

**PROGRAM REVIEW
TECHNICAL EDUCATION
DIVISION**

FALL 2009

SUMMARY
BOARD OF TRUSTEES

Comprehensive Program Review Report

Program: Technical Education Division - Summary for the Antelope Valley College Board of Trustees

Academic Year Reviewed: 2009/2010

Due October 31

Strengths

The Technical Education Division consists of the following programs: Administration of Justice, Aeronautics and Aviation Technology, Agriculture/Landscaping, Air Conditioning and Refrigeration, Aircraft Fabrication and Assembly, Automotive Collision Repair and Refinishing (Auto Body), Automotive Technology, Clothing and Textiles, Electrical Technology, Electronics Technology, Interior Design, and Welding. Currently, there is one administrator (Dean), 14 full time faculty members, two vacant full time faculty positions (Administration of Justice and Automotive), approximately 60 adjunct faculty, and eight classified instructional assistants, and one classified administrative assistant. In addition to these positions, the Division recently was awarded an Economic and Workforce Development grant called the Responsive Training Fund (\$341,000). There are two full-time temporary instructors and one half-time, temporary director associated with the grant.

Programs within the division are of some of the highest quality in the state of California with strong enrollments, up-to-date curriculum, well equipped laboratories and some of the newest facilities on campus. The new facilities include the Technology Building (TE7) and the Environmental Horticultural Sciences facilities which are model facilities for programs across the country.

Most of the programs have strong involvement with the local employers and good job placement rates. Highlights of this involvement include the partnership between Northrop Grumman and the Aircraft Fabrication program, Federal Aviation Administration and the Electronics Technology program, Aeronautics and Aviation program and Edwards AFB, and the Fire Technology program with Los Angeles County Fire Department, United States Department of Agriculture Forest Service, and Edwards AFB.

Weaknesses

While the budget for community colleges statewide are tenuous and, due to these circumstances, immediate solutions will not be forthcoming, the following deficiencies must be delineated and must be addressed in a timely manner to maintain quality educational programs.

1. Faculty staffing. Replacements must be hired for vacant positions in Administration of Justice and Automotive. New faculty positions are needed for Welding, Aircraft Fabrication and Assembly and Fire Technology.
2. Classified staffing. New classified positions are needed in Auto Body (60% Instructional Assistant for nights), Clerical Assistant and Instructional Assistant for Aircraft Fabrication and Assembly.
3. Supply budgets are being reduced when they should be increased to maintain supplies for increased enrollments. A request for \$30,000 has been made every year since 2005 and has not been addressed.
4. Facilities Master Plan must be updated to include a campus location for the Aeronautics and Aviation program (currently at Fox Field), and new campus locations for Fire Technology, Electronics and Welding which are currently in TE1 and TE2 which are slated for demolition.

INTRODUCTION AND OVERVIEW

Comprehensive Program Review Report

Program: Technical Education Division Overview

Academic Year Reviewed: 2009/2010

Due October 31

Area 1 Mission

1.1 State the mission of the program.

The mission of the Technical Education Division is to provide high quality career and technical programs that provide students with the skills and knowledge necessary to secure long-term employment in high wage, high-skilled careers.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

The programs within the division align with the college mission that states “Career and Technical certificate and degree programs comprised of business, technical and occupational courses designed to enhance students’ knowledge and skills leading to employment, career advancement, certification and state and federal licensure.”

The programs within the division also align with the college vision “To provide quality education that enriches lives and builds futures.”

The programs within the division support the college ILO that states “Identify career opportunities that contribute to the economic well being of the community.”

Area 2 History

2.1 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the division include:

- Planning, building, and opening of the new Agriculture and Landscaping Sciences building.
- Northrop Grumman Corporation’s adoption of the Aircraft Fabrication and Assembly Program for providing entry level training for all newly hired structures mechanics.
- Planning and design of the new Auto Body facility and strengthening the curriculum to meet the high standards required for I-CAR certification.
- State licensure requirements for journeymen electricians. The Electrical Program at AVC has been a lead institution in the development and implementation of these standards.

- The new full-time instructor position in Interior Design has provided the leadership necessary to strengthen both the curriculum and the scheduling pattern for both day and evening classes.
- Administration of Justice joined the Technical Education Division in fall 2009 leaving the Social and Behavioral Sciences Division due to the most recent college reorganization.

Please review to program specific sections for additional details.

2.2 Briefly describe the program’s activities and services in the past four years.

All of the programs in the division offer a robust schedule of classes designed to meet the needs of both full-time and part-time students.

The programs in the division were among the first programs in the college to develop PLOs and the format used by this division was adopted as the standard across the college.

SLOs have been developed for all courses. Most courses that were taught during the 2008/2009 year conducted assessments on SLOs.

2.3 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

The most significant and readily available source of outside funding for programs within the division is Perkins IV funding. The table below outlines the programs that have benefited from this funding over the last four years.

PROGRAM	2005/06	2006/07	2007/08	2008/09	2009/2010
Ag/Landscape					\$100,557
Aircraft Fabrication	\$9,980		\$15,000	\$25,000	\$35,000
Airframe and Powerplant	\$65,736		\$37,000	\$58,571	\$68,000
Auto Body		\$56,000	\$31,300		\$88,000
Automotive		\$80,000	\$83,100	\$84,371	
Electrical Technology	\$43,808	\$53,808	\$52,000		
Electronics Technology	\$102,138			\$44,500	\$25,000
Fire Technology		\$37,000	\$75,000	\$63,000	
Interior Design				\$1,160	
Welding	\$35,000	\$45,000	\$10,000	\$48,000	

Perkins IV funding was used to upgrade and modernize major pieces of equipment, upgrade and expand inventories of hand tools and power tools, purchase computers and software, purchase new electronic test equipment and diagnostic equipment, and purchase large scale training systems. Programs receiving Perkins IV funding must also submit a plan to revise curriculum, and improve student retention and completion rates. These activities have a direct impact on improving Student Learning Outcomes. Please refer to program specific sections for the specific program improvements that were accomplished with Perkins funding.

During the 2006/07 year, a one-time funding source referred to as Career Technical Education funds were provided to the by the California Community Colleges Chancellor's Office (CCCCO). A portion of those funds were allocated to this division. They were used to buy a new fork lift for the Welding and Auto Body program, purchase storage cabinets for Fire Technology and Welding, purchase new work stations and chairs for the Airframe and Powerplant program, and to purchase computer driven projection systems for Air Conditioning, Electrical and Aircraft Fabrication and Assembly programs.

The Aircraft Fabrication and Assembly program participates in a National Science Foundation grant called SpaceTEC. SpaceTEC includes twelve community colleges nationally that have aerospace programs and are located in close proximity to a National Aeronautics and Space Administration (NASA) center. Through this grant, the Aircraft Fabrication program received approximately \$10,000 to \$20,000 per year. This funding was used for professional development in advanced composites techniques, specialized tools and equipment, and teaching materials.

The Airframe and Powerplant program was successful in obtaining \$20,000 from California Community Foundation for the 2009/10 year. This funding will purchase a very expensive piece of test equipment for testing composites materials. The equipment will be shared with the Aircraft Fabrication and Assembly program. The remaining funds will be used to refurbish the Aero Commander twin engine aircraft owned by the college.

Another grant for \$341,000 was obtained from the CCCCCO Economic and Workforce Development funds. The purpose of this funding is to offer closed sections of composites classes and certification preparation classes for employees at Northrop Grumman. While these funds do not directly benefit the Aircraft Fabrication and Assembly program, they relieve some of the enrollment pressures from AFAB 120 classes and they continue the positive partnership with a major aerospace company and employer of graduates.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.1 Identify degrees and certificates currently offered in the program.

Programs within this division offer a wide variety of degrees and certificates. Refer to each program section for specific awards.

3.2 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

Programs within this division have fully developed course offerings that provide students with a broad and thorough knowledge of all aspects of the specific career field or industry. This ensures that students leaving the programs have the skills necessary to work for a variety of companies in different capacities and are well prepared to find and maintain employment in a variety of economic cycles.

A new associate degree in Wildland Fire Technology was approved by the CCCCCO in 2005. The new Certificate in Firefighter I Academy was approved by CCCCCO and the State Fire Marshall's Office in 2007. These programs greatly enhanced the employability of students in the Fire Technology program.

The Welding program made major improvements to courses and the certificate requirements to modernize and streamline the course of study. The Electrical program made minor revisions the program requirements and courses to maintain alignment with the new state licensing requirements. Revisions were also made to the Interior Design certificate and courses to better prepare the students for careers in Interior Design or transfer to institutions of higher learning.

New courses that were developed include ACRV 100 Refrigeration Basics, CT 100 Introduction to Fashion, and ELTE 105 Robotics. All of these courses were designed to give new students a better foundation and understanding of the career fields they are entering.

Courses that were not offered for a number of years, or were no longer relevant to the career field were deleted from the course inventory.

Please refer to program specific sections for details of curriculum revisions and development activities.

3.3 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

All programs within this division are heavily involved with technology. This encompasses both the skills required by the industry and utilizing technology to deliver instruction. The dependence on technology within the career fields requires instructors to stay current with new technologies and their uses in the field. This is most often related to the use of computers, the Internet, or other electronic testing systems. Within the teaching discipline, all programs make use of computers in the classroom environment, simulation software, and dependence on lectures enhanced with computer projection techniques.

Another trend prevalent in all disciplines is the lack of preparation for college level work demonstrated by students entering the programs. Many students have difficulty with reading technical material, writing and spelling properly, and basic mathematic concepts. Technical programs have a long history of infusing basic skills into contextualized learning. However, students entering programs now require significantly more instruction in basic skills and concepts.

It is also becoming more common for students entering these programs to have little or no skill with basic hand tools or mechanical concepts. Courses such as AUTO 100, ACRV 100, and ELTE 101 or ELTE 105 are becoming more relevant for teaching these basic technical skills rather than for career exploration as in the past.

Each program is a unique discipline and deals with unique challenges in the students that it serves. Please refer to program specific sections for a detailed analysis of challenges and trends.

3.4 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

All programs have developed a regular pattern of rotation for scheduling courses that are required for certificate or degree completion. When classes are being considered for cancellation due to low enrollment, the dean analyzes the students registered for the class to determine how many registered students require that class for graduation and what impact class cancellation will have on the ability of those students to graduate. When possible, alternative courses or course substitutions are offered to students who lack one class for graduation.

All programs provide students with regular information on class schedules and certificate and degree requirements. Students in advanced classes are actively encouraged to apply for graduation and to participate in commencement activities. For 2009/10, the Admissions and Records office received some Perkins IV funding specifically to improve completer rates for career and technical students.

3.5 Are all Course Outlines of Record (CORs) current?

All CORs are current. Faculty members have been encouraged to review and update CORs on a three year timeline. Please refer to each program section for the specific timelines for course revisions for each program.

3.6 *How does the program ensure that all faculty utilize CORs when designing course syllabi?*

Full-time faculty members have a very close working relationship with part-time faculty in all programs. Collaboration between full-time and adjunct faculty helps to assure consistency throughout each program. This is very important in career and technical programs where students are expected to demonstrate core concepts and skills to be employable. In addition, all faculty are required to submit syllabi to the Dean's office. These are cross-checked against the CORs.

Area 4 Student Support and Development

4.1 *Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.*

Students have full access to a wide array of student support services such as counseling, job placement, Learning Resource Center, and the Library. The Math Specialist in the Learning Resource Center has done an exemplary job in reaching out to technical students and developing specific mathematics tutoring guides and handouts related to many of the disciplines in this division. Most programs have access to computers in the laboratory environment or the shared computer laboratory in TE7 103.

4.2 *Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.*

In 2008/09, the Library used Perkins IV funds to subscribe to a very extensive periodical data base related to a wide range of career and technical fields. This resource is relatively new. Even though the librarian gave a very thorough demonstration of this resource, it does not seem to be widely in use by faculty in this division.

During 2008/09, the Perkins funding supported an extensive upgrade to the Career/Transfer center library of DVDs. A library of over 30 professionally produced DVDs portraying women in nontraditional career fields was obtained. There were also two outreach events – Women in Aerospace Careers and Women in Public Safety – that were very successful.

Perkins funded projects targeted at women in nontraditional career fields and increasing the certificate and AS completion rate are planned for 2009/10.

Specific details may be contained in the program specific sections.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.1 *The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a*

dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- *Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?**

Overall growth in the Technical Education division was relatively flat until 2007/08 when growth was approximately 10% over 2006/07 and 2008/09 when growth was an additional 10.2% over 2007/08. Some of this growth can be attributed to the stabilization of enrollments in Electronics Technology after the program review process. Additionally, Interior Design has experienced growth in enrollments with the hiring of a full-time instructor and Aircraft Fabrication and Assembly has experienced significant growth since Northrop Grumman approved the program for "new hire" training.

Programs that have not experienced growth over the last five years are either operating at the capacity of the facilities (Auto Body, and Automotive) or are operating at the capacity of the availability of instructional staff (Welding cannot grow without a full-time instructor).

Gender ratios are generally following traditional lines with a large majority of women in Clothing and Textiles and Interior Design, and a large majority of men in male dominated fields such as Automotive, Air Conditioning, Welding, etc.

An exception to the gender specific trends is the Aircraft Fabrication and Assembly program. A comparison between the Aeronautics program and the Aircraft Fabrication program indicates that the Aeronautics program female to male ratio is between 6% to 19%, the Aircraft Fabrication program female to male ratio is between 13% to 22%. This can be attributed to the fact that the full-time instructor is a female and provides positive role model to female students.

Ethnicity in the division is comparable to that of the college as a whole Hispanic students nearly equaling White Non-Hispanics and the combined student enrollment of African-American and Hispanic students exceeding the number of White Non-Hispanics.

Success and retention rates for all students are very good and are probably above the college average. These rates usually range between 75% and 100% with most courses and programs running in the 85% to 100% range. This is not due to any type of grade inflation, but it is indicative of the fact that students who enroll in career and technical education programs are serious and committed to their chosen field of study.

Each program spent significant time analyzing the statistics that were relevant to their program. The uniqueness of each program is very apparent from their individual analysis of the data and the trends that were discovered through that analysis. Please refer to the

program specific sections for a complete picture of the health and trends for each program.

*Does not include Administration of Justice in analysis.

- *Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?**

Overall, the programs in the division are doing a very good job of serving the needs of the diverse student population of AVC and the community as a whole and preparing students for employment opportunities that exist in the Antelope Valley and do not require long commutes to the Los Angeles basin.

Additional efforts were begun last year to attempt to attract more women to non-traditional careers. Those efforts include the purchase of a large library of professionally prepared DVDs for the Career Center featuring women in non-traditional careers. Last year, the division in cooperation with the Career Center offered two workshops – Women in Aerospace and Women in Public Safety. Both workshops were well attended and participants were very positive about the content. These efforts will continue in the future with additional workshops.

