

# DIESEL FARM MACHINERY AND HEAVY EQUIPMENT

## DEGREES, CERTIFICATES AND AWARDS

Certificate of Achievement

### DESCRIPTION

This Certificate program is designed to prepare students for employment positions in the field of diesel technology. In this program, students will be maintaining, servicing, and repairing: agricultural hydraulic equipment, construction machines, train locomotive engines, farm tractors, stationary diesel engines and diesel powered highway transportation units. This program will be integrated with the automotive technology program by allowing students the opportunity to specialize in diesel and heavy equipment technology. In addition students will be able to operate diesel engines using alternative fuels such as biodiesel, compressed natural gas, liquefied natural gas, alcohols, hydrogen, and fuel cells. Upon successful completion of this diesel program, students are prepared to take the Automotive Service Excellence (ASE) Certification Exam in Diesel Engines (T2), Preventive Maintenance for tasks (T8), and Alternative Fuels (T6).



### PROGRAM LEARNING OUTCOMES

1. The student will be able to demonstrate safe operation of hand tools and equipment.
2. The student will be able to identify major agricultural equipment components, construction machines and transportation units.
3. The student will be able to diagnose major component failures, recommend repairs, and perform typical major component repairs.

### CERTIFICATE OF ACHIEVEMENT PROGRAM

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.

### 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/)

### CAREER OPPORTUNITIES

- Farm Equipment Technician
- Bus Maintenance and Repair Technician
- Heavy Equipment Maintenance and Repair Technician
- Diesel Truck Maintenance and Repair Technician

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## CERTIFICATE PROGRAM

### DIESEL FARM MACHINERY AND HEAVY EQUIPMENT

Twenty (20.0) 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.

AUT	110	Engine Technology	4.0
AUT	140	Diesel Engine Maintenance and Repair	4.0
AUT	165	Diesel Preventive Maintenance and Inspection	4.0
AUT	240	Diesel Engine Tune-Up	3.0
AUT	285	Alternative Fuels for Diesel Engines	4.0
WE	201	Employment Readiness	1.0

**Total Certificate Units** **20.0**