

IMPERIAL COMMUNITY COLLEGE DISTRICT
REVIEW OF CAREER TECHNICAL EDUCATION TRAINING PROGRAMS
2016

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

II. Career Opportunities

Automotive Service Technicians and Mechanics

III. Industry Certification/Accreditation

The Automotive Technology program is fully certified by the National Automotive Technicians Education Foundation (NATEF). This certification ensures the student will receive training in automotive repair that meets automotive industry standards. Upon completion of the program a student will be prepared for an entry-level position in the automotive industry.

IV. Industry Recognized Credentials (IRC)

The non-profit National Institute for Automotive Service Excellence (ASE) works to improve the quality of vehicle repair and service by testing and certifying automotive professionals. Today, more than 330,000 professionals hold ASE certifications, and work in every part of the automotive service industry. In addition the automotive program started offering certificates of achievements in the following areas: Engine performance/driveability, brakes/suspension, electrical/electricity, transmissions/drivetrains, engine repair/machinist.

V. 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

Occupation	TOP Code	SOC Code	2012	Average Job Openings per Year
Automotive Service Technicians and Mechanics	0948.00	493023	350	17*

*State Employment Development
Occupational Employment Projections 20012-2022
Imperial County
<http://www.labormarketinfo.edd.ca.gov/CommColleges/>

B. Employment Trends Assessment

Automotive Technology is rapidly growing in sophistication, and employers are increasingly looking for workers who have completed a formal training program in high school or in a postsecondary vocational school or community college. Acquiring National Institute for Automotive Service Excellence (ASE) certification is very important for those seeking work in the automotive repair industry.

Employment of automotive service technicians and mechanics is expected to increase by 11.8% (<http://www.labormarketinfo.edd.ca.gov/CommColleges/>). Continued growth in the number of vehicles in use in the Imperial Valley will lead to new jobs for technicians performing basic car maintenance and repair. The increasing use of advanced technology in automobiles will also lead to new opportunities for repair technicians, especially those with specialized skills or certifications.

VI. Other Regional Programs

There are no other similar training programs in Imperial Valley.

VII. Employment and Completion

(Based on State Core Measures Report, 2012-2013, 2013-2014 & 2014-2015)

Core 2: Completions. Measures completions for Career Technical Education student concentrators. Receipt of a certificate or degree or enrollment in a California four-year public university with or without a degree is considered a completion.

Fiscal Year Planning	Program	Total Completions	IVC Completion Rate	State Avg. Completion Rate
2014-2015	Automotive Technology	16/32	50%	65.01%
2013-2014	Automotive Technology	16/44	36.36%	66.22%
2012-2013	Automotive Technology	8/20	40%	63.54%

PERKINS IV Program Performance Trend Report
Core Indicator Two – Total Completions – Certifications, Degrees and Transfer
https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIIndi_TOPCode.asp

Core 3: Persistence and Transfer. The percent of Career Technical Education student concentrators (students who have successfully completed a minimum of 12 units of related Career Technical Education coursework) who persist in education at the community college level or transfer to a two or four-year institution.

Fiscal Year Planning	Program	Persistence	IVC Persistence Rate	State Avg. Persistence Rate
2014-2015	Automotive Technology	43/64	67.19%	80.41%
2013-2014	Automotive Technology	48/80	60%	82.59%
2012-2013	Automotive Technology	42/54	77.78%	81.50%

PERKINS IV Program Performance Trend Report
Core Indicator Three – Persistence and Transfer

https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIndi_TOPCode.aspx

Core 4: Student Placement. The percent of Career Technical Education students who have earnings the following year (as found in the unemployment insurance base wage file) or are in an apprenticeship program, or the military.

Fiscal Year Planning	Program	Placements	IVC Placement Rate	State Avg. Placement Rate
2014-2015	Automotive Technology	19/21	90.48%	61.12%
2013-2014	Automotive Technology	37/37	100%	74.32%
2012-2013	Automotive Technology	13/13	100%	73.21%

PERKINS IV Program Performance Trend Report
Core Indicator Four – Employment

https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIndi_TOPCode.aspx

Pursuant to the FCMAT report, CTE programs are also being evaluated for student demand, certificate and program completion, local labor demand, and a facility utilization for CTE programs in the new CTE building.

VIII. Enrollment Trends

Course	Year	Sections	Avg. Class	Fill Rate
AUT070	2014-2015	0	0	0%
AUT070	2013-2014	2	11	52.50%
AUT070	2012-2013	1	20	100%

Course	Year	Sections	Avg. Class	Fill Rate
AUT085	2014-2015	3	20	90.91%
AUT085	2013-2014	0	0	0.00%
AUT085	2012-2013	0	0	0.00%

Course	Year	Sections	Avg. Class	Fill Rate
AUT110	2014-2015	2	16	80.00%
AUT110	2013-2014	2	18	97.22%
AUT110	2012-2013	3	15	75.86%

Course	Year	Sections	Avg. Class	Fill Rate
AUT120	2014-2015	0	0	0%
AUT120	2013-2014	1	15	75.00%
AUT120	2012-2013	1	14	70%

Course	Year	Sections	Avg. Class	Fill Rate
AUT122	2014-2015	0	0	0%
AUT122	2013-2014	1	18	90.00%
AUT122	2012-2013	0	0	0%