*Does not include Administration of Justice in analysis.

5.2 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

The table below summarizes the status of recommendations from the previous program review. It is clear that much progress has been made with the hiring of additional faculty and staff, the new Environmental Horticulture Science building, the new Auto Body building in progress. Progress has also been made for significant improvements to equipment and tools for many of our laboratories through the use of Perkins (VTEA) funding.

The Technical Education division has been a leader in the development of PLOs with our format being adopted for use college-wide. We also were one of the first divisions to complete SLO development and have been through one assessment cycle for most of our courses.

One of the most significant accomplishments is the increase in certificate completers and degree completers. Completer rates increased over 50% for certificate completers and 26% for degree completers. While this increase was not felt by all programs, it is an indication that large increases are possible through encouraging students to get the awards that they have earned.

Recommendation from Last Program Review	Status	Year
Develop a system for 3 year rotation of course revisions.	Completed	2005
Analyze enrollments to adapt schedules to student needs.	Ongoing	
Remove CT 101 from Interior Design Certificate & Degree	Completed	2007
Develop Program Learning Outcomes for all programs.	Completed	2005
Develop Student Learning Outcomes for all courses.	Completed	2007
Increase Certificate and Degree Completers by 10%	50% and 26% Increase Achieved	2008 and 2009
Hire full-time Drafting Instructor	Program transferred to Math/Science Division	
Hire full-time Interior Design Instructor	Done	2007
Hire full-time Welding Instructor	Still Need	
Hire full-time Instructional Assistant (Day Auto Body)	Done	2006
Hire full-time Instructional Assistant (Night Auto Body)	Still Need	
Hire full-time Instructional Assistant (TE7)	Done	2006
Hire half-time Instructional Assistant for Electronics	Not Done and being re-evaluated.	
Develop a plan for permanent facility for Airframe and Powerplant program.	Not Done	Recommend inclusion in Technology II building.
Develop a plan for suitable relocation of Spray Booth.	Not necessary	New Auto Body Facility 2010.
Incorporate Welding program into Facilities Master Plan with Automotive Complex	Recommended to Facilities Director – Status Unknown	
Develop a plan for relocation of Electronics Technology and Expansion of Electrical Technology.	Not Done	Recommend inclusion in Technology II building.
Develop a Plan for Municipal Fire Academy at the Palmdale Site.	Not Needed Now as program is at Lancaster Site	2008
Re-establish the infrastructure of plants and landscaping	In progress.	

for the new Agriculture/Landscaping facility.		
Increase Instructional Supplies across the division by \$25,000 to keep pace with inflation.	Requested every year. Turned down every year.	
Purchase tools for Auto Body to demonstrate Aircraft painting techniques.	Done.	2007
Replace workbenches and chairs in both Electronics laboratories.	Done	2006
Modernize Electronics Technology equipment and supplies	Done	2008
Keep AutoCAD labs up to date.	No longer in Tech. Ed.	
Encourage all programs to consider VTEA funding proposals.	Done. Many programs in Tech Ed now receiving Perkins funds (VTEA.	
Continue successful outreach activities.	Continuing.	
Connect Elementary and Intermediate algebra students to Technical Education programs.	Successful for the Electronics program.	
Develop new strategies for building relationships with the high schools.	Done. Articulation agreements in place where applicable.	
Develop better lines of communication with ESL staff.	Not Done.	

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.1 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

All programs developed Program Learning Outcomes (PLOs) as a part of the 2005 program review cycle. The format used by the Technical Education Division has been adopted college-wide as the model for other programs and departments to use. To date, the college has not evolved into the assessment of PLOs. Therefore, the division has not ventured into PLO assessment as of this writing.

6.2 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

The full-time instructor in each discipline has accepted the responsibility of discussing SLOs with the adjunct faculty in that area. They have worked together, as a team to develop consistent assessment tools and strategies. Everyone has been encouraged to assess all SLOs in every course taught during the 2008/09 year and report their findings to the Office of Institutional Research.

Please refer to each program area for specific progress and areas for improvement.

6.3 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

PLOs have not been assessed to date. While the division was a pioneer in developing PLOs very little standardization or guidance has been forthcoming from the college as a whole related to this. It is believed that the implementation of the WEAVE assessment software will provide the college with guidance.

It is very early in the assessment cycle for SLOs, however common threads seem to be emerging. Many faculty members are expressing concerns that assessment strategies that were developed in the initial phase of SLO development are not working as intended. Some are too complicated to apply objectively, while others do not seem to test the actual learning of students in all sections of the courses. Other faculty members are concerned that some of the specific SLOs were not broad enough to be course level SLOs but are still more closely related to an enabling objective. Please refer to program specific sections for additional details on the assessment process.

6.4 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

Please refer to program specific sections for needs that have been identified. Any needs that are identified and substantiated should be eligible for Perkins IV professional development funding.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

Each program is unique and has formed unique partnerships. Please refer to program specific sections for a detailed accounting of the collaboration efforts and partnerships.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

Programs participate in many outreach activities. These include, but are not limited to:

Salute to Youth

Automotive Career Day (Automotive and Auto Body)

Tech Prep Articulation Review Meetings

Internships with Edwards AFB (Airframe and Powerplant)

Internships with Federal Aviation Administration (Electronics)

Internships with NASA (Electronics)

AVC Fashion Show (Clothing and Textiles)

Women in Aerospace Careers (Airframe and Powerplant, Aircraft Fabrication, Electronics)

Women in Public Safety Careers (Administration of Justice and Fire Technology)

This listing is only a list of the more notable or widely attended activities. Please refer to program specific sections for specific activities conducted by each program.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

As each program is a unique entity, each program has been asked to develop their own specific goals, objectives, and timelines. Please refer to the specific sections for each program for this information.

The role of the division office is to support and enable the individual goals whenever possible.

Objectives: Significant steps or actions needed to achieve the goal.

Time Frame: Period of time the goal and objectives will be addresses.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

FACULTY NEEDS

Priority	<u>New</u> <u>Replace</u>	Title	Reason
1	R	Administration of Justice Instructor	The second full time instructor abruptly resigned just prior to Fall 2008 semester.
2	R	Automotive Instructor	The replacement instructor hired in 2008/09 abruptly resigned just before the Fall 2009 semester.
3	N	Welding Instructor	This program does not have a full-time instructor. Part time instructors are extremely difficult to find for daytime classes.
4	N	Aircraft Fabrication Instructor	This program has experienced rapid growth due to the fact that Northrop Grumman hires exclusively from this program. The facilities are not used to

			capacity due to difficulties finding adjunct instructors.
5	N	Administration of Justice Instructor	This program has a heavy reliance on adjunct instructors. It is the largest program in the Division and needs an additional full-time instructor to provide stability and continuity.
6	N	Fire Technology Instructor	This program has a heavy reliance on adjunct instructors. It is the second largest program in the Division and needs an additional full-time instructor to provide stability and continuity.

CLASSIFIED STAFF NEEDS

Priority	New Replace	Title	Reason
1	N	Auto Body Instructional Assistant (60% at Night)	The Auto Body program is moving to a new building in fall 2010. The current Welding Instructional Assistant (night) will no longer be able to provide any support. Safety of students in this program at night is a serious concern.
2	N	Clerical Assistant	The Technical Education has continued a strong growth mode and has incorporated the Administration of Justice program. The current Administrative Assistant is unable to continue to keep up with this unreasonable workload.
3	N	Instructional Assistant for Aircraft Fabrication and Assembly (100% Day)	The Aircraft Fabrication and Assembly program is housed in two laboratories that are used by full-time and adjunct faculty at least 4 days and nights per week. The parts and supplies used by this program are very expensive and require significant time and attention to prevent loss and damage.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

Immediate Need – Probably will not be addressed in 4 year time frame.

The Airframe and Powerplant program needs a permanent location on the main campus. It is recommended that this program be considered for inclusion in the Technology Education II building.

The Welding program will eventually need to be relocated from TE2 when it is planned for demolition. Recommend it be included in any expansion of the Automotive Building.

10.3 *Identify funding needed to support student learning.*

All programs require additional instructional supplies funding. This is especially true in this budget year when existing supplies budgets were cut when they were capped at last year's spending level. The division has requested an additional \$36,000 every budget request year since 2006/07. No additional funds have been forthcoming. Instead, funding has been cut.

Area 11 Recommendations and Comments

11.1 *List recommended changes to the Educational Master Plan to:*

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

There are no significant changes suggested to the Educational Master plan. However, the specific concerns listed in section 10.2 above are very significant and require immediate attention. They must be included in the next revision to the Facilities Master Plan.

11.2 *What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?*

Each program in the Technical Education area is unique in structure, courses, students, partnerships, goals, and accomplishments. To attempt to summarize these unique programs in one document does not do the process justice, and it is not conducive to having significant input by faculty. Therefore, this document must be treated as a division overview with program specific documents that support the overview. This

creates redundancy and extra work. It was the unanimous opinion of the faculty of the Technical Education Division that this process be changed to recognize the unique program and that the process be highly discipline specific with a division summary document left to the one page report required in Area 12.

There was also some concerns expressed that sections related to SLOs and PLOs were somewhat redundant.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

Refer to the Summary for the Antelope Valley College Board of Trustees.

**ADMINISTRATION
OF
JUSTICE**

Comprehensive Program Review Report

Program: Administration of Justice

Academic Year Reviewed: 2009-10

Due October 31

Area 1 Mission

1.2 State the mission of the program.

Please refer to Division Overview.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

Please refer to Division Overview.

Area 2 History

2.4 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the AJ section include:

- The AJ section was moved to the Technical Education Division in July 2009.
- Major enrollment growth occurred in the AJ section in the last four years leading to an increase in course offerings.
- Due to the budget crises, AJ has lost both a current full-time Instructor position and also a planned third full-time AJ Instructor position.
- AJ 209, Public Safety Communications, is a new course that was developed and is now being offered.
- The Police Academy and Custody Assistant Academy have both been cancelled by the Los Angeles County Sheriff's Department pending better budget conditions.

2.5 Briefly describe the program's activities and services in the past four years.

- The AJ section has expanded its course offering to accommodate more daytime students than in the past.
- All AJ course SLOs were updated to the current AP&P format.

2.6 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

N/A for AJ

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.7 Identify degrees and certificates currently offered in the program.

AJ offers an associate degree

3.8 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The AJ section has suffered major cut backs in course offerings as a cost saving method for the college. This has negatively impacted the AJ students and their ability to get into required courses. All core courses have been reduced and all electives are now only offering one course per semester.

A new AJ course offering of AJ 209 Public Safety Communications has been added and is helping students to better understand the verbal and written requirements of a career in criminal justice.

AJ courses that were not offered for a number of years, or were no longer relevant to the career field were deleted from the course inventory.

3.9 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

Please refer to Division Overview.

3.10 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The AJ section keeps the same schedule with all course offering being full at the start of each semester. When the budget allows, getting the two additional full-time instructors will assist students by allowing the program to offer more classes. With the current required reductions, many students are not able to get the courses they need in a timely fashion to complete their degrees.

3.11 Are all Course Outlines of Record (CORs) current?

See next page:

AJ Course	Last Revised	Next Revision
101	12/07	12/12
102	02/06	02/11
103	12/07	12/12
104	04/06	04/11
105	11/06	11/11
109	10/08	10/13
110	10/08	10/13
201	04/06	04/11
203	11/07	11/12
207	12/07	12/12
208	03/05	03/10
209	08/06	08/11
130a	04/06	04/11
130b	04/06	04/11
130c	04/06	04/11
130d	04/06	04/11
800	09/06	09/11
810	09/06	09/11

3.12 How does the program ensure that all faculty utilize CORs when designing course syllabi?

Please refer to Division Overview.

Area 4 Student Support and Development

4.3 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Please refer to Division Overview.

4.4 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

In the last four years the assigned AJ classrooms are now all equipped with full audio visual equipment, which allows for use of a full range of instructional media.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.3 The program was provided with a substantial amount of data from the Office of

Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

Enrollment trends for AJ are hard to properly access since the program has had continued growth but, in the Fall 2008 the program lost a full-time Instructor in the second week of the semester. Due to the pending budget crises, this instructor was not replaced. At the end of the same semester the program lost two additional part-time Instructors. This resulted in the reduction of six courses for the Spring 2009 schedule, since there were not enough Instructors to teach the courses. This then became the new lower benchmark for the current Spring 2010 budget required additional course reductions.

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

The AJ program is not meeting the needs of the AJ student population.

5.4 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

- Hiring of a third full-time AJ Instructor was not accomplished and the second full-time Instructor who left was not replaced.
- Development of the new AJ 208, Introduction to Forensic Science course was completed and it is being offered.
- Development of both a P.O.S.T. approved Police Academy and a Custody Assistant Academy were completed and sessions were offered but, their operations have been suspended due to the budget problems.
- Installation of multi-media equipment in all classrooms used by AJ Instructors was completed.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.5 *Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.*

Please refer to Division Overview.

6.6 *How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?*

Please refer to Division Overview.

The full-time Instructor gave all 13 part-time Instructors their individual course CORs and instructions on how to do the Spring 2009 outcomes. 11 of 13 part-timers complied completed SLO assessments.

6.7 *What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.*

AJ intends to continue assessment of SLOs and analysis of the results to see what changes to the assessment process, instruction, or course content need to be made. Adjunct instructors will continue to be encouraged to participate in this activity.

6.8 *If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.*

None at this time.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

Administration of Justice participated with the Fire Technology program in the first Women in Public Safety career awareness workshop held in Spring 2009.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The full-time and all adjunct AJ Instructors are either active or retired administration of justice professionals. They have provided an invaluable link between the college, the students, and the Antelope Valley criminal justice community. The full-time faculty member chairs the Administration of Justice Advisory Committee and is a member of Highland High School's Law and Government Academy Advisory Committee. The AJ section and AVC also have written articulation agreements with Highland High School ROP allowing high school students to participate in AJ courses for AVC credit. An adjunct Instructor is responsible for the College's "Career Planning for Law Enforcement" seminars, which are held each semester. The full-time Instructor continues

to be involved in assisting the community by helping to set up law enforcement job hiring testing for the Los Angeles Police Department and the Los Angeles County Sheriffs at AVC.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

- Hiring of two full-time AJ Instructors
 - Reestablishing both the Police Academy and the Custody Assistant Academy
- Objectives: Significant steps or actions needed to achieve the goal.*

Both of these goals are contingent on the State's budget situation and out of the Technical Education Division's control.

Time Frame: Period of time the goal and objectives will be addresses.

Unknown

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

The justification for the two full-time AJ Instructors has been identified in past reports and division studies. This hiring would allow the AJ program to expand into new and changing areas of criminal justice while putting AJ in compliance with State full-time to part-time Instructor requirements. The program would then be better able to serve the growing needs of AJ students.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

- 10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

Please refer to Division Overview.

