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Solano Community College

Automotive Technology Department

ABRIDGED 2-YEAR PROGRAM REVIEW

Our program prepares graduates for employment in the automotive industry as apprentice mechanics, parts professionals, service writers, or in one of the many areas and jobs related to the automotive industry. Students who complete the Certificate of Achievement or the Associate Degree will be technically proficient in entry level with the skills defined by the National Automotive Technicians Education Foundation (NATEF).

Solano Community College's AT.E.C. Program has had many changes over past the fifteen months that it has been running. The Automotive Program has transformed from four, out dated, ten-unit classes into twelve, applicable, cutting edge classes ranging from two to four units each. This allows students to not only receive a world-class education, but they can now fit the reduced unit classes better into their overall schedules. With measure Q, we have been able to add equipment that demonstrates both dealership and independent shops along with a wide range of laboratory assignments that match these settings. The program has also added a full time lab technician, and a second full time instructor.

Enrollment in the Auto Tech Program has grown at an amazing rate, in fact, it has far exceeded the college's expectations. In fall of 2014 the program kicked off with approximately 80 students and 5 classes offered. The courses included the following; 2-ATEC070 (fundamentals), 1-ATEC 130 (steering and suspension), 1-ATEC 132 (brakes), and 1-ATEC 140 (hybrid and alternative fuels). By spring of 2015 there were 126 students enrolled in 6 classes. These updated courses included; 2-ATEC 070, (fundamentals), 1-ATEC 131 (electrical), 1-ATEC 133 (engine repair), 1-ATEC134 (automatic transmission), and 1-ATEC 136 (manual transmission). Currently in the Fall 2015 semester, there are 200 students enrolled with 10 classes now offered. These have increased to; 5-ATEC 070 (fundamentals), 1-ATEC 130 (steering and suspension), 1-ATEC 131 (electrical), 1-ATEC 132 (brakes), 1-ATEC 135 (engine performance), and 1-ATEC 140 (hybrid and alternative fuels).

The excitement and demand to enroll within the Automotive Program, is most likely due to word of mouth from students and staff in conjunction with all of the outreach and advertisement/branding placed within the community by the college and staff. It may also be related to the information circulating that there is a great need for Technicians in the area, and very few opportunities for training in

this S.T.E.M. field. In Solano County and, we are currently the only source program available. It has become common conversation, as seen in the media, that we are in need of alternative fuels and replacement employees in the fields related to Engineering and Technology. As mentioned above we have five fundamental classes full of enthusiastic students, many who will go on to enroll in other classes offered in the future. Looking at the data program enrollment should continue to increase significantly in the next few semesters.

All of the already offered courses have been re-evaluated, and brought up to newer standards. Also, the program staff has recently written and submitted new curriculum for the following three courses; ATEC 137 Automotive Climate Control Systems, ATEC 138 Automotive Advanced Engine Performance, and ATEC 139 Automotive Electronics. These courses are awaiting approval. With these changes, the degree will be up-dated and resubmitted for approval, ready for graduates to begin their climb to credentialing.

Two students have already received certificates within the first full year of the program, their actions having demonstrated the effectiveness of the new program. Currently, there are many students that will be eligible to graduate with certificates or degrees with in the next year. Students throughout the program are enthusiastic for a new semester's classes, so they can meet their personal goals and accomplish various certificates and possibly even a degree.

The labor market projections for the automotive field are tremendous, they expect anywhere from a 9-15% increase in employment within the next five years. Following are a few cited source quotes on this subject:

“Employment of automotive service technicians and mechanics is projected to grow 9 percent from 2012 to 2022, about as fast as the average for all occupations. Job opportunities for qualified jobseekers should be very good”. (*Bureau of Labor Statistics*)

“Job growth for auto mechanics is predicted to reach 17 percent through 2020, which is slightly more than the 15 percent rate expected for all installation, maintenance and repair occupations, and also more than the 14 percent projected for all jobs in all industries. Driving this demand is a growing population that will buy and drive more vehicles. In addition, more consumers are keeping their more durable cars longer, which requires more maintenance by technicians. Consolidation in the auto industry can depress job opportunities”. (*State of California Development Department*)

The instructors have noted as well, an increase in the amount of inquires for trained students to fill open positions in various local shops. They are frequently receiving both appointments and drop-ins from professionals in the area requesting recommendations for interns, long, and short-term employees.

The Advisory meeting consist of members of the Solano County community, they include owners of various dealerships, independent shops, service managers, Sonoma Raceway, and automotive publishers and enthusiasts. The majority of the committee had a mutual concern for students to be equipped with soft skills such as

customer relations, public interaction, and presentation , as well as the hands on training usually covered at an automotive school or training facility. They have experienced a lack of overall “well roundedness” with new hires and those coming into the industry; either having the skills to professionally deal with the public, in person and by phone, or to deal with the technical aspect of autos, but not both. Also, there seems to be a lack of training in writing accurate estimations, and presenting them to the customer.

Being the only establishment within the Solano County area offering automotive training with certificates and/or an Associates of Science Degree, we are clearly not taking away from or affecting other local programs. This program only adds positive benefits to the community, by offering training to people in this skill set.

Looking at all the data and projects, we are looking at the need to add staff to fulfill the demand of the program. We are going to need to offer more classes, which will require additional instructors, lab technicians and student workers. This is going to require more supplies. Looking at the need for advanced training to existing technicians throughout the community, we have found that we need to offer workshops for those workers. We are working on offering smog training and certifications to technicians.

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