BOARD APPROVED 4/7/09

AUTOMOTIVE

PROGRAM REVIEW 08-09

ONE COLLEGE WAY
BLYTHE, CA 92225

EXECUTIVE SUMMARY

AUTOMOTIVE

The Automotive Technology program is serving an important community need providing students with marketable skills. The need is reflected in the stable enrollments in the program. The new Technology Building and updated scheduling process has improved the efficiency of the course offerings and the student's ability to complete in a timely manner.

The program has also distinguished itself by establishing and maintaining industry partnerships. The benefits include not only supplies and equipment to the program but also exposure to cutting edge research and technology within the automotive industry.

The faculty will be updating the A.S. degree in consort with the Advisory Committee in order to bring the degree requirements more in line with student and industry needs. The faculty will also be working with the local industry to develop more opportunities for on-the-job training.

PART 1: MISSION

State the purpose of program.

The purpose of the Automotive Technology Program is to provide students with the necessary skills to work in an ever-expanding field. To this end, the Automotive Technology Program provides students with basic, entry-level skills, professional development opportunities for working technicians, and certification and degree options.

Associate of Science (Occupational) Automotive Technology

The Associate of Science in Automotive Technology is a two-year course of study designed to prepare students intending either to continue study at a technical school, or to enter the workforce. The Associate of Science Degree in Automotive Technology includes general education courses in English, Math, Speech, History, and Health that are, for the most part, articulated within the CSU system, and some are UC articulated as well, making them transferable within the State of California. Non-substantial changes are being made to the associate's degree at this time.

Certificate in Automotive Technology

The certificate in Automotive Technology is an 18 unit course of a study designed to prepare students with the theory and practical skills necessary for entry-level employment as automotive mechanics. Students will learn the operation, maintenance, and repair of all types of automobiles.

Certificate in Automotive Fabrication

The certificate in Automotive Fabrication is a 16 unit course of study designed to prepare students with the theory and practical skills necessary for entry-level employment in the automotive fabrication industry. Students will learn the basic skills necessary for fabrication of safety cages, suspension set up, engine tuning and overhaul.

In addition to the desirability of the degree and certificate programs, individual AUT courses provide students with practical skills.

Describe how the program supports the overall mission of the College as adopted by the Board of Trustees.

The program supports the overall mission of the College by providing high quality programming in a particular vocational area. AUT courses provide an opportunity for lifelong learning in that they offer the opportunity for professional development and certification to working technicians. And, by offering training that is practicable, the Automotive Technology Program works toward the College's goal, "to create better futures for our students and our communities."

Describe the unique institutional goal the program achieves.

The program satisfies a unique institutional goal by providing technical education in the trades. Without the Automotive Technology Program, a key component of Vocational Education Division programs, the College would not be able to provide the necessary range of technical, vocational training to students intending to enter ever-expanding, in-demand fields.

PART 2: ACCOMPLISHMENTS IN ACHIEVING GOALS OUTLINED IN THE PREVIOUS PROGRAM REVIEW

Describe progress in achieving goals outlined in the previous program review, providing evidence documenting such achievements.

- Certificates in Automotive and Fabrication have been created and approved.
- The new Technology Building has provided adequate classroom and lab space and has greatly increased the productivity of the program.
- Discussions are in progress to provide a dedicated counselor for automotive students including Palo Verde High School, Twin Palms Continuation High School, and adult education.
- E-Learning opportunities are being researched with Title 3 Grant monies.

Explain modifications of goals outlined in the previous program review, providing evidence documenting such modifications.

To date, there has been no need to make significant modifications to the program.

PART 3: POPULATIONS SERVED

Describe the populations served by the program, including special populations.

The Automotive Technology Program is open to all interested Palo Verde High School, Twin Palms High School and Palo Verde College students. During the day, the program serves both high school students and adult students at a ratio of 50/50; during the evening, the program serves a larger number of adult college students.

Describe other populations that should be served by the program, and describe plans to serve them in the future.

While the Automotive Technology Program does serve students of varying needs and interests, ideally, the program would enroll a greater number of adult students.

PART 4: CURRICULUM HISTORY

List the courses constituting the program.

