

Agricultural Science

Award Type: Certificate of Achievement

Allan Hancock College's Agricultural Science Program is designed for students preparing for, or advancing in careers in agricultural sciences. The agricultural science program will prepare students for a wide variety of entry-level positions related to agribusiness and agricultural science with an emphasis on local career opportunities such as pest management and control, agronomist, agricultural mechanics, environmental horticulture, soil science, orchard/vineyard management, produce sales and marketing, agriculture equipment technician, farm management, greenhouse and nursery operations, agricultural inspection, fertilizer specialist, crop advisor, weed science, irrigation consulting, and botanist. Students will gain practical skills in effective communication, problem solving, critical thinking, collaboration, and leadership through hands-on learning and field trips to local agricultural institutions. This program will adequately prepare students to transfer for further study in many agricultural science fields including: Crop Protection, Crop Science, Agricultural Education, Agricultural Science, Soil Science, Fruit Science, Vegetable Science or Sustainable Agriculture.

The graduate of the Certificate of Achievement in Agricultural Science will:

- apply current agricultural industry standards, laws and regulations in the agricultural sciences or related fields.
- assess and differentiate effects of agricultural activities in plant systems while describing alternative practices in order to make sound agricultural decisions that ensure the quality and success of a crop.
- employ effective business skills using industry analysis, market trends, business plans and other standard agribusiness techniques, when presented with a farm or ranch management situation.
- demonstrate knowledge of soils, fertilizers, plant nutrition, and current industry growing techniques and apply this understanding to successfully produce agricultural crops.
- demonstrate basic worker safety practices.
- Identify common insect and disease pests and use knowledge of pest life cycles to recommend pest prevention and management plans.
- Demonstrate an understanding of crop plant biological functions and their application to successful commodity production.

Program Requirements

A major of 23 units is required for the certificate.

Required core courses 14 units:

Course Number	Course Title	Units
AG 125	Soils and Plant Nutrition	4.0
AG 130	Integrated Pest Management	4.0
AG 150	Introduction to Agribusiness	3.0
AG 161	Introduction to Plant Science	3.0

Plus a minimum of 9 units selected from the following:

Course Number	Course Title	Units
AG 149	Cooperative Work Experience: Occupation	1.0 - 8.0 units
AG 152	Introduction to Animal Science	3.0
AG 153	Introduction to Sustainable Agriculture	3.0
AG 154	Introduction to Fruit Science	3.0
AG 155	Introduction to Mechanized Agriculture	3.0
AG 156	Intro to Environmental Horticulture	3.0
AG 160	Plant Propagation and Production	3.0
AG 315	Fertilizers & Plant Nutrition	4.0