

Cuyamaca College Proposed Associate Degree and Certificates

Automotive Department Plan

Recommendations:

Strong Workforce Program Rubric

- Request provides strong evidence funding and changes will increase success rates in program courses
- Request provides strong evidence changes will increase enrollment and FTES in program courses.
- Request will increase and document improved student completion and certificates.
- Request provides strong evidence of need for additional graduates in the field.

Our degree and certificate programs need to be changed to capture more graduations and certificates. Credit hour requirements should be revised for specialized certificates and associate degrees increasing student access to specialized training. The work experience requirement should be increased for each degree and certificate. We also need to create certificates following the State minimum to capture the average student success rates. We need to expand relationships with industry organizations, regional colleges, workforce training organizations, Miramar College, ECC, and Southwestern by forming articulation agreements and industry sponsored degree programs containing apprenticeships. Distance learning tools will allow us to perform on the job training, and increase success rate employment.

Current Catalog Offering

Associate Degree Automotive Technology 39 – 44 credit hours

ASEP Degree 52.5 credit hours

ASSET Degree 51.5 credit hours

Certificate of Achievement Advanced Engine Performance and Emissions 25 credit hours

Certificate of Achievement Brakes and Front End 19 credit hours

Certificate of Achievement Drive Train 22 credit units

Proposed Degrees and Certificates

Associate Degree or AST*	Certificate of Achievement or Department Award of Achievement*	Credit Hour
Master Technician Degree Automotive Technology AST		39 - 44
Ford ASSET AST	Ford ASSET	51.5
General Motors ASEP AST	GM ASEP	52.5

ASCCA Automotive Master Technician AST	ASCCA Automotive Master Technician	51
Automotive Chassis AS	Automotive Chassis	18
Automotive Electrical and Electronics – Alternative Fuel AS	Automotive Electrical and Electronics – Alternative Fuel	18
Automotive Engine Performance AS	Automotive Engine Performance	18
Automotive Power Train AS	Automotive Power Train	18
Automotive Service Management* AST	Automotive Service Management	18
	Automotive Department Award of Achievement	
	Automotive Brakes	8
	Automotive Suspension and Alignment	8
	Emission Control License	8
	Automotive Engine Repair	8
	Automotive Power Train	8
	Automotive Electrical	8

*AS and AST. The Associate degree AS is not articulated for direct transfer to CSU. The Automotive Service Management will articulate to CSU for a business management degree with emphasis in automotive technology.

*Department award of achievement have work experience in addition to academic course work in a specific content areas.

Bachelor of Science Automotive Service Management

Students do not have a clear pathway for a B.S. degree. We need to work with San Diego State, San Marcos State, or another university to formulate a clear pathway articulation for a higher education degree for our top level A.S. students, who have completed their general education requirements. This may include several pathway options.

Certificates of Achievement

Students need to receive certificates and awards as they complete certificates of achievement. Students like patches and recognition of their achievements as they progress towards an A.S degree. Currently, there is no recognition of achievements other than a department certificate. I suggest we invest in a department uniform shirt that has patches that can be affixed to the uniform as students progress through each certificate. Students can wear there uniform and display their achievements.

Work Experience

Each degree or certificate has a required work experience component. Work experience is currently being performed by many of our students who do not enroll in the Work Experience class. Requiring work experience for each certificate will ensure students are more prepared to work in industry and will increase employment and wages.

Labor Market Index – Projected Jobs and Wages

Projections of Employment by Occupation,
2012 - 2022

Selections:

TOP Code(s):

- 094800 Automotive Technology

Geography: **San Diego County**
Includes: San Diego County

Annual Job Openings by Occupation

SOC Code	Occupation Title (Linked to "Occupation Profile")	2012 Employment	Annual Job Openings (1)
493023	Automotive Service Technicians and Mechanics	5,690	227
Total		5,690	227

(1) Total Job Openings are the sum of new jobs from growth plus net replacements. Annual job openings are total job openings divided by the number of years in the projection period.

(2) This occupation has been suppressed due to confidentiality.

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[Save or View in Excel](#) [Back to Occupation List](#) [New Search](#)

Automotive Service Technicians and Mechanics (SOC Code : 49-3023) in San Diego County

Diagnose, adjust, repair, or overhaul automotive vehicles. Exclude "Automotive Body and Related Repairers" (49-3021), "Bus and Truck Mechanics and Diesel Eng Specialists" (49-3031), and "Electronic Equipment Installers and Repairers, Motor Vehicles" (49-2096).

Employers are usually looking for candidates with Post secondary vocational training .