AUTOMOTIVE TECHNOLOGY		
COURSE ID	COURSE NAME	UNITS
AUT 090	Automotive Fabrication & Setup	4
AUT 100	Introduction to Automotive Technology	3
AUT 101	Basic Technician Skills	3
AUT 102	Engine Analysis / Tune-Up	3
AUT 103	Suspension, Steering and Alignment	3
AUT 105	Automotive Technology: Principles, Diagnosis and Service	5
AUT 110	Brake Systems	3
AUT 111	Automotive Electrical Systems	3
AUT 112	Engine Electrical Systems	3
AUT 113	Standard and Automatic Power Trains	3
AUT 115	Introduction to Alternative Fuels	3
AUT 120	Introduction to Diesel Technology	3
AUT 200	Engine Diagnosis / Overhaul	6
AUT 201	Auto Maintenance and Repair	6
AUT 202	Fuel and Emissions Systems	3
AUT 210	Engine Performance and Troubleshooting	6
AUT 212	Automotive Air Conditioning	3
AUT 290	Selected Studies in Automotive Technology	.25-4

Of the courses constituting the program, list those courses that have not been successfully offered at least once during the preceding six (6) semesters.

AUTOMOTIVE TECHNOLOGY		
COURSE ID	COURSE NAME	UNITS
AUT 105	Automotive Technology: Principles, Diagnosis and Service	5
AUT 113	Standard and Automatic Power Trains	3
AUT 115	Introduction to Alternative Fuels	3
AUT 120	Introduction to Diesel Technology	3
AUT 201	Auto Maintenance and Repair	6
AUT 202	Fuel and Emissions Systems	3
AUT 210	Engine Performance and Troubleshooting	6

AUT 290	Selected Studies in Automotive Technology	.25-4

Explain why such courses were not successfully offered. Provide a strategy for improving their success, or explain why they should not be removed from the program.

Although these courses are not currently offered, they may be in the future.

PART 5: COURSE SCHEDULING AND AVAILABILITY

Describe how effectively the scheduling process of classes in the program:

Optimizes class availability for day students, evening students and distance education students.

Within the Automotive Technology Program, courses are scheduled at times that allow appropriate instructional methodology. At this time, day courses are scheduled on a Monday, Wednesday, Friday and Tuesday, Thursday, Friday in two- hour blocks to meet the needs of students. This meets the needs of that student population better than the one-hour, 5 day a week block from years past. Also, a seventh period at the high school has been implemented to better accommodate students wishing to pursue opportunities such as Automotive Technology classes. The night classes are offered in two and a half hour blocks to accommodate the schedules of adult students, the primary enrollees in these courses.

Optimizes student learning.

Within the Automotive Technology Program, courses are adequately sequenced for both day and evening students. The Automotive Technology faculty, in developing a schedule of classes, adhere to the department's two-year plan. A core sequence of courses is offered each semester, and elective courses that students, given high-quality advising and appropriate preparation, will be able to complete the program within the two-year cycle.

PART 6: STUDENT LEARNING OUTCOMES

Describe the process by which the program identifies, measures and evaluates student learning outcomes at the course, program and degree levels, and provide evidence that this process is being followed.

Students completing courses in the Automotive Technology program possess the skills and training to pursue various career options, such as;

a. Meeting certification and recertification requirements in Automotive Technology, including but not limited to ASE certification.
b. Obtaining entry level training as an automotive technician.
c. Improving skills in additional areas to become more employable within the industry.

Curriculum in the Automotive Technology Program is appropriate for first and second year students at a trade school.

Describe the process by which program improvements are made, and provide evidence that this process is being followed.

The Automotive Technology faculty with recommendations from the advisory committee has taken measures to ensure that courses reflect the skills that working professionals need. The training offered within the program focuses on one topic per course per semester. This modular curricular organization by nature discourages duplication. While concepts are often reinforced from one class to the next, students work toward a new skill set for each class in the program.

PART 7: PROGRAM AND COURSE COVERAGE

Describe how effectively courses in the program are covered by:

Full-time Faculty; Part-time (adjunct)

The Automotive Technology Program is staffed by one full-time faculty and one part-time faculty member. These two faculty members are adequate to support the program.