Course	Year	Sections	Avg. Class	Fill Rate
AUT125	2014-2015	2	16	80.00%
AUT125	2013-2014	2	19	102.78%
AUT125	2012-2013	2	17	89.47%

Course	Year	Sections	Avg. Class	Fill Rate
AUT130	2014-2015	3	16	81.67%
AUT130	2013-2014	1	20	100%
AUT130	2012-2013	1	18	90%

Course	Year	Sections	Avg. Class	Fill Rate
AUT150	2014-2015	2	14	70%
AUT150	2013-2014	1	20	100.00%
AUT150	2012-2013	2	9	45%

Course	Year	Sections	Avg. Class	Fill Rate
AUT155	2014-2015	1	23	115%
AUT155	2013-2014	2	21	105.00%
AUT155	2012-2013	2	16	80%

Course	Year	Sections	Avg. Class	Fill Rate
AUT160	2014-2015	1	21	105%
AUT160	2013-2014	1	16	80%
AUT160	2012-2013	2	19	95%

Course	Year	Sections	Avg. Class	Fill Rate
AUT170	2014-2015	1	21	105.00%
AUT170	2013-2014	1	9	45.00%
AUT170	2012-2013	2	15	96.77%

Course	Year	Sections	Avg. Class	Fill Rate
AUT180	2014-2015	0	0	0%
AUT180	2013-2014	2	16	80.00%
AUT180	2012-2013	1	14	70%

Course	Year	Sections	Avg. Class	Fill Rate
AUT210	2014-2015	2	16	77.50%
AUT210	2013-2014	2	18	90.00%
AUT210	2012-2013	2	16	80%

Course	Year	Sections	Avg. Class	Fill Rate
AUT220	2014-2015	0	0	0.00%
AUT220	2013-2014	1	10	55.56%
AUT220	2012-2013	1	12	66.67%

Course	Year	Sections	Avg. Class	Fill Rate
AUT230	2014-2015	1	19	95%
AUT230	2013-2014	0	0	0.00%
AUT230	2012-2013	1	10	50%

Course	Year	Sections	Avg. Class	Fill Rate
AUT231	2014-2015	0	0	0%
AUT231	2013-2014	0	0	0.00%
AUT231	2012-2013	1	11	100%

Course	Year	Sections	Avg. Class	Fill Rate
AUT235	2014-2015	1	11	55%
AUT235	2013-2014	0	0	0.00%
AUT235	2012-2013	0	0	0%

IX. Completions

	2014-2015		2013-2014		2012-2013	
	Degrees	Certificates	Degrees	Certificates	Degrees	Certificates
Automotive Technology	2	3	0	0	0	0

X. FTES/FTEF Analysis

Year	FTES	FTEF	FTES/FTEF
2014-2015	53.73	6.13	8.77
2013-2014	53.35	6.07	8.79
2012-2013	58.86	8.47	6.95

XI. Facility Utilization Plan

The Automotive program is housed in a fifty plus year old building and we only have one restroom available for all classes with no female restroom. Some of the classes are taught outside without protection from hot weather, winds, cold weather and rains. The program met NATEF standards due to the hard work that it's been done to the facilities. The automotive program is in need of a renovation. IVC is planning to remodel the automotive area in a near future.

XII. SWOT Analysis

<p>Strengths Continue with requirements for National Automotive Technicians Education Foundation (NATEF) accreditation. These achievable goals will bring the Automotive Technology Department to the forefront of automotive technology education.</p>	<p>Weaknesses Success rate is impacted by students leaving early with job opportunities. Although the majority of students intend to earn a certificate or degree, many gain employment after enrolling in only one or two classes and are therefore not tracked nor identified as program completers.</p>
<p>Opportunities The Automotive Program just updated its curriculum in additional certificates of achievement. These certificates will bring completion and success rates to the program.</p>	<p>Threats The automotive department is 50 year old building and it is in need of a renovation.</p>

XIII. Program Evaluation

The Automotive Technology program was restructured in 2015 to provide students certificate options in areas of specialization. Previously, students had to complete 39 units in the discipline to earn a certificate and a degree (plus GE). This high credit hour program made it difficult for students to complete, particularly since many CTE students are interested in learning a trade to make them employable. These challenges are evident by the low performance levels in completion of certificates and degrees. A series of five stackable auto certificates were approved by the Curriculum Committee in 2015 that now allows the students to take the same courses while earning five industry recognized certifications. Data demonstrating the value of this change is not yet available but it is expected that the completion performance standard will significantly improve.

This program also has a very low productivity ration (6.95). The ideal ratio is 15. A low ratio is typical of many CTE programs that have limitations on enrollment due to lab space and safety standards. Fill rates appear to be consistent with other college programs. As noted by the faculty, the program is housed in a worn out facility; however, this building is slated to be the next renovation project when the college starts new construction projects. The program has benefited from Perkins and other grant programs that have allowed the purchase of new equipment that teach students with the latest technology available.

XIV. Recommendations

Although the program has low performance indicators in completion rates, it is anticipated the restructure of the program from one large 39 unit certificate program to five short industry related certificates will mitigate this indicator.

It is recommended that the Automotive Technology program continue without any further mitigation with a subsequent reevaluation in 2 years.