San Diego County is the same as San Diego-Carlsbad MSA.

Occupational Wages

Area	Year	Period	Hourly Mean	Hourly by Percentile		
				25th	Median	75th
San Diego-Carlsbad MSA	2016	1st Qtr	\$20.96	\$13.86	\$19.13	\$26.96

[View Wages for All Areas](#) [About Wages](#)

Occupational Projections of Employment (also called "Outlook" or "Demand")

Area	Estimated Year-Projected Year	Employment		Employment Change		Annual Avg Openings
		Estimated	Projected	Number	Percent	
San Diego County	2012 - 2022	5,690	6,530	840	14.8	227

[View Projections for All Areas](#) [About Projections](#)

Job Openings from JobCentral National Labor Exchange

Enter a Zip Code [Find a Zip code in San Diego County](#)

Within miles of Zip Code.

[Search Jobs](#)

Program Management

We need to hire an additional person to help us coordinate articulation agreements, manage apprenticeships with ASCCA, the New Car Dealer Association, and create curriculum changes that will put our students in work experience classes. All classes need to be converted to hybrid classes. We will need to upgrade our instructional technology and certification of instructors to teach work based hybrid classes.

Projected Costs

Curriculum Development 100 hours \$45 per hour \$4500

Work Experience Coordinator – Department Coordinator \$85,000 per year

Professional Development - @One for Teachers \$2,000 per Faculty = \$6,000

Lab Assistants – Fall, spring and summer semesters. 34 weeks x 20 hours per week. 680 hours x 2 assistants = 1360 hours x \$12 per hour = \$16,320 x 1.05 = \$17,136 Total estimate \$20,000 for lab assistants.

Lap Tops and Smart Classroom

At least two classrooms should be converted to smart classrooms. This will require a smart LED screen, lap tops with cameras, and a video camera for recording labs. 24 Lap tops, 2 LCDS, 2 Video Cameras, 2 speaker – microphone sets \$15,000

Dedicated and Specialized Classrooms

Each classroom should be dedicated and specialized for each class taught in the room. Ford ASSET, and GM ASEP should have dedicated classrooms, so that student can schedule open labs and objective tests.

Dedicated Parking

- Each department training vehicle should have a dedicated parking space and have known laboratory bugs, or demonstration “set up” design specific to department learning objectives. Vehicles should be renumbered to match the parking space.
- Each vehicle should be returned to the designated parking space when not being used for department objective labs or tests.
- Ford and GM vehicles need to be separate from the general program training vehicles.
- ASCCA training vehicles may need to be separated from general program training vehicles as the population of vehicles increases.
- No more vehicles should be accepted without approval of the full-time faculty.
- Older unused vehicles should be removed so that every vehicle has a dedicated parking space.