- 10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years.*

Place items on list in order (rank) of importance.

Unknown

10.4 Identify funding needed to support student learning.

Please refer to Division Overview.

Area 11 Recommendations and Comments

11.3 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

With the constant changing areas of administration of justice, new and innovative courses will be developed as the need arises. New technology in the industry will require new technology in the classroom. Those changes are not foreseeable at this time.

11.4 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Unknown

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

**AEROSPACE
AIRFRAME & POWERPLANT
PROGRAM**

Comprehensive Program Review Report
Program: Aeronautics and Aviation Technology
Academic Year Reviewed: 2009-2010
Due October 31

Area 1 Mission

1.3 State the mission of the program.

Refer to division overview.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

Refer to division overview.

Area 2 History

2.7 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

Major enrollment growth occurred over the last four years. In 2005 there were a total of 24 – 28 students per semester for the day and evening classes. Since then the program has experienced significant growth; presently the program is running at full capacity. One factor in enrollment growth may be related to the internship with the Edwards Air Force Base Jet Engine Shop.

In addition, the establishment of the Aircraft Fabrication program has fostered an increased interest in aviation. Upon completion of the Fabrication program, many students have enrolled in the Airframe and Powerplant program to further their education.

2.8 Briefly describe the program's activities and services in the past four years.

The program is currently undergoing a significant revision/update of the Airframe and Powerplant program Curriculum with the Federal Aviation Administration. Over the last 3 years the program has developed, implemented, and is currently assessing Student Learning Outcomes for every program course.

The Airframe and Powerplant program currently participates in many outreach activities that include the Edwards Air Force Base Open House, I'm Going to College, the Bonn-Meyer Math and Science Odyssey, and has participated in the Women in Aviation Workshop, the Aerospace Walk of Honor, and the Aviation Technician Education Council national annual meeting.

2.9 *Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.*

The Airframe and Powerplant program has received funding from Perkins IV annually for the past 4 years. This funding has allowed us to obtain numerous training devices that greatly enhances student learning.

2005—Borescope Inspection Equipment allows students to use state-of-the-art equipment to inspect internal components of aircraft engines.

2006—Lab Volt Electronic Trainers allows students to learn state-of-the-art electronics technology with enhanced hands-on computer interface. In addition, the program purchased precision measuring tools, to allow accurate inspections of various aircraft components.

2007—Electronic Soldering Station, Global Positioning System Trainers allow students to learn in a hands on environment about state-of-the-art aircraft navigation. Fuel Boost Pumps were also purchased for the Aero Commander Training aircraft allowing students to gain valuable engine operating experience.

2008—Instrument Systems Trainer, and Avionics System Trainer allows students hands on training in trouble shooting of aircraft operational systems.

2009—Technical Manuals for Aero Commander training aircraft allow students to research with actual aircraft manufacture maintenance manuals, Landing Gear Trainer and Auto Pilot Trainer were also acquired to enhance student learning in aircraft systems.

2009—\$20,000 California Community Foundation grant, which allows the program to purchase a Bondoscope, that enables students to inspect and check composite structures. In addition, the grant is funding parts and materials for repairs for the Aero Commander Training Aircraft.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.13 Identify degrees and certificates currently offered in the program.

This program is designed to prepare students for careers in the aeronautical and aviation industry. The courses offered by the Airframe and Powerplant program are vocational education based. Three Airframe and Powerplant certificates (General Aircraft Maintenance, Aircraft Airframe, and Aircraft Powerplant) are designed for those individuals seeking an aircraft maintenance technician license. The General certificate requires 18 units, the Airframe certificate requires 30 units, and the aircraft Powerplant certificate requires 30 units. The entire program requires successful completion of 78 units.

Completing any of the certificate programs in addition to the associate degree requirements may satisfy the requirements for an associate degree in aeronautical and aviation technology. This program is transferable.

3.14 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The Airframe and Powerplant program serves the aviation industry and community. This program falls under the Career and Technical Education component of the college mission statement.

In addition to the Airframe and Powerplant certification curriculum, the program also offers AERO 180, which is the SpaceTEC Readiness Course. This course prepares students to test for and obtain aerospace certification through the SpaceTEC organization.

3.15 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

Refer to Division Overview.

3.16 *Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?*

All courses are offered on a rotational basis so that the students are able to complete the programs within a reasonable time frame.

Program staff encourage students to fill out the Certificate of Achievement Form and turn them in, in order to receive the appropriate Certificate of Achievement.

Program Instructors counsel and encourage students to continue in their educational pursuits to receive an Associate of Science or Associate of Arts in Aviation/Aeronautical Technology.

3.17 *Are all Course Outlines of Record (CORs) current?*

All course offerings are due for revision in the academic year 2009- 2010.

Course	08-09	09-10	10-11	11-12	12-13	13-14	14-15
AERO 120		X			X		
AERO 121		X			X		
AERO 230		X			X		
AERO 231		X			X		
AERO 240		X			X		
AERO 241		X			X		
AERO 280		X			X		
AERO 281		X			X		
AERO 282		X			X		

3.18 *How does the program ensure that all faculty utilize CORs when designing course syllabi?*

Refer to the Division Overview.

Area 4 Student Support and Development

4.5 *Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.*

Refer to Division Overview.

4.6 *Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.*

In the last four years, the Airframe and Powerplant classroom has been equipped with audiovisual equipment, and computers, which allow the program to use a full range of instructional media. In addition, the program has obtained Clickers technology to increase student participation during lectures and classroom instruction.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.5 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?
- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

At this time the airframe and powerplant program is holding between 6 – 9 % female participation. Aircraft maintenance is a traditionally male dominated career field. The number of females has stayed fairly consistent over the last four years. Ethnicity is comparable to the college statistics; however, the Hispanic population has increased significantly in the Airframe and Powerplant program where by the Hispanic population is exceeding that of the white non-Hispanic population beginning in spring 2009.

The overall enrollment has increased significantly in the last 3 years with the most growth occurring in the 20-24 year old range. The other age ranges remained steady over the last several years. These trends may be occurring due to the downturn in the United States economy. Students in the 20-24 year old age group are realizing that they need to obtain skills in order to be successful in the job market.

The program success rate is running between 75 – 100 %. This could be due to the fact that students enrolled in the Airframe and Powerplant program are committed to obtaining their Airframe and Powerplant Licenses. The students have a significant investment in time having to attend five days a week for five plus hours each day.

The students are willing to put in the effort and hard work to be successful in this program.

The Airframe and Powerplant program is meeting the needs of various populations by giving them the skills necessary to obtain employment in the local aircraft/aerospace industry.

The Airframe and Powerplant program has seen an increase in Airframe and Powerplant Certificates over the last several years.

- 5.6 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. The Airframe and Powerplant program is presently included in the Education Master Plan for the college; however there is no current reference within the Facilities Master Plan related to a permanent facility for the program. There is a significant need to establish permanent adequately sized buildings, and classrooms. Without these improvements, the program is unable to expand in both enrollment and in staff size.

The progress of recommendations and accomplishment of goals identified in the program's last program review are as follows:

1. An ongoing increase for supplies should be included in any Strategic Planning Budget Committee requests. Funding for the last four years has remained consistent; however, given the increase in the cost of aircraft materials and supplies an increase in funding is necessary.
2. Establish a permanent adequately sized facility with college owned land, buildings and classrooms. Some efforts have been made by the division Dean and other college administrators to secure a permanent facility for the Airframe and Powerplant Program; however, no permanent facility has been secured to date.
3. Student surveys indicated the needs in following areas: Student surveys from the last program review indicated the need for the following items; however, due to lack of permanent adequate facilities the program has been unable to address the need for more workbenches, workspace, lighting, cooling and heating.
 - a. Need more workbenches
 - b. Need more workspace
 - c. Need better lighting
 - d. Need cooling and heating
 - e. Need updated DATA such as engine and aircraft manuals

4. Internet access for the student use and staff support, the cost of approximately \$8000.00. Internet access has been provided for both students and staff with thirteen computer workstations installed in the classroom.
5. To enhance the leaning of the students, the addition of online classes would increase the student enrollment especially students that are currently employed. Due to the federal requirement for laboratory components, the Airframe and Powerplant Program is limited in its ability to offer online courses at this time; however, negotiations are still ongoing with the Federal Aviation Administration.

The performance/quality indicators used by the program are certificates of completion and Student Learning Outcomes. Completion has increased by an average of 35-40% of students obtaining their Airframe and Powerplant Certificates, SLO assessment is ongoing with no significant trends noted at this time

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.9 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to Division Overview.

6.10 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

There is no adjunct or part time faculty assigned to the airframe and powerplant program at this time.

6.11 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

The plan is to assess every SLO every semester. At this time PLOs are not currently being assessed. The Airframe and Powerplant Program has been assessing SLOs for the past year. Many of the SLOs instruments are in the early stages of evaluation. Beginning in the spring 2010 the SLOs and the applicable assessment tools will be evaluated and appropriate changes incorporated to make assessment more meaningful.

6.12 *If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.*

The SLO assessments are in their infancy and no clear indications are apparent at this time.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

The Airframe and Powerplant program collaborates with the Aircraft Fabrication and Electronics programs and student services during outreach venues. In addition, the Airframe and Powerplant program collaborates with the Aircraft Fabrication program to implement the SpaceTEC readiness courses and SpaceTEC aerospace worker certification. At this time collaboration is in its early stages, therefore no assessment is available at this time.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The Airframe and Powerplant Program currently participates in many outreach activities that include the Edwards Air Force Base Open House, I'm Going to College, the Bonn-Meyer Math and Science Odyssey, and has participated in the Women in Aviation Workshop, the Aerospace Walk of Honor, and the Aviation Technician Education Council National Annual meeting.

The Airframe and Powerplant Program currently has a close working relationship with the Edwards Air Force Base Propulsion Shop. Several students are involved in an internship program that allows students to work 640 hours in the engine shop on Edwards Air force Base during their tenure in the Airframe and Powerplant program. Through the internship program, many students have been hired to work full time at the Propulsion Shop.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

To obtain a Pratt and Whitney PT6 Turbo Prop Engine and Run stand.

Objectives: Significant steps or actions needed to achieve the goal.

To submit a success proposal for Perkin IV funding

Time Frame: Period of time the goal and objectives will be addresses.

Submit a successful proposal for 2010-2011 Perkins IV funding year. Once funding is approved, place an order for the Pratt and Whitney PT6 Turbo Prop Engine and Run Stand. Implement the use of the Pratt and Whitney PT6 Turbo Prop Engine and Run stand in the 2011-2012 school year.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

The Pratt and Whitney PT6 Turbo Prop Engine and Run stand will fulfill the Federal Aviation Administration requirements for students to operate a gas turbine engine and controllable pitch propeller.

The Pratt and Whitney PT6 Turbo Prop Engine and Run stand will assist students in obtaining knowledge and skill to meet local industry standards.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

- 10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

Refer to division overview

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

Refer to division overview.

10.5 *Identify funding needed to support student learning.*

Refer to division overview.

Area 11 Recommendations and Comments

11.5 *List recommended changes to the Educational Master Plan to:*

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

Refer to division overview.

11.6 *What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?*

Refer to division overview.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

AGRICULTURE/ LANDSCAPE

Comprehensive Program Review Report

Program: Agriculture/Landscape

Academic Year Reviewed: 2009/2010

Due October 31

Area 1 Mission

1.4 State the mission of the program.

The primary mission of the Agriculture/Landscape Program is to provide high quality career and technical classes that provide students with the skills and knowledge necessary to secure long-term employment in high wage, high-skilled careers or to transfer to 4 year colleges and universities to further their education goals. The program also provides individuals with education that enriches lives and builds futures.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

The Agriculture/Landscape Program align with the college mission that states “Career and Technical certificate and degree programs comprised of business, technical and occupational courses designed to enhance students’ knowledge and skills leading to employment, career advancement, certification and state licensure.”

The Agriculture/Landscape Program also aligns with the college vision “To provide quality education that enriches lives and builds futures.

The Agriculture/Landscape Program also aligns with the college vision “To Provide Transfer/general education courses in communication and critical thinking, the physical and biological sciences, arts and humanities, social and behavioral sciences, and technical education. Completion of these courses allows students to fulfill degree requirements or enroll in upper division courses and programs at accredited four-year institutions through our articulation agreements.

The Agriculture/Landscape Program supports the college ILO that states “Identify career opportunities that contribute to the economic well being of the community.”

Area 2 History

2.10 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the program include:

- Planning, building, and opening of the new Agriculture/Landscape Science building.
- Revising curriculum to meet state guidelines for articulation between community college, CSU and U.C. programs
- The collaboration of local governments and agencies in adopting the list of Plant used in classes as the official recommended plant list for local landscaping ordinances.
- State and Local Landscape ordinances and requirements have changed and will continue to change. The curriculum and requirements on the program will continue to reflect these changes when appropriate.

2.11 Briefly describe the program’s activities and services in the past four years.

See divisional summary

2.12 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

The most significant and readily available source of outside funding for program within the division is Perkins IV funding. The table below outlines the Agriculture/Landscape program that have benefited from this funding over the last four years.

PROGRAM	2005/06	2006/07	2007/08	2008/09	2009/2010
Ag/Landscape					\$100,557

Perkins IV funding is being used to upgrade and modernize major pieces of equipment, upgrade and expand inventories of hand tools and power tools, purchase new electronic testing equipment, and landscaping the new facilities. Programs receiving Perkins IV funding must also submit a plan to revise curriculum, and improve student retention and completion rates. These activities have a direct impact on improving Student Learning Outcomes.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.19 Identify degrees and certificates currently offered in the program.

Degrees	Certificates
---------	--------------

A.S. Agriculture/Landscape	Agriculture/Landscape
A.S. Landscape Construction	Landscape Construction
	Grounds Maintenance

3.20 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The Agriculture/Landscape Program has fully developed course offerings that provide students with a broad and thorough knowledge of all aspects of the Landscape, Agriculture and Horticulture careers. This ensures that students leaving the program have the skills necessary to work for a variety of companies in different capacities and are well prepared to find and maintain employment in a variety of economic cycles.

During the last review period AGRI 150 – Landscape Construction was split into two new classes AGRI 153 – Landscape Construction – Concrete and Masonry, and AGRI 155 Landscape Construction – Wood and Lighting. AGRI – Landscape Equipment class was eliminated.

3.21 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The program is heavily involved with technology. This encompasses both the skills required by the industry and utilizing technology to deliver instruction. The dependence on technology within the career fields requires instructors to stay current with new technologies and their uses in the field. This is most often related to the use of computers, the Internet, or other electronic testing systems. The program makes use of computers in the classroom environment, simulation software, and dependence on lectures enhanced with computer projection techniques.

