

# AGRICULTURE PLANT SCIENCE

## DEGREES, CERTIFICATES AND AWARDS

### Certificate of Achievement

#### DESCRIPTION

Agriculture Plant Science encompasses the study of the plant, soil, and water resources that are foundational to all agro-ecosystems and prepares the student for a challenging career in many areas including: soil and crop management, plant breeding and genetics, seed science, environmental soil science, soil restoration and conservation, international agriculture, and ecosystem management.

#### PROGRAM LEARNING OUTCOMES

1. Demonstrate an understanding of fundamental concepts and knowledge related to the selection, propagation and management of various plant commodities produced for food, feed and fiber.
2. Display competency with respect to the use of standard lab, industry equipment and techniques used in production.
3. Demonstrate understanding of scientific research and critical thinking skills related to hypothesis development and data interpretation as applied to the decision making process for commercial production.

#### CERTIFICATE OF ACHIEVEMENT PROGRAMS

The **Certificate of Achievement** program is designed for students with personal or occupational goals who wish early employment. To qualify for the Certificate, a student must satisfy the following requirements: (1) complete all courses listed for a particular certificate.; (2) achieve a "C" average (2.0 GPA) for all courses used to complete the certificate; and, (3) file a Certificate Application form with Admissions and Records by the appropriate deadline(s) identified on the application.

#### CAREER OPPORTUNITIES

California is one of the top states in the nation in annual gross agricultural returns. The livestock industry and over 250 specialty crops provide a variety of career choices. Trained personnel are employed on ranches and farms, as well as the vast agriculture service industry. Career opportunities also exist with governmental agencies. Every year there are several openings in Agriculture Education in California as well as other states. Of the career opportunities identified many will usually require the completion of degree requirements at 4-year colleges and universities.

- Agribusiness Representative
- Agricultural Products Inspector
- Agronomist
- Chemical Fertilizer Sales
- College Instructor
- Cooperative Extension Agent
- Cooperative Manager
- Crop Consultant
- Crop Production
- Agronomic Production Manager
- County Agricultural Extension Agents
- Plant Geneticist Post secondary Teacher
- Soil Surveyor Vocational Agriculture Teacher
- Crop Scout/Consultant
- Education Specialist
- Farm Manager
- Farming Operation
- 4-H Association Youth Specialist
- Genetic Engineering Scientist
- International Agronomist
- Land Reclamation Specialist
- Land-Use Planner
- Conservation/Environmental Technician
- High School Agriculture Teacher
- Seed, Chemical and Fertilizer Consultant
- Organic Certification Specialist
- Plant Breeder
- Research Technician
- Sales Representative
- Seed Production
- Soil Conservation Specialist
- Youth Development Specialist
- Waste Management Specialist
- Water Quality Specialist

**Gainful Employment:** Federal regulations require institutions to provide students with Gainful Employment information for specific certificate programs offered at IVC. Please click on our Programs of Study link to view the information for each certificate program: <http://www.imperial.edu/courses-and-programs/programs-of-study/>

#### TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree at Imperial Valley College may not be the same as those required for completing the major at a transfer institution offering a bachelor's degree. Students who plan to transfer to a four-year college or university should schedule an appointment with an IVC Counselor to develop a student education plan (SEP) before beginning their program.

#### Transfer Resources:

[www.ASSIST.org](http://www.ASSIST.org) – CSU and UC Articulation Agreements and Majors Search Engine

[www.CSUMentor.edu](http://www.CSUMentor.edu) – CSU System Information

[www.universityofcalifornia.edu/admissions/index.html](http://www.universityofcalifornia.edu/admissions/index.html) - UC System Information

[www.aiccu.edu](http://www.aiccu.edu) – California Independent Colleges and Universities, Association of

<http://wiche.edu/wue> – Western Undergraduate Exchange Programs

#### FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that IVC offers a full array of financial aid programs – grants, work study, scholarships, and fee waivers (we do not participate in the federal loan programs). These programs are available to both full and part time students who are seeking a degree or certificate. For those who qualify, financial aid is available to help with tuition, fees, books and supplies, food, housing, transportation, and childcare. Please log onto our website for additional information: [www.imperial.edu/students/financial-aid-and-scholarships/](http://www.imperial.edu/students/financial-aid-and-scholarships/)

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## CERTIFICATE PROGRAM

### AGRICULTURE PLANT SCIENCE

Nineteen (19.0) units required for the certificate.

ALL COURSES FOR THIS CERTIFICATE MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

#### I. Required courses for the certificate (10.0)

AG	120	Soil Science	3.0
AG	140	Principles of Plant Science	4.0
AG	245	Plant Propagation/Production	3.0

#### II. Acceptable courses for the certificate (select a minimum of 9 units)

AG	134	Agricultural Business Organization (3.0)	
AG	138	Computer Applications in Agriculture (3.0)	
AG	170	Principles of Entomology (3.0)	
AG	220	Irrigation and Drainage (3.0)	

**Total Major Units**

**19.0**