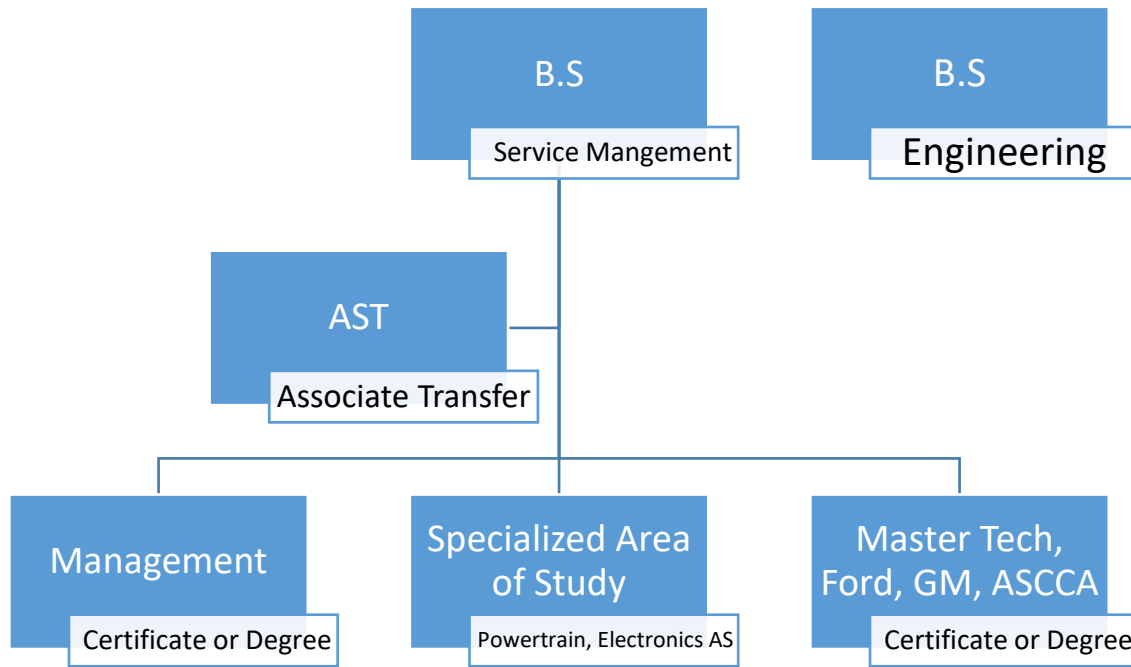
Department Objective Labs and Tests

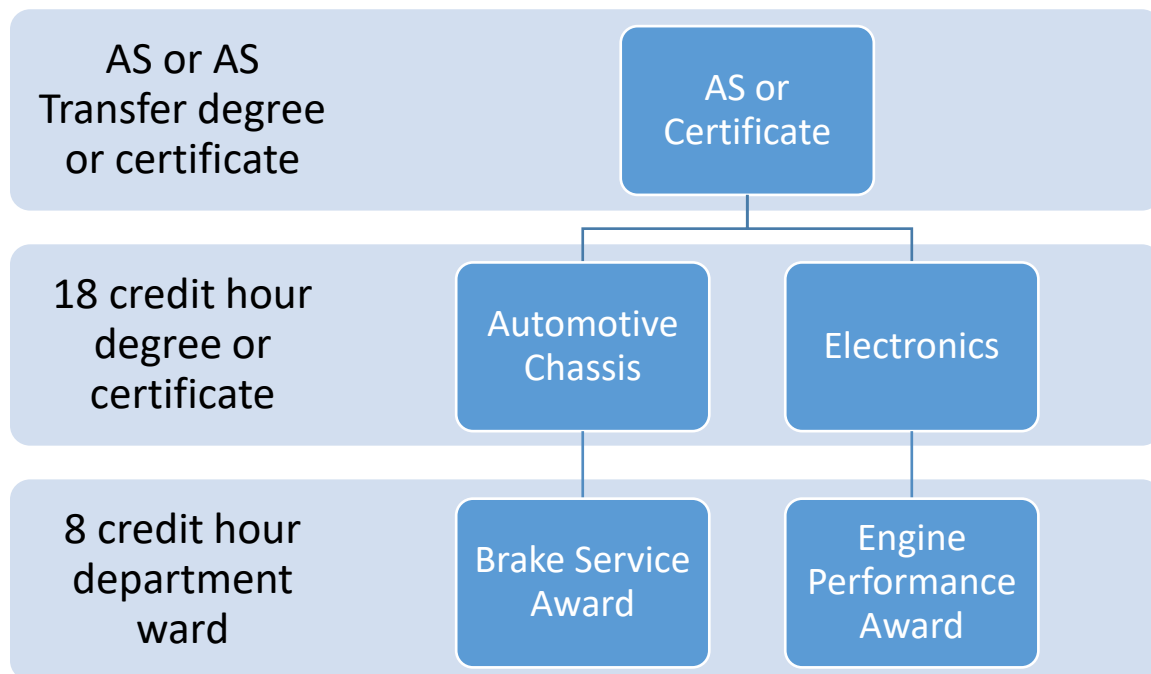
Lab assistants should prepare specifically assigned vehicles for laboratory tests. The laboratory tests should be specifically designed by the Department for specific vehicles and SLOs. The vehicles should be assigned specific areas of the lab during midterms and final examinations. The end goal should be open labs. A student enrolled in a hybrid training course should schedule a laboratory test. Objective written tests should be written and administered by the department with input from adjunct faculty.

Hybrid Classes

Each department course should be converted to a hybrid training course. The course could be taught as face to face, for those students not enrolled in work experience. Students enrolled in work experience

can perform laboratory labs at their respective job. The Department will administer objective labs and tests for all students to ensure achievement of learning objectives.





Graduations and Certificates - History

2012- 13	1013 - 14	2014 - 15	Total
AS degree (4)	AS degree (5)	AS degree (11)	AS degree (20)
Cert 30 (3)	Cert 30 0	Cert 30 (5)	Cert 30 (8)
Cert < 30 (8)	Cert < 30 (3)	Cert < 30 (10)	Cert < 30 (22)

The above chart shows need for improvement. Changing our degree credit hour requirements and increasing work experience will increase our certificates and degrees.