Another trend prevalent in all disciplines is the lack of preparation for college level work demonstrated by students entering the program. Many students have difficulty with reading technical material, writing and spelling properly, and basic mathematic concepts. Technical programs have a long history of infusing basic skills into contextualized learning. However, students entering programs now require significantly more instruction in basic skills and concepts.

The curriculum in the program has been and continues to adapt the new State and Local requirements in reducing the water requirements of a landscape. This has been the major reason the curriculum now has more emphasis on hardscapes, appropriate plant materials and irrigation practices.

3.22 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students

can complete their programs within a reasonable time frame?

The advisory committee is currently reviewing the certificate program to determine how to streamline the process and have students complete the certificate in a reasonable time.

The program has developed a regular pattern of rotation for scheduling courses that are required for certificate or degree completion.

The Program provides students with regular information on class schedules and certificate and degree requirements. Students in advanced classes are actively encouraged to apply for graduation and to participate in commencement activities.

3.23 Are all Course Outlines of Record (CORs) current?

All CORs are current and the following chart shows timeline for updating CORs.

	Class	Spring 07	Spring 10	Spring 13
AGRI 100	Fruit And Nut Production	Revised	Update	Update
AGRI 102	Plant Pest Control	Revised	Update	Update
AGRI 104	Nursery Practices	Revised	Update	Update
AGRI 110	Basic Landscape Design	Revised	Update	Update
AGRI 112	Plant And Landscape Maintenance	Revised	Update	Update
AGRI 130	Environmental Gardening	Revised	Update	Update
AGRI 132	Turf and Landscape Maintenance	Revised	Update	Update
AGRI 134	Plant Identification I	Revised	Update	Update
AGRI 150	Landscape Construction	Removed		
AGRI 153	Landscape Construction -Masonry	New	Update	Update
AGRI 155	Landscape Construction – Wood and Lighting	New	Update	Update
AGRI 210	Advanced Landscape Design	Revised	Update	Update
AGRI 212	Interior Plantscape	Revised	Update	Update

AGRI 220	Landscape Irrigation	Revised	Update	Update
AGRI 230	Soils And Plant Nutrition	Revised	Update	Update
AGRI 234	Plant Identification II	Revised	Update	Update
AGRI 250	Landscape Management	Revised	Update	Update
AGRI 199	Work Experience	Revised	Update	Update
BIO 103	Introduction To Botany	Revised	Update	Update

3.24 *How does the program ensure that all faculty utilize CORs when designing course syllabi?*

See divisional summary

Area 4 Student Support and Development

4.7 *Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.*

See divisional summary

4.8 *Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.*

See divisional summary

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.7 *The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.*

- *Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?**

Gender ratio is approximately 39% female and 60 % male, however if we remove the classes that were for the prison the percentage changes 42% female and 57% male. This percentage shows a large group of non-traditional learners. The botany is also not included because it is a mixture of program students with a majority of general education students. When Botany classes are included the percentage of females increase to 54% to 46% male, which is lower than the college wide percentage and higher than program students.

The ethnicity of the program does not follow the trend of the college population, although the ethnic breakdown is in the same order as the college. White non-Hispanic enrolls at a much higher rate, with a 51.7 percent of the program, followed by white non-Hispanic at 21.6% and African American at 12.8 %.

It is hard to determine success rate in the program since it is reported in percentages of a class. If all the classes are added together, then the averaged, the program success rate is 67.7 percent. However some classes, numbers are larger than others. Several small classes can statistically affect the overall success rate s reported. Two trends were noticed, the plant ID classes had the lowest success rate, probable due the difficulty of the class and the Interior Plantscape classes had the highest. The Interior Plantscape classes were only offered during intersession. Is the higher success rate due to the reduced weeks of the semester, or it was probably the only class the students were taking.

The age breakdown for the program is just about backwards of the college. 47.2% of the students in the program are over 40, with the highest range in 40-49 (29.8%). The 20-29 age group range was 25.4%. These statistics probably show the program is primarily a night program with many students looking for retraining or improving their current job.

5.8 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

The program's strong points (last program review):

Hands on curriculum based on industry needed skills.

Actual landscape projects in commercial and residential settings.

The program's strong link to the community.

The program's community involvement.

The program's area of improvement (last program review):

Keeping the curriculum up-to-date with college's curriculum requirements.

Although it is well known and publicized in the community, more information always helps.

Staffing of the facilities on a short-term situation such as when Lab technician is on vacation, injured or sick.

Staffing of the new larger facilities will be difficult.

The program is lacking in tools and equipment to efficiently operate the program.

Funding is lacking keeping the program from rising up to industry standards in tools and equipment.

Using the Agriculture/Landscape Advisory Committee more efficiently.

Working with grounds for coordinating supplies, equipment and safety training.

The table below summarizes the status of recommendations from the previous Agriculture/landscape review.

Recommendation from Last Program Review	Status	Year
Develop a rotation of 1/3 of the classes to update or revise each year and take to APP to keep the curriculum up-to-date with college's curriculum requirements.	Completed Revision completed	2005. 2007
Determine and fund a way to staff/maintain the facilities on a short-term situation such as when Lab technician is on vacation, injured or sick.	Not Completed	
Develop a plan to provide resources to maintain the new larger facilities being planned, i.e. student assistance, volunteers, docents, industry assistance (such as in a water district would like a demonstration garden, they would also pay for maintenance)	In Discussion	
Hold more Agriculture/Landscape Advisory Committee meeting.	In process, still needs improvement	

The program is lacking in tools and equipment to efficiently operate the program.	These three recommendations are in process. The program received a VTEA grant of 100,577.00 to help towards these recommendations. Current asking for additional help from industry sources.	
Develop a process to bring the program's tool and equipment up to industry standards. (Cost – Landscaping new facilities approximately \$180,000.00, Tools and equipment approximately \$75,000.00)		
Develop a process to bring the program up to “state of the art” status in the landscape field (Cost – Tools and equipment approximately \$60,00.00).		
Although the program is well know and publicized in the community, more information always helps.	Ongoing	

The table below summarizes the status of recommendations from the previous Technical Education program review that included Agriculture/Landscape.

Recommendation from Last Program Review	Status	Year
Develop a system for 3-year rotation of course revisions.	Completed	2005
Analyze enrollments to adapt schedules to student needs.	Ongoing	
Develop Program Learning Outcomes for all programs.	Completed	2005
Develop Student Learning Outcomes for all courses.	Completed	2007
Re-establish the infrastructure of plants and landscaping for the new Agriculture/Landscaping facility.	In progress.	
Continue successful outreach activities.	Continuing.	
Develop new strategies for building relationships with the high schools.	Done. Articulation agreements in place where applicable.	

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.13 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

See divisional summary

6.14 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

See divisional summary

6.15 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

See divisional summary

6.16 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

See divisional summary

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

See divisional summary

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The Agriculture/Landscape Program participated in many outreach activities. Including the following

Antelope Valley Fair

Home and Garden Show

Weekly Garden Column – Antelope Valley Press

Palmdale Water Fair

Desert Oasis Landscape

Landscape Conservation ordinances, Cities of Lancaster and Palmdale

Water wasting ordinance, City of Lancaster

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

Goals	Objectives	Time frame	Justification
	<i>significant steps or actions needed to achieve the goal</i>	<i>Period of time the goal and objectives will be addresses</i>	<i>How does the goal support the mission of the college? How does the goal meet the needs of the community</i>
Organize the new Agriculture/Landscape Science facilities			This will be “placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs ”
	Organize tools and supplies in storage	Completed during the 10-11 school year	
	Organize classroom materials in cabinets	Completed during the 09-10 school year	
	Scan in all slides and pictures into computer for storage and side shows	Completed during the 11-12 school year	

Design and Landscape new Facilities			This will be “placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs ”
	Design Landscape and develop material needs for facility	Completed during the 09-10 school year	
	Work with industry/community to help in providing needed materials	Completed during the 09-10 school year	
	Install Landscapes (with Classes)	Completed during the 11-12 school year	
Develop a plan to provide resources to maintain the new larger facilities.			This will be “placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs ”
	Work with college administration on development of a volunteers or docents process	Completed during the 09-10 school year	
	Work with government and industry for assistance in the program	Completed during the 09-10 school year	

Involve the program in more community activities held at the new facilities	Hold community events for water districts or garden associations	Completed during the 09-10 school year	This will be “placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs ”. This also allows the co-operation between the community and AVC
Involve the Agriculture/Landscape Advisory Committee in program activities	Hold more meetings during the year	Completed during the 09-10 school year	This will be “placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs ”

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement,*

increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.

FACULTY NEEDS

None

CLASSIFIED STAFF NEEDS

Staffing the facilities on a short-term situation such as when Lab technician is on vacation, injured or sick.

Additional staffing needed to maintain the new larger facilities being planned, i.e. student assistance, volunteers, docents, industry assistance (such as in a water district would like a demonstration garden, they would also pay for maintenance)

Neither of these needs relate to new positions however they need to be addressed as a staffing need.

10.2 List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.

With the construction of new facilities, most of the facility needs have been addressed, however there will be needs identified as classes are offered. Currently the irrigation and landscape infrastructure needs to addressed, most will be solved through the group 2 funding and a VTEA grant.

10.6 Identify funding needed to support student learning.

The program is lacking in tools and equipment to efficiently operate the program.	These three recommendations	
Develop a process to bring the program’s tool and equipment up to industry standards. (Cost – Landscaping new facilities approximately \$180,000.00, Tools and equipment approximately \$75,000.00)	are in process. The program received a VTEA grant of 100,577.00 to	

Develop a process to bring the program up to “State of the art” status in the landscape field (Cost – Tools and equipment approximately \$60,00.00).	help towards these recommendations. Current asking for additional help from industry sources.	
--	---	--

Area 11 Recommendations and Comments

11.7 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

With the current budget and scheduling issues there are no current recommended changes to the Educational Master Plan.

11.8 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Program review needs to be program based not divisional based.

Program review would be work better as a standing committee to review documents instead of peer teams

Several items seem to be duplicated in the required information or the program review self-study .

Area 12 Report to the Board of Trustees

Prepare a one-page synopsis of the program review.

AIR CONDITIONING AND REFRIGERATION

Comprehensive Program Review Report

Program: Air Conditioning and Refrigeration

Academic Year Reviewed:

Due October 31

Area 1 Mission

1.5 *State the mission of the program.*

Refer to Division Overview

1.2 *Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.*

Refer to Division Overview

Area 2 History

2.13 *Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.*

Significant program changes - At the end of the last program review period the advanced courses had pre-requisites established which eliminated the “drop in” anywhere format the program had over the prior review period. Entry level courses were only offered every two years so many students started their program with commercial or advanced classes. As noted in the last review the new facility made possible the opening of increased course offerings. The ability to offer more classes, made it possible to offer basic classes every semester, and enforcing pre-requisites for the advanced classes, making it possible for every student to enter the program taking entry level courses whenever they start the program.

The additional entry level courses were added; they all filled, and turned away students. (three entry level courses per semester – one during the morning, Monday thru Thursday for 20 hours / 10 Units, and one Monday and Wednesday evenings 10 hours / 5 Units, and one Tuesday and Thursday evenings 10 hours / 5 Units) These entry level courses are feeder courses to the two advanced specialties offered. (ACRV-212 Commercial Refrigeration Systems ACRV-213 Commercial Refrigeration Controls ACRV 222 Commercial Air Conditioning Controls and ACRV 223 Commercial Air Conditioning Systems). Initially the advanced courses ran low numbers, while the basic classes ran two groups of students through but after running the basic classes for a full 2 years, the commercial classes are finally filled to capacity!! I see the advanced classes having adequate numbers from the basic courses from here on out.

We went from an average of 63.5 students enrolled in the program in 2004/05 to an average enrollment of 92 students in 2008/09. At present we have over 120 students

enrolled for Fall 2009. The Fall of 2004 we had approximately 706 FTES while in Fall of 2008 we had approximately 961 FTES.

2.14 Briefly describe the program's activities and services in the past four years.

The ACRV program has built on the Work Experience (WE) program providing students with industry interaction and working experience. The WE program addresses the needs of the employers, both in meeting the students from our programs, and mentoring our students, their future employees. They have the ability to show students what is required of entry level employees, and what their expectations are as an employer. At the same time the students benefit through interaction with contractors, vendors and technicians already working in the industry by putting the students in scenarios where technical communication is an essential part of doing business. They receive hands on practical experience through real world work situations. This increases the students' confidence in settings where technical communication is the norm. All this increases the employability of our WE students when they enter the job market. At present the WE program has 100% success with students finding employment.

We have had some success with a student run club for ACRV program students here at AVC which we call SMART Club. SMART stands for **S**tudents **M**entored **A**ir conditioning and **R**efrigeration **T**raining. This club forms study groups where students mentor students through the program. They formed a student lending library and have raised money to purchase books and software to enhance their education and technical training. This library exists for the use of all future students who become a member of the student club. The club is supervised by advisers such as Chuck Gordon and me.

This past year an interest in SKILL USA was expressed. I applied for a AVC Foundation Grant and was awarded \$1000 to take a group of students to a Skills competition in Modesto. We received some additional funding through professional development and sent Justin Shores (Full time Faculty – Electrical Program) and Stanley Goldstein (Adjunct – ACRV Instructor) and several students from each program to the Event. The experience has motivated our students to form a SKILLS Club on campus with the hopes of eventually sending students to a regional competition. The ball is in the students' court!

2.15 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

No Perkins grants were applied for during this period. I received an AVC Foundation Grant of \$1000 last year to take a group of students to a Regional Skills Competition.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.25 Identify degrees and certificates currently offered in the program.

Air Conditioning Specialist Certificate

The following courses (20 units) are required for the certificate.
ACRV 122 & 123 **or** 125 **and** ACRV 222 & 223 **or** 225

Air Conditioning A.S.

The requirements for an **associate degree** in Air Conditioning may be satisfied by completing 20 units of required courses, 21 units of general education requirements, and sufficient elective credits to total 60 units.

Refrigeration Specialist Certificate

The following courses (20 units) are required for the certificate.
ACRV 112 & 113 **or** 115 **and** ACRV 212 & 213 **or** 215

Refrigeration A.S.

The requirements for an associate degree in Refrigeration may be satisfied by completing 20 units of required courses, 21 units of general education requirements, and sufficient elective credits to total 60 units.

Air Conditioning–Refrigeration Specialist Certificate

A certificate in Air Conditioning-Refrigeration Specialist may be earned by completing the requirements for the Air Conditioning Specialist and the Refrigeration Specialist. Duplicate courses need only be taken once.
ACRV 112 & 113 **or** 115 **and** ACRV 212 & 213 **or** 215 **and** ACRV 122 & 123 **or** 125 **and** ACRV 222 & 223 **or** 225

Air Conditioning–Refrigeration Specialist A.S.

The requirements for an associate degree may be satisfied by completing the certificate requirements in addition to the associate degree requirements.

