

Sustainable Hydroponic Agriculture and Rural Entrepreneurship (SHARE)

Degree Type

Certificate

Program Description

This certificate prepares individuals for work in the sustainable agricultural industry, including traditional agribusiness and the emerging field of controlled environment agriculture. Agriculture continues to be the largest industry in the State of Pennsylvania. The benefit of a controlled agriculture program is the ability to produce food year-round without dependence upon ideal weather conditions, use of pesticides, or need for the expense of land and heavy equipment.

Students will learn skills that can be transferred to any controlled agriculture industry, including the new medical marijuana production industry that has been introduced in PA, which is highly regulated, with plants grown and harvested in a controlled environment. The hydroponic program will train students for employment in this and other agribusiness industries.

In partnership with Sandyvale Memorial Park, this program will be able to offer both theory and practical hands-on application in a greenhouse using actual hydroponic equipment. The College will use the greenhouse for both hydroponic plant growth and traditional greenhouse growing.

This program falls under the federal guidelines of Gainful Employment programming. For important information regarding program costs, debt, and potential earnings, please [click here](#).

Career Opportunities

1. Traditional agribusinesses
2. Greenhouses
3. Controlled environment agribusinesses

Program Objectives

Upon completion of the program, the student will be able to:

1. Demonstrate the competencies necessary to work in the controlled environment agriculture sector.
2. Identify the need for sustainability in traditional and non-traditional agribusinesses.
3. Demonstrate an introductory knowledge of the skills common to the contemporary business environment.

Obtaining the Certificate

To earn the Certificate, the student must:

- Matriculate into the program.
- Satisfactorily complete all certificate requirements.

Required Courses

Course Code	Title	Credits
AGR 105	Botany Lecture	3
AGR 110	Introduction to Sustainability	3
AGR 115	Botany Lab	1
AGR 120	Hydroponic Food Production Lecture	3
AGR 121	Hydroponic Food Production Lab	1
AGR 125	Principles of Sustainable Agriculture Lecture	3
AGR 126	Principles of Sustainable Agriculture Lab	1
AGR 130	Plant Propagation Lecture	3
AGR 131	Plant Propagation Lab	1
BUS 110	Introduction to Business	3
BUS 230	Principles of Marketing	3
CIT 100	Microcomputer Applications	3
Total Credits		28

Course Sequencing

Fall 1

Course Code	Title	Credits
AGR 105	Botany Lecture	3
AGR 110	Introduction to Sustainability	3
AGR 115	Botany Lab	1
AGR 125	Principles of Sustainable Agriculture Lecture	3
AGR 126	Principles of Sustainable Agriculture Lab	1
BUS 110	Introduction to Business	3

Spring 1

Course Code	Title	Credits
AGR 120	Hydroponic Food Production Lecture	3
AGR 121	Hydroponic Food Production Lab	1
AGR 130	Plant Propagation Lecture	3
AGR 131	Plant Propagation Lab	1
BUS 230	Principles of Marketing	3
CIT 100	Microcomputer Applications	3