Describe ongoing or projected deficiencies in faculty coverage of courses in the program.

As enrollment increases or to offer a wider variety of classes other faculty will be necessary.

Describe plans to improve program and course coverage, if applicable.

None.

PART 8: PROFESSIONAL DEVELOPMENT

Describe specific professional development activities in which faculty members in the program participate, and explain how such activities benefit or enhance the program and support and facilitate student learning outcomes.

Instructors routinely participate in professional development in terms of continuing professional education and seminars. The Automotive faculty has completed additional coursework in the subject area, at PVC. This training has allowed for skills updates in an ever-changing field. The faculty's continuous attention to professional development ultimately helps students by providing them a highly skilled and highly qualified faculty. The full time faculty has completed the Automotive Technology Certificate at PVC and is working on the Welding Certificate.

Instructors regularly attended new product seminars presented by leading industry equipment manufacturers. The new cutting-edge equipment purchased by the faculty and advisory committee is due to their attention to trends in the industry. For example, the faculty purchased Snap-On tools and scanners.

Staff of the Automotive Technology Program regularly participate in in-service activities, including College Flex Day trainings, College seminars, Palo Verde High School seminars, and other professional growth opportunities offered on campus as time permits. Every year the Automotive Technology Program participates in Career Day on the Palo Verde College main campus, and the Palo Verde College information booth and displays at the Colorado River County Fair.

Describe areas of unmet professional development needs among faculty in the program, if applicable, and outline plans to address those needs.

No unmet professional development needs have been identified at this time.

PART 9: STUDENT PERFORMANCE AND COMPLETION

Display and comment on semester-by-semester course completions in the program over the preceding six (6) semesters. (Course completion rate = A, B, C, D, or CR divided by A, B, C, D, F, CR, NC, W, MW, IP)

SUMMER 2007-08					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E
AUT 212 1	Auto Air Condtn	3	11	64%	E
SPRING 2007-08					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E

AUT 090 1	AutoFab&Setup	2	11	100%	D
AUT 103 1	Susp,Steer, Alg	3	24	83%	D
AUT 112 1	Engine Elec Sys	3	16	86%	D
AUT 200 1	Eng Diag/Ovrhl	6	21	86%	D
FALL 2007-08					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E
AUT 090 1	AutoFab&Setup	2	16	88%	D
AUT 101 1	Bsc Tech Skills	3	22	91%	D
AUT 102 1	Engine Analysis	3	25	88%	D
AUT 102 2	Engine Analysis	3	14	93%	E
AUT 110 1	Brake Systems	3	24	83%	E
AUT 111 1	Auto Elec Sys	3	18	89%	D
SUMMER 2006-07					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E
AUT 212 1	Auto Air Condtn	3.00	13.00	100%	E
SPRING 2006-07					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E
AUT 090 1	Auto Fab & Setup	2.00	11	82%	D
AUT 103 1	Susp, Steer, Alg	3.00	12	92%	D
AUT 111 1	Auto Elec Sys	3.00	12	83%	E
AUT 112 1	Engine Elec Sys	3.00	11	82%	D
AUT 200 1	Eng Diag/Ovrhl	6.00	21	81%	D
FALL 2006-07					
Course Code	Course Title	Credit Hours	Enrollment	Successful Completion	D/E
AUT 090 1	Auto fab & Setup	2.00	15	80%	D
AUT 101 1	Bsc Tech Skills	3.00	18	78%	D
AUT 101 2	Bsc Tech Skills	3.00	10	90%	E
AUT 102 1	Engine Analysis	3.00	16	69%	D
AUT 110 1	Brake Systems	3.00	18	94%	D
AUT 111 1	Auto Elec Sys	3.00	16	94%	D

Display and comment on semester-by-semester degree or certificate completions, if applicable.

Certificate Completions		
Certificate	Semester	Completed
Automotive Technology	2006-07	3
Automotive Technology	2007-08	9

PART 10: ENROLLMENT AND FINANCIAL TRENDS

Display and comment on year-by-year enrollments in the program over the preceding five (5) years.