Reference page 80 thru 84 in the AVC Catalog.

3.26 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

Our program had no set entry point! It made instruction of advanced classes challenging to say the least. Students entering into the program would find themselves with only one option for the day class – Whatever was being offered! And in turn the night class may have given them one chance at a basic class, which was hard to get into, and when full left the student without options, so they would sign up for the advanced class being offered. Our instructors taught 8 different classes over 4 years, having many of the students for the entire period. Teaching advanced students in the same class that first semester students were taking. Instructors struggled to keep the class challenging for the advanced students, while trying not to lose the basic student who didn't understand a word that was being said. This was all due to our "drop in anywhere" program with no course pre-requisites and only one classroom lab to offer courses in.

Upon getting the new labs we implemented pre-requisites for our advanced classes, requiring completion of a fundamentals course with a C or better before a student could take the advanced Class. We brought on several new adjunct instructors, and added two additional course offerings. This was made possible with the increased class lab space and necessary to eliminate repetition of fundamental material that was covered in every course; insuring students understood the advanced material.

A student entering the program now has options of going to school during the day (full time) or at night for two nights or four nights. They may also choose to start a refrigeration or an air conditioning program from entry level.

The increase in options and the ability for a student to start with the fundamentals has increased enrollment to the program. This semester all three basic classes were full (75 students) with close to 40 students turned away. This may of course be due to the economic downturn, but I would rather believe it's due to our course offerings and availability.

We have been offering the additional courses and pre-requisites on the advanced courses for two years now, and we are now finally filling our advanced classes. Both filled this semester. Retention of students in the program basic courses and continuing on to advanced courses has improved. Successful completion of the fundamentals classes has increased, perhaps due to the ability to offer entry level classes every semester, both day and night. Success may also be attributed to the instructor being able to teach his entire class at an entry level, and not having to worry about advanced students getting bored of the repetition.

In turn, it has also increased the level of instruction for the advanced classes due to reduced repetition which allows more time for the instructor to cover the required curriculum components.

3.27 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The HVAC/R industry has been going through technological advances and government mandated changes for the most part due to a global environmental awareness on issues such as global warming, the depletion of the ozone, reduction of oil dependency pushing for increased energy efficiency, and it seems the entire planet wants to go “Green”! While the fundamentals remain the same, the technology is constantly improving to stay with the changing times. We must teach or at least expose our students to EPA compliance, recovery, recycling and reclamation of refrigerants, new refrigerants and refrigerant handling techniques to protect our O-zone. We must address Title 24 codes, variable speed ECM and VFD motor technology, alternative energy sources and hybrid equipment. Much of this technology is relatively new, and requires our instructors to continually seek additional training to maintain proficiency.

3.28 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

We have the equivalent of 5 programs running simultaneously. Students entering the program this Fall semester could be eligible for a certificate as early as next Fall. There are three entry points for the program, every semester. There are also three exit points where a student can complete with a certificate. A student could complete all our classes in 3 years, 1 year of full time days, and 2 years of 2 nights a week, and receive two certificates or if he chose to attend four nights a week, he could complete the program in two years and receive both certificates. At present, unless budget cuts forced us to drop classes I see us filling our classes and having approximately 40 certificates or degrees every year.

3.29 Are all Course Outlines of Record (CORs) current?

Chart showing date of revisions due and proposed revisions for the future

X denotes when I will update / revise course outline of records.

Due denotes when actually due to be updated.

Course	08-09	09-10	10-11	11-12	12-13	13-14
ACRV 100	X		due	X		
ACRV 112		X	due		X	
ACRV 113		X	due		X	
ACRV 115		X	due		X	
ACRV 122		X	due		X	
ACRV 123		X	due		X	
ACRV 125		X	due		X	
ACRV 212			X due			X
ACRV 213			X due			X
ACRV 215		(No longer offered)	(No longer offered)			
ACRV 222			X due			X
ACRV 223			X due			X
ACRV 225		(No longer offered)	(No longer offered)			
ACRV 198		(No longer offered)	(No longer offered)			

3.30 How does the program ensure that all faculty utilize CORs when designing course syllabi?

We use a standard syllabi template that has the course description, objectives and course content, along with typical assignments and methods of evaluation. This template is used by every instructor, insuring consistency and uniformity. We then assess the SLOs and PLOs using student competencies recognized by industry standards insuring both the success of our students and our program.

As a team we use these templates that encourage consistency with our syllabi and the use of our CORs. We implemented Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) for all our courses in 2008/2009 and assessed SLOs in all our first year students. We are now going through our second year of assessment with our

basic students, and our first year of assessment of our advanced students. Presently our fundamental class CORs are being re-written to account for the assessment of SLOs and PLOs. The Advanced or 2nd year courses will be revised next year to account for the SLOs and PLOs.

We use a standard syllabi template that has the course description, objectives and course content, along with typical assignments and methods of evaluation. This template is used by every instructor, insuring consistency and uniformity. We then assess the SLOs using student competencies recognized by industry standards insuring both the success of our students and our program.

Area 4 Student Support and Development

4.9 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Refer to Division Summary

4.10 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

Refer to Division Summary

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.9 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?
- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

5.10 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

Goals in the last review were to increase course offerings, to include an entry point every semester. Implement the pre-requisites and increase the level of instruction. Fill the ACRV labs (TE-7 RM 105 and 108) every Monday thru Thursday night by offering courses simultaneously. This of course meant bringing

on two new instructors. We wanted to offer a summer introductory course for students considering entering into the ACRV industry.

We achieved our stated goals! We went from an average of 63.5 students enrolled in the program in 2004/05 to an average enrollment of 92 students in 2008/09. At present we have over 120 students enrolled for the Fall 200. The Fall of 2004 we had approximately 706 FTES while in Fall of 2008 we had approximately 961 FTES. Our average student is approximately 35 years of age, and usually cross training. We average as many Hispanics as we do Caucasians and 98% of the students are male. Most of the younger students have been out of high school for over two years. Surprisingly, most of the students find employment out of the valley. Perhaps due to the availability of graduate students from our program, employers aren't hurting for applicants.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.17 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to Division summary

6.18 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

Assessment of Student learning outcomes is accomplished for the most part through student competencies. These competencies are consistent between the instructors of the same discipline as the same assignments and assessment rubrics are used. The advanced course instructors teach their discipline and use assessments specific to their curriculum. Hands on demonstrations with tools and equipment, interpretation of schematics in diagnostics, and simulation software are used. Initial assessment of our students has shown us areas of weakness and some of our strengths. We are presently taking a hard look at our assessments to determine is it our assessment or our Student learning outcome, (example – refrigerant recovery practices). The basic classes offer many opportunities for students to practice their techniques and skill in refrigerant handling. Yet students lack confidence as they progress through the program. This is due perhaps to lack of equipment to insure every student gets hands on with the equipment during lab sessions. Typically, there is one recovery machine to a group of four students. One person hooks up and runs the equipment at a time while three observe. Each session could be between an hour or two. We are sure of this assessment, but lack of equipment and individual instruction (One instructor per 25 students) make it almost impossible. We have lowered our SLO expectations for 1st year students and allowed the student time to gain more experience throughout the program.

6.19 *What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.*

This is our second year assessing the students in the program. Many of the students assessed last year are now in advanced classes. This will be the first year we assess the advanced courses. We are still looking at how well we are assessing our students with SLOs. We have not yet developed assessments for PLOs. We may need another year or two to work out inconsistencies in our assessment methods, and find uniform rubrics that work across our course offerings. I'm finding my expectations of the first year students was higher than we are capable accomplishing. By re-evaluating, we are lowering expectations of first year students on competencies requiring extensive hands on experience to develop confidence, and allowing the student into the second year to develop full confidence levels. .

6.20 *If the program SLO and PLO assessment results make it clear that particular - professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.*

Program is industry driven which motivates us to stay current with industry standards. The student competencies that are required of students entering into the industry require confidence with hand tools, specialty meters and gauges, and refrigerant handling. This is not being accomplished to the degree that it could be.

- ❖ More hands-on experience to improve proficiency on competencies
First we need more hands-on time with the specialty tools and meters. This is complicated by the limited number of tools we have to use. We need tools and meters for every student. This will ensure every student can follow the instructor direction when learning the procedure and every student can practice the procedure during the same lab session.
- ❖ A lab only session to facilitate students with the time and place to apply and practice hands on skills.
 - While many students catch on fast, many need more time to practice and develop the necessary skills to succeed. A student cannot practice at home on equipment he doesn't or with tools he doesn't have. Therefore while homework is intense, lab assignments stay in the lab. A student using computer lab has the option of taking work home. Our students don't. Yet we only have limited lab space with limited instruction. To solve the problem will require more equipment and tools, and more lab time for those that need it.
 - We could perhaps offer a lab only session for 8 hours on Fridays allowing students from any of the programs to use the lab to get the extra lab time and hands on practice they need.

- We could separate lab from the lecture, and offering multiple lab times making it possible to have less students in a lab and more time for the students to get instruction. Students could enroll in a choice lab time, with lower student numbers in each session.
 - Perhaps a 3-2-3 day session with the three hour sessions being lab, and the two hour sessions being lecture. Rather than have all the students for a straight 5 hour session. Some would come early and some would stay late.
 - For the night Classes we could have lecture one evening. And then two evenings of labs offered, with the students required to take only one lab session of the two. Their choice! So for a M/W class, Monday could be lecture, and Wednesday a Lab, or Friday night a Lab. A Tuesday / Thursday Class could lecture on Tuesday, and offer labs on Wednesday or Friday.
 - Perhaps a Saturday Lab could also be offered as an option. These options would also increase versatility of the programs, and give instructors a reduced student load in lab.

- ❖ Additional tools allowing individuals to accomplish lab projects in a timely manner with less downtime waiting to use a tool.
 - Sharing a workbench may help compensate for limited lab space, but doesn't help a student build confidence with the equipment and tools.
 - Typically, with limited tools, and equipment, one student is always watching. The task being performed may be a time consuming task that must be accomplished before another task can be attempted.
 - The Second student must observe, while becoming easily distracted bored and many times impatient waiting for the opportunity to his/ her turn at the wheel. That means one half of a students time is spent observing another student. If the students' partner is slow or makes mistakes, the partnership is stressed. More tools and more equipment should solve this problem.
 - It's bad during the day class, but it's impossible during the night class, where two programs are going on in opposite labs, but there are no more tools or equipment to go around.

- ❖ Increased storage for lab equipment would make it possible to free up lab space and allow more students to work on projects simultaneously.
 - More tools and equipment will require creative thinking when accommodating the materials with a storage location.
 - Projects that are ongoing need racks to keep them secure and out of the way for the other classes that use the labs. These labs are used by three classes during one semester. – A fulltime day class, and two 5 unit evening classes, (M-W and T –R) on top of storing lab projects, you have parts, hardware, and supplies that require a home.
 - Then we must consider the tools to outfit 50 students that occupy our labs any one evening of the week. Even at one toolbox and a refrigerant cart (with meters,

scales, tanks, recovery units and vacuum pumps) for every workbench, that would be 13 per lab for a total of 26 units.

- Then for the advanced classes some specialty tools that are limited to use to the students in the advanced classes. You would have up to 5 additional specialty boxes for each commercial program. (Refrigeration and Air Conditioning)

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

We have a good relationship with our electrical program with many of our students seeking specialty courses on Motor Controls, Residential and Commercial Wiring, and National Electrical Codes.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

We have excellent rapport with local contractors and vendors who accept our students from the Work Experience program for ride along and job-site experiences. Students gain insight of the industry, while contractors get to know our students, their future employees. The past two summers we have fielded a softball team of students to compete in the Annual R.S.E.S. Softball tournament. This team was coached by Ernie Bridges, adjunct instructor of the ACRV program. This annual picnic and softball tournament is a venue for the students to interact on a social basis with the contractors, vendors and technicians in the local industry.

ASHRAE has awarded scholarships to students in our program for the last two years. They support our program and its students as many are viable candidates for engineering programs across the country. They have been pushing to start a student ASHRAE club in our program. At present we are taking on Skills USA as it seems to be where the students want to go.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

We have done well these past four years, yet much of our equipment is in need of replacement and we lack the specialty tools and training material to keep up with

current trends. We need to acquire more hand-tools and specialty tools, meters and refrigeration tools. Enough tools to adequately equip 50 students to work in the lab. Students should not have to wait to borrow a tool, because the few good tools we have are busy at another workbench, or even the other lab. Making room for the additional tools and tool carts will require finding storage for training aids allowing tool racks to be kept in the labs.

Where would I like to see the program in five years?

- I would like to see enough tool boxes, and charging carts to run two full labs at the same time.
- Enough tools in those boxes and racks to allow every student in the lab the hands on experience every time, rather than one of the students at a workbench always having to watch the other student work.
- I would like to see racks of new or slightly used parts, available for student projects, instead of the boxes of recycled scrap we've acquired and use continuously over and over and when the components don't work, I wont have to say, "Well, its great experience!! You already know what broken equipment looks like!"
- I would like to see a storage system that allows student projects to be put up and secured, until they will be worked on again.
- I would like to see a place to put all the unused training aids out of the way to allow more space for students to work in the labs. It gets pretty crowded when we finally get all our tool boxes, charging carts, and equipment in the lab, and realize we still need to get students and an instructor in the lab, and the instructor needs to safely navigate between the workbenches and tool carts.
- I would like to see an improved exhaust ventilation system allowing more than 2 students to safely braze at a time.
- I would like to see a tools and equipment budget to be used to maintain and repair equipments items and replace equipment that is beyond economical repair.
- I would like to see an increase in our supply budget that is capable of supporting the number of students we have in our labs.

Perhaps while all this is said, a revision in the way we offer our courses and labs may offer increased versatility of our facility. We may need to look outside of the box to resolve this one.

Objectives: Significant steps or actions needed to achieve the goal.

During a time period when everyone in the country wants more money it's hard to justify enough priority on your program to raise your voice and be heard! Both because there are so many voices screaming for funding, some perhaps are in more dire need than yourself. Perhaps if we all stop asking we may find resolve in the woes our country faces. All said, there is no problem we can't solve in our program that money won't resolve.

Money is all it takes. I will pursue grants (Perkins) to purchase the new tools and equipment to facilitate the use of our labs with 25 students in each lab at one time. The tools will make it possible for every student to have tools and equipment with which to work with to increase his/her learning experience and gain confidence. In the meantime we will continue to provide the best experience possible for our students. We will seek equipment donations from contractors in town. I will network with manufacturers of equipment and tools, seek help and guidance wherever it may come from, and graciously accept all donations of equipment and tools. I will continue to work with the advisory committee in meeting the needs of the local industry, and seek all the help and donations we can get.

