at CMU in no fewer than two semesters.

Essential Learning Requirements

(15 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Code	Title	Semester Credit Hours
Communication		
ENGL 111	English Composition I-GTCO1	3
ENGL 112	English Composition II-GTCO2	3
Mathematics		
MATH 108	Technical Mathematics (or higher) [1]	3
Other Essential Learning Core Courses		
Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course		3

Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course	3
Total Semester Credit Hours	**15**

[1] This is a 4 semester credit hour course. 3 credits apply to Essential Learning requirements and 1 credit applies to General Electives.

Other Lower Division Requirements

Code	Title	Semester Credit Hours
Wellness Requirement		
KINE 100	Health and Wellness	1
Select one Activity course		1
Total Semester Credit Hours		**2**

Program Specific Degree Requirements

(42 semester hours, must earn a grade of "C" or better in each course.)

Code	Title	Semester Credit Hours
AGRS 100 & 100L	Practical Crop Production and Practical Crop Production Laboratory	4
AGRS 102	Agriculture Economics	3
AGRS 110	Integrated Pest Management	3
AGRS 115	Fundamentals of Agriculture	3
AGRS 118	Agriculture Facilities Management and Design	3
AGRS 125	Agricultural Machinery and Technology	3
AGRS 205	Farm and Ranch Management	3
AGRS 208	Agricultural Finance	3
AGRS 210	Agricultural Marketing	3
AGRS 293	Cooperative Experience/Internship	5
Total Semester Credit Hours		**33**

Code	Title	Semester Credit Hours
Restricted Electives		
Select 9 semester hours of the following. See recommended advising tracks.		9
ACCT 201	Principles of Financial Accounting	
AGRS 225	Feeds and Feeding	
AGRS 230	Farm Animal Anatomy and Physiology	
AGRS 250 & 250L	Live Animal and Carcass Evaluation and Live Animal and Carcass Evaluation Laboratory	
WELD 151	Introduction to Welding	
AGRS 296	Topics:	
CISB 101	Business Information Technology	
AGRS 105	Animal Science	
AGRS 142	Livestock Production Practices	
AGRS 220	Controlled Environment Agriculture (CEA) Practices	
BIOL 321 & 321L	Taxonomy of Grasses and Taxonomy of Grasses Laboratory	
BIOL 322 & 322L	Plant Identification and Plant Identification Laboratory	
AGRS 260	Plant Propagation	
Total Semester Credit Hours		**9**

General Electives

(6 semester hours)

Code	Title	Semester Credit Hours
MATH 108	Technical Mathematics	1
Select Additional Electives		5
Total Semester Credit Hours		**6**

Suggested Course Plan Sustainable Agriculture AAS, Production Agriculture Emphasis

First Year		
Fall Semester		**Semester Credit Hours**
MATH 108	Technical Mathematics	4
AGRS 102	Agriculture Economics	3
AGRS 115	Fundamentals of Agriculture	3
AGRS 118	Agriculture Facilities Management and Design	3
AGRS 125	Agricultural Machinery and Technology	3
	Semester Credit Hours	**16**
Spring Semester		
ENGL 111	English Composition I-GTCO1	3
AGRS 205	Farm and Ranch Management	3
AGRS 208	Agricultural Finance	3
AGRS 210	Agricultural Marketing	3
AGRS 293	Cooperative Experience/Internship [1]	5
	Semester Credit Hours	**17**
Second Year		
Fall Semester		
AGRS 100 & 100L	Practical Crop Production and Practical Crop Production Laboratory	4
AGRS 142	Livestock Production Practices	3
AGRS 225	Feeds and Feeding	4
KINE 100	Health and Wellness	1
Essential Learning- Social and Behavioral Sciences, Natural Sciences, Fine Arts, or Humanities		3
	Semester Credit Hours	**15**
Spring Semester		
AGRS 105	Animal Science	3
AGRS 110	Integrated Pest Management	3
AGRS 250 & 250L	Live Animal and Carcass Evaluation and Live Animal and Carcass Evaluation Laboratory	3
ENGL 112	English Composition II-GTCO2	3
KINA 1XX Activity		1
Essential Learning- Social and Behavioral Sciences, Natural Sciences, Fine Arts, or Humanities		3
	Semester Credit Hours	**16**
	Total Semester Credit Hours	**64**

[1] Internship credits can be taken in any semesters as it best fits the students schedule. A minimum of 5 credit hours must be taken to complete degree requirements.

Sustainable Agriculture AAS, Crop/Plant Emphasis

First Year		
Fall Semester		**Semester Credit Hours**
MATH 108	Technical Mathematics	4
AGRS 115	Fundamentals of Agriculture	3
AGRS 102	Agriculture Economics	3
AGRS 125	Agricultural Machinery and Technology	3
AGRS 118	Agriculture Facilities Management and Design	3
	Semester Credit Hours	**16**
Spring Semester		
ENGL 111	English Composition I-GTCO1	3
AGRS 205	Farm and Ranch Management	3
AGRS 208	Agricultural Finance	3
AGRS 210	Agricultural Marketing	3
AGRS 293	Cooperative Experience/Internship [1]	5
	Semester Credit Hours	**17**
Second Year		
Fall Semester		
AGRS 100 & 100L	Practical Crop Production and Practical Crop Production Laboratory	4
AGRS 220	Controlled Environment Agriculture (CEA) Practices	3
BIOL 107 & 107L or BIOL 108/108L	Principles of Plant Biology or Diversity of Organisms-GTSC1	4
Essential Leaning- Social and Behavioral Science, Natural Science, Fine Arts or Humanities		3
KINE 1XX, Health and Wellness		1
	Semester Credit Hours	**15**
Spring Semester		
AGRS 110	Integrated Pest Management	3
AGRS 260	Plant Propagation	3
ENGL 112	English Composition II-GTCO2	3
KINA 1XX	Activity	1
Restricted Elective		3
Essential Learning- Social and Behavioral Sciences, Natural Sciences, Fine Arts, or Humanities		3
	Semester Credit Hours	**16**
	Total Semester Credit Hours	**64**

[1] Internship credits can be taken in any semesters as it best fits the students schedule. A minimum of 5 credit hours must be taken to complete degree requirements.

Advising and Graduation

Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for their intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found on the Graduation web page.

If a student's petition for graduation is denied, it will be their responsibility to apply for graduation in a subsequent semester. A student's "Intent to Graduate" does not automatically move to a later graduation date.