Year	FTE's	Headcount*	Sections
2003-04	40.59	236	16
2004-05	44.87	238	17
2005-06	26.83	177	17
2006-07	32.33	173	12
2007-08	40.98	202	11

***Duplicate headcount

Display and comment on year-by-year expenses incurred by the program over the preceding five (5) years, as to: supplies, contracts, capital outlay and other non-salary expenses.

	Salaries	Benefits	Supplies	Contracts	Capital	TOTAL	FTES	Rate	Income
2007-2008	$81,836.68	$22,810.64	$51,315.69	$ 335.75	$ 8,375.06	$164,673.82	40.98	$4,771.00	$195,515.58
2006-2007	$82,924.67	$22,522.93	$19,492.83	$ 252.24	$ 2,033.13	$127,225.80	32.33	$4,564.00	$147,554.12
2005-2006	$73,392.06	$21,367.91	$10,455.72	$ 203.70	$ 1,726.81	$107,146.20	26.83	$4,367.00	$117,166.61
2004-2005	$77,939.01	$23,982.40	$ 3,200.00	$ 695.83	$ 1,437.14	$107,254.38	44.87	$5,509.33	$247,203.64
2003-2004	$65,991.51	$18,126.74	$ 4,120.94	$ -	$35,639.36	$123,878.55	40.59	$5,106.59	$207,276.49

The partnership with Lucas Oil has provided $20,000 - $25,000 in supplies for the PVC Automotive students as well as the maintenance of all PVC vehicles.

PART 11: FACILITIES AND EQUIPMENT

Are current facilities, such as classrooms, offices and equipment, adequate to support the program? Explain.

The new facilities, occupied in Fall 2007, located on Palo Verde College Campus meet the needs of the Automotive Technology Program.

Is available dedicated space adequate to support the program? Explain.

The facilities are adequate to support the program.

Is available equipment adequate to support the program? Explain.

Palo Verde College has historically been very supportive of the Automotive Technology Program in terms of equipment. All equipment is adequate to support instruction

Describe plans for future changes in support facilities or equipment.

No further plans at this time.

PART 12: STRENGTHS AND WEAKNESSES

List and comment on the major strengths of the program.

The Major strengths of the department are as follows:

- The construction of the phase 2 vocational Technology Building with state of the art facilities, classrooms and equipment provides the PVC student and optimal learning experience.
- Students participating in program classes are prepared for certification, and employment, in a highly technical, in-demand field.
- Automotive faculty are flexible and adaptable, looking for opportunities to design and offer classes to meet student, community, and employee needs.
- Automotive faculty has a record of carefully sequencing program courses, ensuring that entering students can complete the program according to a reasonable timeline.
- $42,230 has been raised for scholarships for Automotive Technology Program students wishing to pursue further education, either at trade schools or colleges.
- The partnership with Lucas Oil has provided $20,000 - $25,000 in supplies for the PVC Automotive students as well as the maintenance of all PVC vehicles.

- The partnership with the I-10 Speedway has provided a hands-on training experience for PVC students.
- Automotive Technology courses are directed toward the Automotive Technology Certificate and Degree and meet ASC standards.
- Course Outlines are updated on a regular basis to meet the industry and ASC standards.
- Advisory Committee meetings are held on a regular basis to obtain direction on equipment purchases and keeping classes updated.
- Enrollments are steady.
- Purchased new textbooks, workbooks and videos.

List and comment on the major weaknesses of the program.

Departmental weaknesses include:

- Limited community business support for on-the-job training.
- Lack of adjunct faculty pool.
- Lack of A.S. degree completers.

PART 13: PLANS TO REMEDY WEAKNESSES

Identify specific steps to correct identified weaknesses and provide the timeline by which they are to be corrected.

- Aggressively market an internship program to the business community.
- Use HR and Instructional Services resources to build up an adjunct faculty pool.
- Update the A.S. degree program.

PART 14: PLANS TO ADVANCE THE PROGRAM

Describe other plans that will advance the program.

- Updated A.S. Degree
- Discussions are underway for dedicated counseling
- Continued partnerships with Lucas Oil and I-10 Speedway and other business partnerships.
- Research is being conducted on getting ASE certifications in the Automotive field available for students