- If I manage to get Perkins money for our program I'll purchase tools and specialty tools, storage racks and carts for equipment. Replacing all the older tools and increasing our tool inventory levels.
- I'll look into a rack storage system that utilizes the space we have in our storage facilities more efficiently.
- I would also like to see a weekend course offered. The same courses offered two nights a week offered on Saturday and Sunday!
- Perhaps offer some Friday night Test preparation courses through Corporate and Community Ed. These only require a seat and a room. There would be no additional burden to our program.
- An increase in supply budget to \$10K, a tool and equipment budget to maintain and repair tools, meters and equipment of \$5K, and an annual funding source of \$5k to replace tools and equipment beyond economical repair. There isn't any plan to handle aging or broken equipment. When equipment breaks if there isn't supply budget or Prop money to handle the repair or replacement, it goes without being done.

Time Frame: Period of time the goal and objectives will be addresses.

- Hopefully, If I apply for Perkins money for 2010 / 2011. and funding is received, the additional tools and equipment could be procured and put into use as soon as Fall 2010. In case full funding is not possible, I will be prepared with an incremental plan than will allow for a multiple year window to procure funding to adequately equip our labs.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

- These goals are in line with meeting the needs of the students. The students and their success through certificates, degrees, or employment are the mission of the college. In turn the needs of the community are met.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

At present we are staffed adequately.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

- Storage system – to make it possible to store training aids when not in use. At present they take up valuable space that could be used by students in lab. A mezzanine system in our parts room would give us a second level of storage.
- Renovate our emergency eye-wash system to a wash sink with an eyewash system. We have no wash-basins which are essential for sanitary reasons. This eye-wash basin with proper drain will also alleviate the occasional accidental flooding of the labs.
- Sound system in lecture areas – labs tend to be noisy and a speaker-system for the audio-visual equipment is needed.

10.7 *Identify funding needed to support student learning.*

Increase in supply budget is necessary to support the increased student load and the increased material needs to support the changes in technology. At present the supply budget for our program is between \$3k and \$4K per school year. We also receive Prop 20 funds that help offset the inadequate supply budget. Our annual expenditures for perishable supplies such as welding gases, and dry nitrogen, copper tubing, brass

hardware, refrigerants and lubricants, brazing rods and emery cloth, transformers, relays, contactors, controls, wire, electrical connectors, dryers, filters, sight-glasses and access fittings easily exceed the allocated budget money every year. New supplies are needed every year to use for students lab projects. Most years we don't receive enough money to cover supplies, but are usually saved by prop 20 funds and others we have been fortunate. Our budget has not increased in over 5 years, yet we have increased student numbers by almost 40%. We need an annual supply budget of \$10K and another \$4K to \$6K to keep our tools in repair and useable condition. We need a plan that would allow us to phase out equipment older than 5 years old, such as replacing 20% of the recovery units, vacuum pumps and gauges every year, as this equipment cannot stand up to the rigorous and constant use that they get in our labs. At present our recovery units, vacuum pumps gauges, and meters are all over 5 years old, and over 50% are in disrepair due to age and excess use. To get more than 3 years worth of service out of this type equipment is not possible in the industry. Presently we need to replace all our aging tools and equipment. I will pursue a Perkins grant for this.

Area 11 Recommendations and Comments

11.9 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

Refer to division overview

11.10 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Refer to Division Overview

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

AIRCRAFT FABRICATION

Comprehensive Program Review Report

Program: Aircraft Fabrication & Assembly Technician Program

Academic Year Reviewed: 2009/2010

Due October 31

Area 1 Mission

1.6 State the mission of the program.

The mission of the Aircraft Fabrication & Assembly Technician Program (AFAB) is to provide the local aerospace industry with skilled entry level aircraft fabrication technicians and to provide students with the skills and knowledge necessary to secure long-term employment in high wage, high-skilled careers.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

The AFAB program aligns with the college mission that states “Career and Technical certificate and degree programs comprised of business, technical and occupational courses designed to enhance students’ knowledge and skills leading to employment, career advancement, certification and state and federal licensure.”

The AFAB program also aligns with the college vision “To provide quality education than enriches lives and builds futures.”

The AFAB program supports the college ILO that states “Identify career opportunities that contribute to the economic well being of the community.”

Area 2 History

2.16 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the AFAB program include:

- Northrop Grumman Corporation’s adoption of the Aircraft Fabrication and Assembly Program for providing entry level training for all newly hired structures mechanics.
- Major enrollment growth over the last year due to the partnership with Northrop Grumman.
- Northrop Grumman and Aircraft Fabrication Program received the Excellence in Partnership award from the California Community College Association for Occupational Education (CCCAOE).

- The award of the Responsive Training Fund Grant for \$341,000 for specific training in composites and certification readiness for SpaceTEC certification of their senior technicians.
- The new addition of 2 temporary full-time AFAB instructors and grant director.

2.17 Briefly describe the program’s activities and services in the past four years.

The AFAB program offers a schedule of classes designed to meet the needs of both full-time and part-time students.

The program was one of the first programs in the college to develop PLOs and the format used by the Technical Education division was adopted as the standard across the college.

SLOs have been developed for all the AFAB courses. All courses that were taught during the 2008/2009 year conducted assessments on SLOs.

2.18 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

The most significant and readily available source of outside funding for the AFAB program is Perkins IV funding. The table below outlines the programs that have benefited from this funding over the last four years.

PROGRAM	2005/06	2006/07	2007/08	2008/09	2009/2010
Aircraft Fabrication	\$9,980		\$15,000	\$25,000	\$35,000

Perkins IV funding was used to upgrade and modernize major pieces of equipment, upgrade and expand inventories of hand tools and power tools. The program submits a plan to revise curriculum, and improve student retention and completion rates. These activities have a direct impact on improving Student Learning Outcomes.

During the 2006/07 year, a one-time funding source referred to as Career Technical Education funds were provided to the by the California Community Colleges Chancellor’s Office (CCCCO). A portion of those funds were allocated to this division. They were used to purchase computer driven projection systems the Aircraft Fabrication and Assembly program.

The Aircraft Fabrication and Assembly program participates in a National Science Foundation grant called SpaceTEC. SpaceTEC includes twelve community colleges nationally that have aerospace programs and are located in close proximity to a National Aeronautics and Space Administration (NASA) center. Through this grant, the Aircraft Fabrication program received approximately \$10,000 to \$20,000 per year. This funding was used for professional development in advanced composites techniques, specialized

tools and equipment, and teaching materials. This Grant expands access for composites courses for Northrop Grumman employees.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.31 Identify degrees and certificates currently offered in the program.

The AFAB program offers a AS degree and certificate.

3.32 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The AFAB Program has developed the course offerings that provide students with a broad and thorough knowledge of the aircraft fabrication career field. This ensures that students leaving the program have the skills necessary to work for a variety of aerospace companies and are well prepared to find and maintain employment in a variety of economic cycles.

A new course that was developed for the AERO and AFAB program was AERO 180 the SpaceTEC Certification Readiness course for the RTF grant. This course is designed to prepare students for the SpaceTEC Core certification written exam. The successful completion of this course and the subsequent successful passing of the SpaceTEC written and practical exams will allow students to be awarded the SpaceTEC Core Certificate/License and 24 units of course credit honored by the American Council on Education and AVC.

3.33 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The AFAB program is heavily involved with technology. This encompasses both the skills required by the industry and utilizing technology to deliver instruction. The dependence on technology within the career fields requires instructors to stay current with new technologies and their uses in the field. This is most often related to the use of computers, the Internet, or other electronic testing systems. Within the AFAB discipline, all classes make use of computers in the classroom environment, simulation software, and dependence on lectures enhanced with computer projection techniques.

Another trend prevalent in the AFAB discipline is the lack of preparation for college level work demonstrated by students entering the programs. Many students have difficulty with reading technical material, writing and spelling properly, and basic mathematic concepts. Technical programs have a long history of infusing basic skills into contextualized learning. However, students entering programs now require significantly more instruction in basic skills and concepts.

It is also becoming more common for students entering these programs to have little or no skill with basic hand tools or mechanical concepts.

3.34 *Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?*

The AFAB program has developed a regular pattern of scheduling courses that are required for certificate or degree completion.

Students are provided with regular information on class schedules and certificate and degree requirements. Students in advanced classes are actively encouraged to apply for graduation and to participate in commencement activities. For 2009/10, the Admissions and Records office received some Perkins IV funding specifically to improve completion rates for career and technical students.

Faculty encourages students to apply for their certificates as well as Northrop Grumman.

3.35 *Are all Course Outlines of Record (CORs) current?*

All CORs are current. Faculty have been encouraged to review and update CORs on a three year timeline.

The following table shows when the COR's for each AFAB class are due. This year all AFAB COR's need to be updated, as of this date the AFAB 130 has been updated 05/09 and the remaining classes are in the process of being updated for the 2009 due date.

	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
AFAB 110	X			X			X
AFAB 115	X			X			X
AFAB 120	X			X			X
AFAB 130	X			X			X

3.36 *How does the program ensure that all faculty utilize CORs when designing course syllabi?*

The full-time faculty member has a very close working relationship with the part-time faculty in the program. AFAB program faculty meetings are held monthly to encourage collaboration and ensure that program standards are being applied to all students. This assures consistency throughout each program. This is very important in career and technical programs where students are expected to demonstrate core concepts and skills to be employable.

Area 4 Student Support and Development

4.11 *Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.*

Students have full access to a wide array of student support services such as counseling, job placement, Learning Resource Center, and the Library. The Math Specialist in the Learning Resource Center has done an exemplary job in reaching out to technical

students and developing specific mathematics tutoring guides and handouts related to many of the disciplines in this division. The AFAB program has access to computers in the laboratory environment or the shared computer laboratory in TE7 103.

4.12 *Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.*

In 2008/09, the Library used Perkins IV funds to subscribe to a very extensive periodical data base related to a wide range of career and technical fields. This resource is relatively new. Even though the librarian gave a very thorough demonstration of this resource, it does not seem to be widely in use by faculty in this division.

During 2008/09, the Perkins funding supported an extensive upgrade to the Career/Transfer center library of DVD's. A library of over 30 professionally produced DVDs portraying women in nontraditional career fields were obtained. There were also two outreach events – Women in Aerospace Careers and Women in Public Safety – that were very successful.

Perkins funded projects targeted at women in nontraditional career fields and increasing the certificate and AS completion rate are planned for 2009/10.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.11 *The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.*

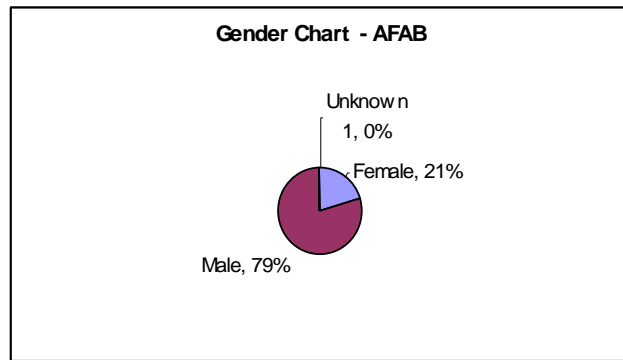
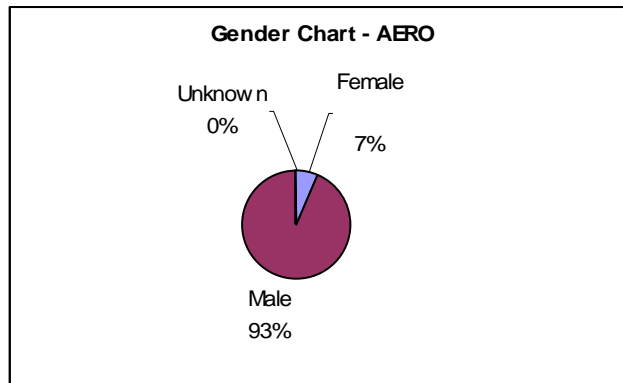
- *Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?**

Overall growth in the Technical Education division was relatively flat until 2007/08 when growth was approximately 10% over 2006/07 and 2008/09 when growth was an additional 10.2% over 2007/08.

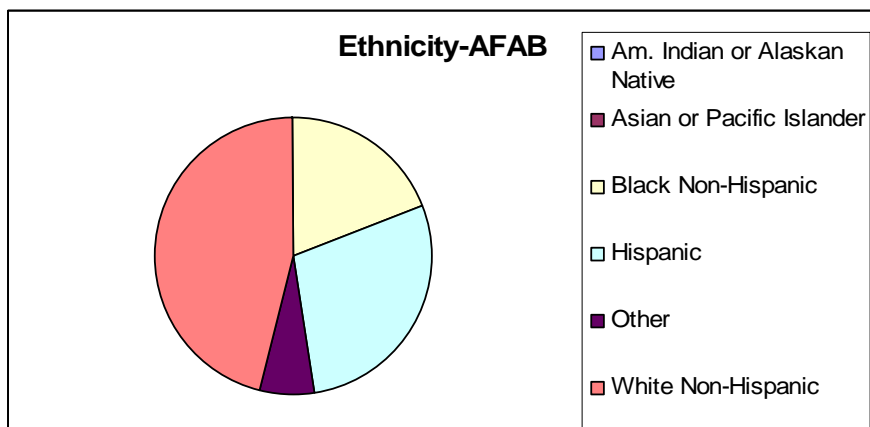
The Aircraft Fabrication and Assembly program has experienced significant growth since Northrop Grumman approved the program for “new hire” training.

Classes fill during the first weeks of early registration. Students show up at midnight and spend the night outside the building to crash the classes.

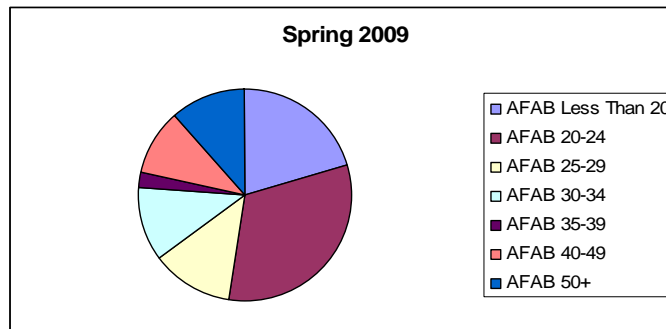
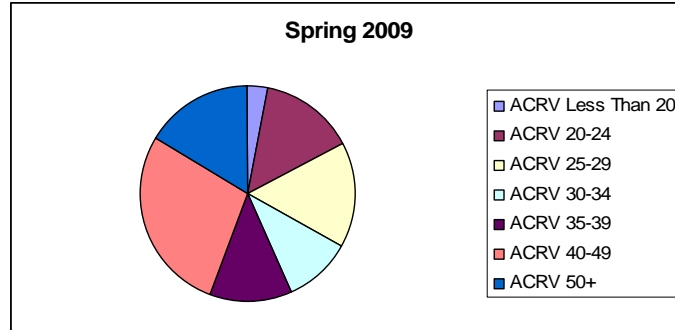
An exception to the gender specific trends is the Aircraft Fabrication and Assembly program. A comparison between the Aeronautics program and the Aircraft Fabrication program indicates that the Aeronautics program female to male ratio is between 6% to 9%, the Aircraft Fabrication program female to male ratio is between 13% to 21%. This can be attributed to the fact that the full-time instructor is a female and provides positive role model to female students and the program is 16 weeks in length. This allows a student to be job ready in a short period of time, no long term commitment and is less intimidating.



