

PROGRAM TITLE: Automotive Technology	COLLEGE: Golden West College
DATE: 2023 Biennial Program Review	Taxonomy of Program (TOP) Code: • 0948.00: Automotive Technology

CERTIFICATES AND DEGREES	TOTAL: 8
CERTIFICATES	DEGREES
<ul style="list-style-type: none"> • Certificate of Achievement: Chassis and Drivetrain • Certificate of Achievement: Engine Performance and Emission Specialist • Noncredit Certificate of Completion: Automotive Lube Technician Specialist • Noncredit Certificate of Completion: Automotive Tire and Wheel Technician • Noncredit Certificate of Completion: Vehicle Maintenance Specialist • Noncredit Certificate of Completion: Smog Inspector 	<ul style="list-style-type: none"> • Associate in Arts: Chassis and Drivetrain • Associate in Arts: Engine Performance and Emission Specialist

1. PROGRAM MEETS A DOCUMENTED LABOR MARKET DEMAND: GROWTH IN MARKET Data based on TOP code crosswalk to applicable Standard Occupational Classification (SOC) Codes Job openings based on Orange County Region as reported in EMSI: Occupation Overview Report				
OCCUPATION	EMSI Current Openings (2022)	EMSI Projected Openings (2032)	Change Between 2022-2032 Job Openings	% Change
Electronic Equipment Installers and Repairers, Motor Vehicles (49-2096)	25	22	-3	-12.0%
Automotive Service Technicians and Mechanics (49-3023)	5,451	5,793	+342	+6.3%
TOTAL	5,476	5,815	+339	+6.2%

Golden West College offers six certificates and two associate degrees under the Automotive Technology Program. According to the Economic Modeling Specialists International (EMSI), there were 5,476 openings in 2022 associated with the Automotive Technology Program. Occupations in the program are expected to increase by 6.2% between 2022 and 2032, with the largest increase to job openings (+342) and the largest percentage change (+6.3%) are realized by Automotive Service Technicians and Mechanics.

The table below shows the projected openings and percentage changes within each occupation associated with the program.

2. PROGRAMS MEET A DOCUMENTED LABOR MARKET DEMAND: PERCENTILE EARNINGS WITHIN MARKET**Data based on TOP code crosswalk to applicable SOC Codes****Percentile earnings based on Orange County Region as reported in EMSI: Occupation Overview Report**

OCCUPATION	25 th Percentile Earnings	Median Earnings	75 th Percentile Earnings
Electronic Equipment Installers and Repairers, Motor Vehicles (49-2096)	\$19.45/hour	\$20.08/hour	\$24.81/hour
Automotive Service Technicians and Mechanics (49-3023)	\$19.19/hour	\$25.46/hour	\$31.32/hour
PERCENTILE EARNING AVERAGE	\$19.21/hour	\$25.43/hour	\$31.30/hour

Automotive Service Technicians and Mechanics represent the Automotive Technology Program with the highest median earnings of \$25.46/hour. Electronic Equipment Installers and Repairers, Motor Vehicles represent the Automotive Technology Program with the lowest median earnings of \$20.08/hour.

3. PROGRAM DOES NOT REPRESENT UNNECESSARY DUPLICATION OF OTHER MANPOWER TRAINING PROGRAMS IN THE AREA:**Programs based on TOP Code (0948.00) Certificates and Associate's degrees in Orange County Region as reported in DataMart – Program Awards Summary**

INSTITUTION	Certificates Awarded (2021-2022)	Associate Degrees Awarded (2021-2022)	% Distribution of Total Certificate /Associate Degrees Awarded	Growth % Year over Year (YOY) (Compared with 2020-2021)
Cypress College	204	15	55.9%	+56.4%
Golden West College	50	19	17.6%	+228.6%
Santa Ana College	17	35	13.3%	-8.8%
Saddleback College	20	6	6.6%	+73.3%
Fullerton College	15	11	6.6%	+4.0%

Of the total 392 certificates and associate degrees awarded in 2021-22, Golden West College awarded 17.6% of the certificate and associates degrees in Automotive Technology Program in the Orange County Region. Compared to 2020-21, the number of awards by Golden West College increased by 228.6%.

