

**IMPERIAL VALLEY COLLEGE DISTRICT
REVIEW OF CAREER EDUCATION TRAINING PROGRAMS
2019**

AUTOMOTIVE TECHNOLOGY

I. Program Description

This program will train students as automotive technician with advance skills to perform service and maintenance on State-of-The-Art vehicles. By completing this program requirement, the student will gain proficiency in safety, automotive services, testing, troubleshooting, brakes, suspension, wheel alignment, engine tune-up, electrical systems, fuel systems (carburetion and fuel injection), emission systems, transmission, drive train, engine repairs, engine rebuilding, automotive machining, and air conditioning. Competence will be assessed regularly in accordance with Automotive Service Excellence (ASE) standards. Graduates of this Automotive Technology Program are prepared and trained to pass the ASE exam and to seek employment in related automotive fields.

A. Degree
Associate in Science, Automotive Technology

B. Certificate
Certificated of Achievement, Automotive Technology

This program is designed to prepare students for entry level employment in the area of Automotive Brakes, Suspension, and Steering. The program will provide the student the necessary skills and knowledge demanded of the modern automotive brakes, suspension, and steering systems. This program will prepare students for employment in the following technical and professional fields: automotive brakes, automotive suspension, steering wheel, and four-wheel alignment technicians. In addition, the student will gain the necessary knowledge and preparation to pursue the State Brake License. Upon successful completion of this program, students will be prepared to take Automotive Service Excellence (ASE), Exams for Automotive Brake (Test A4), and Automotive Suspension (Test A5).

A. Certificate
Certificated of Achievement, Auto Tech: Brakes, Suspension, and Steering
Specialization

This program is designed to prepare students for entry level employment in the area of automotive electrical/electronic and air conditioning technology. The program will provide the necessary skills and knowledge through the use of modern tools and equipment to diagnose electrical and electronic circuits. Students will be prepared for employment in the following technical and professional fields: Electronic Engine Computer Control; Power Train Computer Control; Brake and Suspension Computer Control; and Air Conditioning Instrumentation Computer Control. Upon successful completion of this program, students will be prepared to take the Automotive Service Excellence (ASE) exams in Electrical/Electronic Systems (Test A6), and Heating and Air Conditioning (Test A7).

A. Certificate
Certificated of Achievement, Auto Tech: Electrical/Electronic and Air Conditioning
Specialization

The Engine Performance and Drivability Specialization Certificate of Achievement program is designed to prepare students for entry level employment in the area of engine performance and drivability. The program will provide the necessary skills, through the use

of modern tools and equipment, to diagnose and repair engines using the latest technology applications. In addition, students will learn to use electronic diagnostic equipment to measure computer engine electronic systems parameters. This program will prepare students for employment in the following fields: engine performance, engine tune-up, and engine electronic and general instrumentation diagnostics. In addition, the students will gain the necessary knowledge and preparation to pursue the State of California Emission Control License. Upon successful completion of this program, students will be prepared to take Automotive Service Excellence (ASE) exams in Engine Performance (Test A8), Electronic System (Test A6), Advanced Engine Performance (Test L1) and the State of California Emission Control License.

A. Certificate

Certificated of Achievement, Auto Tech: Engine Performance and Drivability Specialization

The Engine Repair and Machinist Specialization Certificate of Achievement program is designed to prepare students for employment as Engine Repair and Machinist Specialists. The program will provide the necessary skills and knowledge through the use of modern tools and equipment to repair automotive engines and perform specialty work in machine shops. Students will learn to use honing and boring machines and motor balancing. Students will be working with high performance engines as well as using blueprint measurements. This program will prepare students for employment in the following fields: general mechanics, engine specialist, engine machinist specialist and high performance engine applications. In addition, the students will gain the necessary knowledge and preparation to pursue the State of California Emission Control License. Upon successful completions of this program, students will be prepared to take the Automotive Service Excellence (ASE) exams for Engine Repair (Test A1), and Machinist Specialist (M1, M2, and M3).

A. Certificate

Certificated of Achievement, Auto Tech: Engine Repair and Machinist Specialization

The Transmission and Power Train Specialization Certificate of Achievement is designed to prepare students for employment as Automatic Transmission and Power Train Specialists. The program will provide the necessary skills and knowledge through the use of modern tools and equipment to diagnose and repair automatic and manual transmissions using the latest technology applications. In addition, students will learn to use electronic diagnostic equipment to troubleshoot electronic transmission units. This program will prepare students for employment in the following fields: transmission specialists, transmission installers, and repair technicians. Upon successful completion of this program, students will be prepared to take Automotive Service Excellence (ASE) exams for Automatic Transmissions (Test A2) and Manual Drive Transmission (Test A3).

A. Certificate

Certificated of Achievement, Auto Tech: Transmission and Power Train Specialization

Diesel Farm Machinery and Heavy Equipment 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).

A. Certificate

Certificated of Achievement, Diesel Farm Machinery and Heavy Equipment

II. Career Opportunities

Automotive Service Technicians and Mechanics

III. Labor Market Demand

The Automotive Technology program at Imperial Valley College meets a documented labor market demand. Employment trends for this field are derived from a variety of sources. These are listed below:

A. Employment Trends (Employment Development Department):

Occupation	TOP Code	SOC Code	Average Job Openings per Year
Automotive Service Technicians and Mechanics	0948.00	493023	19
Farm Equipment Mechanics and Service Technicians	0947.00	493041	2
		Total	21*

*Center of Excellence Imperial County Regional Labor Market Assessment 2016

IV. Other Regional Programs

There are no other similar training programs in Imperial Valley.

V. Employment (Perkins Core Indicator)

Job Placement
2016-2017
75%

VI. Completions/Success

	Degrees		Certificates	
	2017-2018	2018-2019	2017-2018	2018-2019
Automotive Technology	4	4	6	4

VII. Program Evaluation (to be completed by EWD office)

The Automotive Program revamped its program two years ago creating a system of specialization certificates instead of one 39 unit certificate option. Enrollment in automotive classes is strong. Faculty will be submitting some additional curriculum modifications to increase completions. Automotive Technology Program meets the requirements stipulated under the California Education Code, Division 7, Part 48, Chapter 1, Article 1, Section 78016.