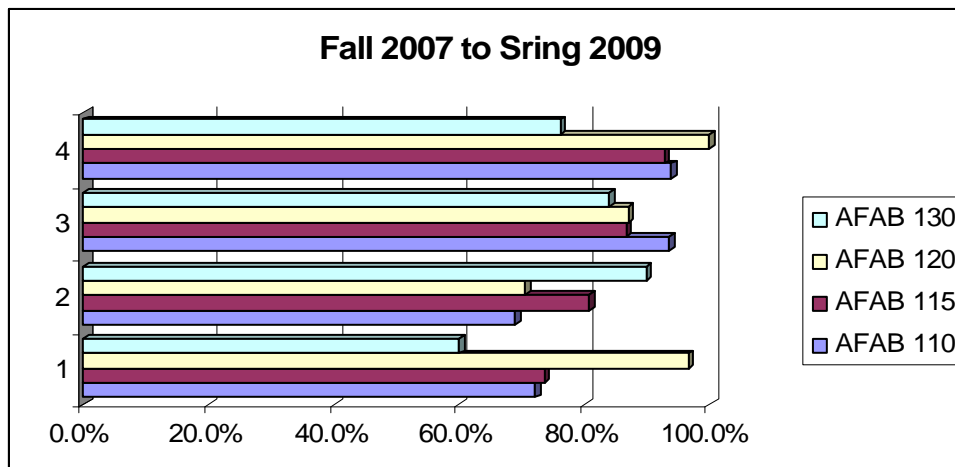
Ethnicity in the division is comparable to that of the college as a whole Hispanic students nearly equaling White Non-Hispanics and the combined student enrollment of African-American and Hispanic students exceeding the number of White Non-Hispanics. The AFAB program almost mirrors the college's diverse population.



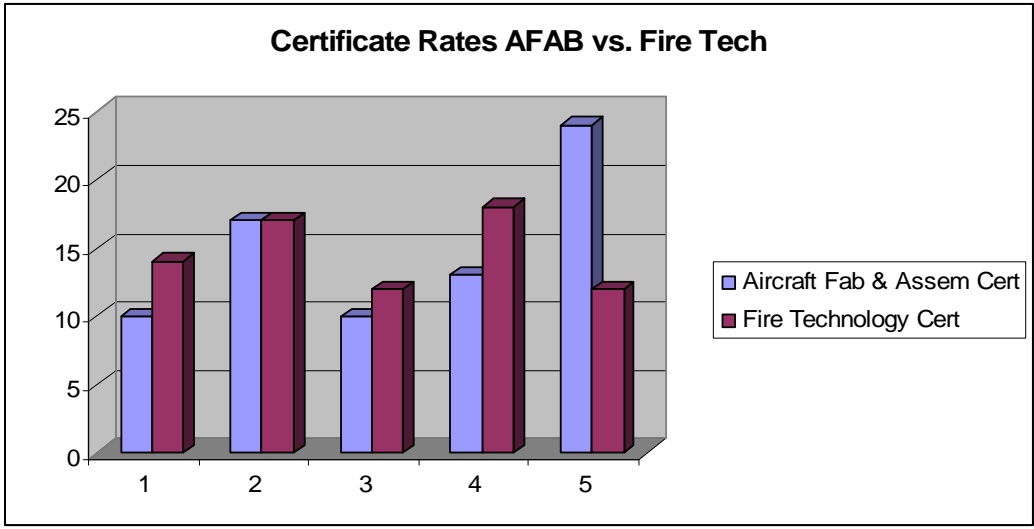
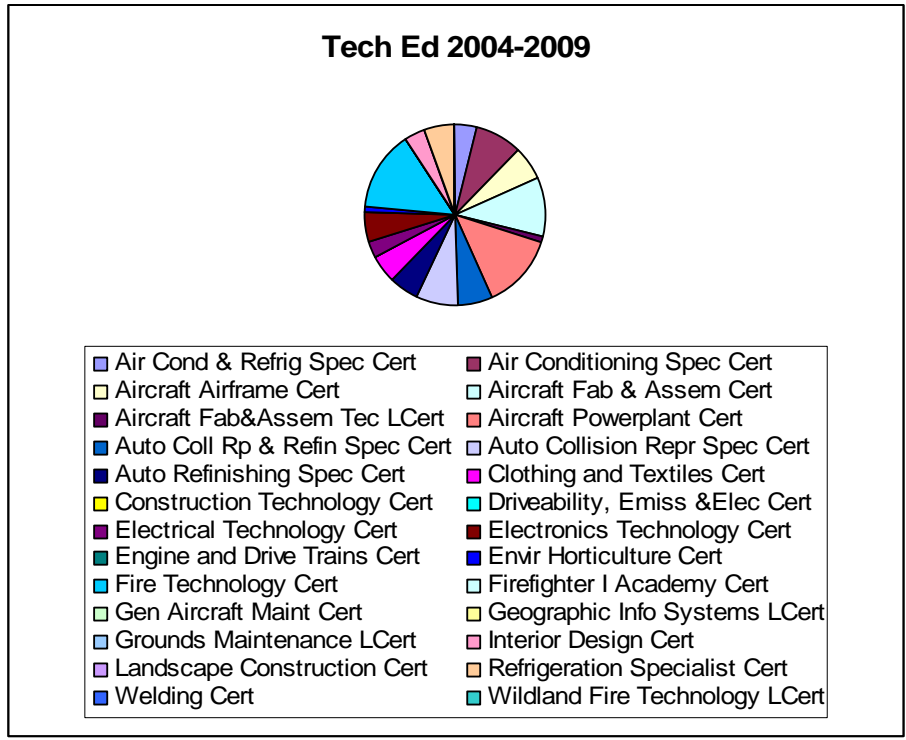
Age rates for the AFAB program shows that the program tends to attract younger students, much like the college as a whole. If you compare the AFAB program to the ACRV program you will see that the ACRV program tends to attract individuals between the ages of 40 to 49 and the AFAB program tends to attract individuals between the ages of 20 to 24.



Success and retention rates for all students are very good and are probably above the college average. These rates usually range between 75% and 100% with most courses and programs running in the 85% to 100% range. This is not due to any type of grade inflation, but it is indicative of the fact that students who enroll in career and technical education programs are serious and committed to their chosen field of study. This is also indicative of the fact that the local aerospace companies provide positive feedback concerning the successfulness of the graduates working in their company.



Certificate rates for students are very good. The AFAB program has an excellent completion rate as compared to the Technical Education Division. Even in comparison with the Fire Academy program that is much larger than that of the AFAB program (consisting of 4 courses), the certificate completion rates are comparable. This is mostly due to the high demand of the students from the local aerospace industries, Northrop Grumman in particular and from the help of La Donna Trimble and the poster series.



- *Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?**

Presently, with the employment rate and the amount of hiring that the aerospace industry is providing, the AFAB program is serving the needs of the diverse student population of AVC and the community as a whole and preparing students for employment opportunities that exist in the Antelope Valley and do not require long commutes to the Los Angeles basin.

Additional efforts were begun last year to attempt to attract more women to non-traditional careers. Those efforts include the purchase of a large library of professionally prepared DVDs for the Career Center featuring women in non-traditional careers. Last year, the AFAB and FTEC programs in the division in cooperation with the Career Center offered two workshops – Women in Aerospace and Women in Public Safety. Both workshops were well attended and participants were very positive about the content. These efforts will continue in the future with additional workshops.

5.12 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

Looking at the last program review the AFAB program had just hired the program's first full-time faculty and this individual was dealing with running a new program, so no goals were set other than meeting the needs of industry growth.

The AFAB and Airframe & Powerplant were the first programs to develop their SLOs and PLOs. The Technical Education Division has been a leader in the development of PLOs with our format being adopted for use college-wide. We also were one of the first divisions to complete SLO development and have been through one assessment cycle for most of our courses.

At the time of the last program review, a new full-time faculty member had just been hired and the facilities and equipment were all new. The goals of the new faculty member were to: review and update the curriculum to industry standards.

Recommendation from Last Program Review	Status	Year
Review and update the curriculum to industry standards.	Completed	2008
Encourage adjunct faculty to become more involved with the program and curriculum.	Completed	2007
Develop stronger industry partnerships.	On going	
Develop a website with information related to the program.	Not done	

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.21 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

The AFAB program developed Program Learning Outcomes (PLOs) as a part of the 2005 program review cycle. The format used by the Technical Education Division has been adopted college-wide as the model for other programs and departments to use. To date, the college has not evolved into the assessment of PLOs. Therefore, the program has not ventured into PLO assessment as of this writing.

The AFAB program has assessed all the SLOs in all the courses for the program for the last academic year; the program has a 100% SLO assessment compliance rate. All the instructors (full time and adjunct) assess every SLO per course every semester. They meet at least twice a semester, the first meeting is before the start of the semester to review the SLOs and the assessment tool, so that all instructors teaching a particular course as assessing the students in the same manner. Another meeting is held at the end of the semester to collect the data and review results.

6.22 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

The full-time AFAB instructor has accepted the responsibility of discussing SLOs with the adjunct faculty in that area. The AFAB program conducts at least two meeting per semester for all AFAB faculty (full-time and adjunct) to discuss SLOs, curriculum, standards and expectations, safe shop practices, etc. They have worked together, as a team to develop consistent assessment tools and strategies. Everyone has been encouraged to assess all SLOs in every course taught during the 2008/09 year and report their findings to the Office of Institutional Research.

6.23 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

The AFAB program is in the process of completing a full year cycle of assessing all courses in the program. The results of the assessment will be examined and any adjustment to the SLOs or assessment tools will be made once any deficiencies have been located.

6.24 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

If the assessment results indicate a need to serve the students, such as providing students with the tools and equipment needed to develop a better understand of industry practices and processes, this could be improved with either proper funding and budget as well as training for faculty. This training could be either educational teaching methodologies and/or technical training.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

The AFAB program shares the composite lab with the Airframe & Powerplant program. The full time AFAB instructor team-instructs with the Airframe & Powerplant instructor for the composite section in the A&P program.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The AFAB program faculty annually attends the Salute to Youth and the Math & Science Odyssey events. The program is looking to develop Internships with Edwards AFB similar to the one they have developed with the Airframe and Powerplant program.

The Airframe and Powerplant, Aircraft Fabrication, and Electronics program hosted the Women in Aerospace Careers event to attract more women to the aerospace industry.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

Listed in the order of priority:

1. Increase the supply budget for the program.
2. Hire a dedicated AFAB Instructional Assistant.
3. Hire another full-time instructor for the AFAB program.
4. Expand the course offerings to include pneudraulics and electrical wiring.

Objectives: Significant steps or actions needed to achieve the goal.

All of the above objectives are contingent on the State's budget situation and out of the Technical Educations Division's control.

Time Frame: Period of time the goal and objectives will be addresses.

Is determined by the State's budget situation and the governing district.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

1. The growth that the program has received in the last year has allowed more classes to be offered due to student and industry demand; however the current supply budget is inadequate. Alternate sources of funding are a necessity to the program at this point in time.
2. Currently the Instructional Assistant provides no assistance to the AFAB program. The full-time faculty member has to clean, repair, inventory, set up shop, etc... for the classes. Help during lab time to ensure the safety of students and proper use of equipment (this would also help reduce the cost of replacing broken equipment and tooling from improper student usage). Some of this work has been subsidized by the loaning of the Airframe and Powerplant Instructional Assistants during the spring 2009 semester. The assistants were available for a total combined of 8 hours a week (4 hours each). Although this was a help, it is not enough. The program's huge growth with all classes being offered during the summer (8-hour instruction days) has stressed the labs, equipment, and funds for the program.
3. Currently there is one full-time faculty to seven adjunct instructors. It is becoming more and more difficult to manage all aspects of the program, especially with the expansion of classes due to the dramatic increase in growth. Another full-time faculty member is needed to manage class scheduling, adjunct coordinating, SLO data collecting and assessment, repairing shop equipment and tooling, purchasing supplies, etc...
4. The program would like to expand of the course offerings to include pnuedraulics and electrical wiring. Northrop has expressed a need for this training. However the classroom/lab and time dedicated to developing these courses by the full-time faculty member is limited. The development of these courses will increase the AFAB classes to include the much needed training that industry (Northrop) is requesting.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

- 10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

AFAB PROGRAM NEEDS

Priority	<u>New</u> <u>Replace</u>	Title	Reason
1	R	Increase Supply Budget	Current budget is in adequate due to the increase course offerings per semester.
2	N	AFAB Instructional Assistant	The program currently has no dedicated assistant; instructor has to perform all upkeep and maintenance on equipment and shop.
3	N	Aircraft Fabrication Instructor	This program has experienced rapid growth due to the fact that Northrop Grumman hires exclusively from this program. The facilities are not used to capacity due to difficulties finding adjunct instructors.
4	N	Expand course offerings	Cannot expand offerings without an additional full-time instructor

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

Immediate Need – Probably will not be addressed in 4 year time frame.

The AFAB program has an immediate need for an air compressor that will have the capacity to run both the structures and composite labs simultaneously. As of to date, the air compressor located in the TE7 building is in adequate and sometimes cannot maintain enough air pressure to run one lab, composites or structures.

This affects the student's **Student Learning Outcomes**, if a student cannot correctly accomplish a task using the proper tools and equipment, then they cannot practice the correct forms and procedure. This results in inadequate training and poor outcomes.

10.8 *Identify funding needed to support student learning.*

The AFAB program requires additional instructional supplies funding. The AFAB program's budget had been the same, even though the course offerings have more than doubled. Composite and sheet metal materials have increased in prices and a very costly, yet the program did not receive an increase in budget. None of the programs in Tech Ed. have received a budget increase, yet all of our material fees have gone up. This is especially true in this budget year when existing supplies budgets were cut when they

were capped at last year's spending level. The division has requested an additional \$36,000 every budget request year since 2006/07. No additional funds have been forthcoming. Instead, funding has been cut.

Area 11 Recommendations and Comments

11.11 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

See Division overview.

11.12 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

See Division overview.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

AUTO BODY TECHNOLOGY

Comprehensive Program Review Report

Program: Auto Body

Academic Year Reviewed:

Due October 31

Area 1 Mission

1.7 State the mission of the program.

Refer to division overview.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

Refer to division overview.

Area 2 History

2.19 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

Previous instructor Joe Kroeger retired. Replacement was hired in 2008. He has been in the auto collision industry for 25 years. The new shop is under construction and will be a major positive change to the program.