4. PROGRAM IS OF DEMONSTRATED EFFECTIVENESS AS MEASURED BY THE ENROLLMENT AND COMPLETION SUCCESS OF ITS STUDENTS:

Data based on required courses within degrees/certificates associated with program.

Enrollment: Data Source: Argos – Program Review Enrollment Cube (Census Enrollment)

FTES: Data Source: Argos – Program Review Enrollment Cube (FTES Total)

FTES: Resident: Data Source: Argos – Program Review Enrollment Cube (FTES Res 320)

FTES: Non-Resident: Data Source: Argos – Program Review Enrollment Cube (FTES NRes 320)

WSCH/FTEF: Data Source: Argos – Program Review Enrollment Cube (WSCH_FTEF 525 Est)

Enrollment within Subject: Data Source: Argos – Program Review Access Success Cube (Enrolled)

Retention within Subject: Data Source: Argos – Program Review Access Success Cube (Retention)

Annualized Course Success Rate: Data Source: Argos – Program Review Access Success Cube (Success)

Degrees and Certificates: Data Source: DataMart - Program Awards Summary

Academic Year	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Enrollment	467	451	480	338	383
FTES	110	106	112	61	72
FTES: Resident	107	102	109	59	70
FTES: Non-Resident	3	4	3	2	2
WSCH/FTEF	388.6	421.4	348.1	264.7	272.5
Fall to Spring Retention Within Subject					
Fall-to-Spring Enrollment	247/223	219/233	289/290	172/170	211/160
Fall-to-Spring Retention	89.6%	91.4%	78.2%	77.2%	83.6%
Annualized Course Success Rate	76.6%	83.4%	64.1%	77.2%	83.6%
Degrees and Certificates					
Certificates	24	31	24	9	50
Associate Degrees	13	20	31	12	19
Total	37	51	55	21	69

The course data above reflect required course enrollments within degrees/certificates associated with the program and TOP codes aligned with the program TOP codes. Elective course options within degrees/certificates were not included in the enrollment count.

The enrollment in the Automotive Technology grew from 467 in 2017-2018 to a in 2019-2020 (480), the program decreased to 338 in 2020-2021, but experienced growth to 383 in 2021-2022. The FTES experienced a similar peak of 112 in 2019-2020. FTES dropped to 61 in 2020-21 before increasing to 72 in 2021-2022. The instructional load efficiency (WSCH/FTEF) experienced a primarily upward trend, beginning at 388.6 in 2017-2018 and increasing to 421.4 in 2018-2019 before experiencing a decline to 272.5 in 2021-22. A value of 525 or higher is the standard average target and it is a measure of average class enrollment needed for cost efficiency purposes.

Overall, the enrollment in the program experienced growth from 2017-2018 and peaked in 2019-2020 but declined the following two years. Degree and certificate awards fluctuated with a start of 37 in 2017-2018, rising to 55 in 2019-2020, dropping to 21 in 2020-2021 and increasing to a peak of 69 in 2021-2022.

The Automotive Technology department has seen a significant increase in enrollment in the 22-23 year, though that data is not shown here. The department was one of the first programs offered back in person during the pandemic, being considered “essential workforce training” The department successfully navigated the return to campus and has seen increasing demand from OC dealerships and manufacturers who are in great need of Automotive technicians.

The college has agreements with Honda, Subaru, and Volvo. Recently the department has been approached by General Motors and Hyundai to create additional partnerships to move technicians into those career pathways. The program is working closely with the industry advisory to keep up with current trends and make sure that the technicians educated at GWC are ready for employment.

Automotive faculty have rewritten curriculum to create stackable certificates that are mapped to the Automotive Service Excellence (ASE) areas in order to better serve students as they progress in their careers. The faculty also work closely with CTE counselors, funded by the Strong Workforce Program, to increase completions. The data above shows that despite being slightly down in enrollments, completions have increased! This is due to collaboration between the automotive department and student services.

College Dean Signature: _____ Date: _____

Vice President of Instruction Signature: _____ Date: _____