2.20 Briefly describe the program's activities and services in the past four years.

The program's activities and services have remained the same with a day program that includes auto body and auto refinishing and a night program that provides these same services. All Auto Body COR's are being updated to the current AP & P format.

2.21 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

We received Perkins funds for 2009 /2010. The funds will be used to update our teaching curriculum and also to purchase a new updated frame rack.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.37 Identify degrees and certificates currently offered in the program.

Auto Body offers a certificate program for Auto Body, Auto Refinishing, and a combo certificate. All certificates lead to associate Degrees

3.38 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

Revisions have not been done consistently and I am revising all courses in the program.

	2006	2007	2008	2009	2010	2011	2012
ABDY 112		X		X	X		
ABDY 113		X		X	X		
ABDY 115		X		X	X		
ABDY 212		X		X	X		
ABDY 213		X		X	X		
ABDY215		X		X	X		
ABDY 122	X			X		X	
ABDY 123	X			X		X	
ABDY 125	X			X		X	
ABDY 222	X			X			X
ABDY 223	X			X			X
ABDY 225	X			X			X

3.39 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

Courses include current I-CAR curriculum which is the current Auto Body industry standard. This curriculum is taught along with hands on instructional methods to meet all knowledge requirements.

3.40 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The Auto Body program keeps the same rotational schedule with all courses offered and these classes are full at the beginning of each semester. Students are encouraged to apply for their certificates and to continue for their degrees.

3.41 Are all Course Outlines of Record (CORs) current?

They are in the process of being revised.

3.42 How does the program ensure that all faculty utilize CORs when designing course

syllabi?

I meet frequently with night instructors. We all follow the COR to assure our students can perform to industry standards.

Area 4 Student Support and Development

4.13 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Services are adequate for students.

4.14 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

Refer to 4.1, no changes have affected us, look at division notes.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.13 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

Ethnicity stayed in line with campus.

Fifty percent of the students enrolling are 24 years and younger.

Ten percent are female, similar to other male dominated programs such as AERO, AUTO, and ELEC.

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

It appears that the success of our basic classes currently have a success rate of approximately 70%. The success rate may be due to students exploring the Auto Body Program to seek out if this would be a career of choice.

As the students advance into the Advanced Auto Body Programs the success rate climbs to 80% to 100%.

5.14 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.25 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to division overview.

6.26 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

The full-time instructor meets with both of the night instructors at least once a week. We frequently coordinate our assessment strategies.

6.27 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

All courses are assessed through exams and hands on exercises.

75% of the courses were assessed in spring of 2009. All courses will be assessed in 2009/2010.

6.28 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

The constant changes in the Auto Body industry drive instructors to attend conferences, and other outside industry classes to stay educated in the industry.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

Automotive and Auto Body programs have joined for Auto Career Day, a cluster of common students is starting to merge.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

Plans to revitalize the Advisory Committee.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

Become an I-CAR approved training program.

Objectives: Significant steps or actions needed to achieve the goal.

Purchase the 59 teaching programs, and become a certified I-car instructor.

Time Frame: Period of time the goal and objectives will be addresses.

During the 2010/2011 year.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

This will provide the most current procedures used in the industry to be shared with our students. By getting our students I-CAR certified, we will be providing our community with a better pool to hire from.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 List faculty and staff requirements to meet program needs in the next four years.

Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.

Increase the Adjunct pool, and add a night time instructional assistant.

10.2 List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years.

Place items on list in order (rank) of importance.

The new body shop is going to put our program on the cutting edge.

10.9 Identify funding needed to support student learning.

The new shop will need new tooling, so there will be a need for Perkins funding.

Area 11 Recommendations and Comments

11.13 List recommended changes to the Educational Master Plan to:

- Meet student needs.
- Respond to PLOs and SLOs.
- Reflect changes in the disciplines, educational methodology, and technology.
- Address external mandates such as state requirements, industry and professional standards, etc.

No changes.

11.14 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Refer to Division Overview

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

AUTOMOTIVE TECHNOLOGY

Comprehensive Program Review Report

Program: Automotive Technology

Academic Year Reviewed: 2009

Due October 31

Area 1 Mission

1.8 State the mission of the program.

Refer to division overview

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

Refer to division overview

Area 2 History

2.22 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

Major changes to the automotive department over the past four years:

1. Senior instructor, John Knapp retired in spring of 2008.
2. Adjunct Faculty, Leonard Johnson resigns in the summer of 2008.
3. Hired new full time faculty, Chris Eckead.
4. Full time faculty, Chris Eckead resigned in early august 2009.
5. Hired new adjunct instructors to fill vacancy left by Mr. Eckead, new adjunct instructors are; John Mawhorter, Leo McConnell and Richard Tucker.
6. Due to budget concerns, the full time instructor position was temporarily put on hold.
7. Due to budget concerns two AUTO 101/102 courses canceled spring 2010.
8. Due to budget concerns one of the AUTO 198H (licensed smog check technician update) courses had to be canceled.

2.23 Briefly describe the program's activities and services in the past four years.

The automotive department developed Student Learning Outcomes (SLO's) for all courses offered by the Automotive Department.

Developed Program Learning Outcomes (PLO's) for the Automotive Department.
 Conducted SLO assessments on courses offered during the 2008/2009 year.

Once a year, the Automotive Department hosts Automotive Career Day. All the local high schools, students, teachers, administrators, counselors and board members are invited.

Local business owners participate in the activities and speak to students about career opportunities in the automotive industry.

The automotive department has become involved with Rick Engstrom from Quartz Hill High School in the Tech Prep program. Mr. Mawhorter has collaborated with Mr. Engstrom about a joint shadowing program. The program will most likely be engine related, either upper or lower end (still undecided at this time). Mr. Engstrom and Mr. Mawhorter attended the California Automotive Teachers conference in accordance with the tech prep plan.

2.24 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

PROGRAM	2005/06	2006/07	2007/08	2008/09	2009/2010
Automotive		\$80,000	\$83,100	\$84,371	

The Perkins IV funds were used to replace outdated, broken or worn out equipment. With Perkins funding the automotive department purchased some of the “new state of the art” scan tools, oscilloscopes, and technical training equipment. The chassis dyno is used in the engines and transmission courses. It is also used during automotive career day, using local cars for demonstration on use and operation of the dyno.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.43 Identify degrees and certificates currently offered in the program.

There are currently two certificates available, one in chassis and power train, the other in drive ability emissions and electrical. Each certificate requires 26 units of instruction. The certificate combined with additional units of general education and electives will lead to an Associate of Science Degree for a total of 60 units.

3.44 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The adequacy of courses needs to make improvements. The AUO 175 (automotive fuel, carburetion, fuel injection and the California Clean Air Car Course) only ran one time over the past four years. The auto 175 course needs to run on a more frequent rotation to ensure students are able to complete the certificate program in a timely manner. At this time only one adjunct instructor is Bureau of Automotive Repair (BAR) certified to teach

the California Clean Air Car Course. The automotive department hopes to have a full time certified instructor by the fall of 2010, to meet the needs of the student.

3.45 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The automotive field has become dependent on computers and electronics in every aspect of the automobile. All course need to incorporate fundamentals of electricity and basic testing procedures in the curriculum.

With the recent high price in crude oil and gasoline, hy-bred, compressed natural gas, electric, and fuel cell vehicles are in high demand. Instructor training and service equipment is needed to meet the needs of students, industry and the community. Hy-bred, electric and compressed natural gas vehicle are already in service. Fuel cell technology is the up and coming alterative fuel vehicle. Training and special tools will be needed for these vehicles also.

3.46 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The automotive program is offered during the morning in a five hour block, four days a week. Smaller course increments are offered during the afternoon and evening. Usually in a three or four hour class two times a week.

There are some major concerns that affect student completion of certificate programs. The loss of a second full time instructor has a major impact on how our program operates. Only a full time instructor can teach the morning class due to the fact that adjunct instructors can not teach more than 10 LHE per week. In the last program review it stated that the California Automotive Technician Training certification (CATTS) certification team criticized the automotive department for only having two full time instructors. The team felt that the program needs an additional instructor to adequately meet the needs of the students. Classes are running at capacity at this time due to the lack of space in the classroom and shop area.

As mentioned in 3.2 the rotation of courses needs improvement. The Automotive Department is working hard to meet the needs of students and improve certificate completion rates. There is an improvement of completers over the past 4 years in the engines and drive train area. Associates degrees have also improved over the last 4 years. The lack of certificate completion in the drivability and emissions area is due AUTO 175 not being offered in the standard 2 year rotation. This will change by fall of 2010; AUTO 175 will start on a regular 2 year rotation as designed. The full-time instructor will follow up on certificate completions in the spring of 2010, AUTO 176, AUTO 177 and AUTO 276 are currently in session.

3.47 Are all Course Outlines of Record (CORs) current?

Course of Record update chart (3 year rotation)

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
AUTO 100	M			M			M		
AUTO 101	M			M			M		
AUTO 102	M			M			M		
AUTO 105	C			C			C		
AUTO 110		M			M			M	
AUTO 111		M			M			M	
AUTO 112		M			M			M	
AUTO 113		M			M			M	
AUTO 125			M			M			M
AUTO 126			M			M			M
AUTO 127			M			M			M
AUTO 128			M			M			M
AUTO 130	C			C			C		
AUTO 150	K			K			K		
AUTO 151	K			K			K		
AUTO 152		M			M			M	
AUTO 153			M			M			M
AUTO 175		K			K			K	
AUTO 176		K			K			K	
AUTO 177		K			K			K	
AUTO 190	J			J			J		
AUTO 198A			M			M			M
AUTO 198B	K			K			K		
AUTO 198C	K			K			K		
AUTO 198D	K			K			K		
AUTO 198E	K			K			K		
AUTO 198F		K			K			K	
AUTO 198G	K			K			K		
AUTO 198H			K			K			K
AUTO 198J			K			K			K
AUTO 198L		K			K			K	
AUTO 198N			C			C			C
AUTO 199	K			K			K		
AUTO 200	K			K			K		
AUTO 210	K			K			K		
AUTO 231	C			C			C		
AUTO 232		C			C			C	
AUTO 276		K			K			K	
AUTO 277		C			C			C	
AUTO 278			C			C			C

M=Kevin Mawhorter K=John Knapp C=Chuck Capsel J=Leonard Johnson

All of the automotive courses are currently up to date using the new AP&P template as of the 2009 school year.

3.48 *How does the program ensure that all faculty utilize CORs when designing course syllabi?*

All courses are taught within the parameters described in the syllabus and outline of record. Instructors also collaborate on grading and teaching methodology to assure consistency.

Area 4 Student Support and Development

4.15 *Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.*

Refer to division overview

4.16 *Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.*

Refer to division overview

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.15 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- **Write about enrollment trends that the self-study team believes are important to the program’s planning and resource needs. Why might these trends be occurring?**

Enrollment trends:

Student enrollment is at capacity at this time. AUTO 126, after dropping no shows and adding students (total of 24 maximum)I still had 19 students wanting to attend class. All classes offered this semester were full to capacity the first night of class. The Automotive program has maintained a strong student enrollment in all classes over the last four years

	Spring 2005	Summer 2005	Fall 2005	Spring 2006	Summer 2006	Fall 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
total	173	52	167	174	30	179	181	45	175	184	39	181	188

Success

	spring 05	summ 05	fall 05	spring 06	summ 06	fall 06	spring 07	summ 07	fall 07	spring 08	summ 08	fall 08	spring 09
AUTO 100	31.60%	51.50%	33.30%	23.50%	80.00%	46.10%	28.10%	59.40%	52.20%	32.90%	79.40%	45.10%	20.30%
AUTO 101	41.80%	84.20%	53.30%	47.50%	90.00%	51.10%	47.20%	76.50%	63.10%	53.70%	63.20%	47.10%	25.80%
AUTO 102	57.10%	100.00%	25.00%	75.00%	100.00%	50.00%	66.70%	100.00%	18.20%	76.90%	100.00%	33.30%	0.00%
AUTO 110						47.40%						64.00%	
AUTO 111		52.40%		41.20%			66.70%		42.10%	26.10%			
AUTO 112			65.20%						57.90%	11.80%			
AUTO 113		0.00%					100.00%		100.00%	100.00%			
AUTO 125				66.70%						42.90%			
AUTO 126			71.40%							55.60%			
AUTO 127				60.00%								73.90%	
AUTO 128						76.90%							0.00%
AUTO 130				50.00%					75.00%				60.90%
AUTO 150	40.70%						23.10%						60.00%
AUTO 151				16.70%								61.10%	
AUTO 152	73.70%					68.20%							0.00%
AUTO 153	90.90%					85.20%							0.00%
AUTO 175			66.70%						54.50%				
AUTO 190	50.00%			46.70%						62.50%			
AUTO 198A								100.00%					
AUTO 198E													
AUTO 198H			90.90%	73.00%		38.10%	92.30%		73.30%	90.90%		91.70%	90.60%
AUTO 200		60.00%											
AUTO 210	50.00%												
AUTO 231			73.70%				78.60%					60.00%	
AUTO 232	77.80%					41.70%				60.00%			
AUTO 276							62.50%						
AUTO 277			100.00%				75.00%					58.30%	
AUTO 278	50.00%									84.60%			

The Student Success rate in the automotive program is lower then expected. After evaluating the spread sheet, I found that one instructor had very low percentages in all his courses. The instructor no longer works for the college and I believe the percentage rate will increase over the nest 4 years.

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

Number of degrees and certifications:

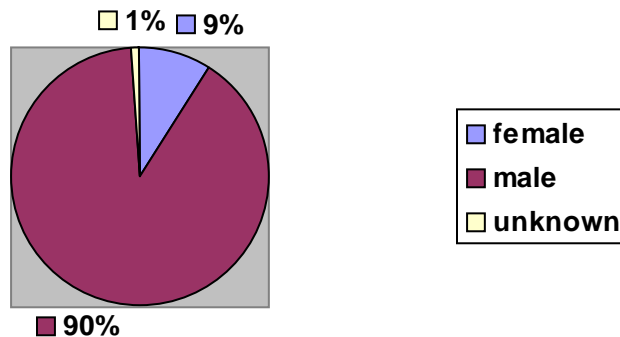
The number of certificate completions is low for the amount of students in our program. One of the certificate programs requires the instructor to be certified by the state of California Bureau of Automotive Repair. Only one instructor is currently certified at this time. I have recently passed the 4 day course at the BARs Training facility. I have a presentation appointment at the BAR on December 8th 2009.

Associate in Science Degree	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
Drivability, Emissions & electrical	1	0	0	0	0
Engine and Drive Trains	0	0	1	0	4

Certificate program	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
Drivability, Emissions & electrical	0	2	1	1	0
Engine and Drive Trains	0	1	1	4	4

Gender:

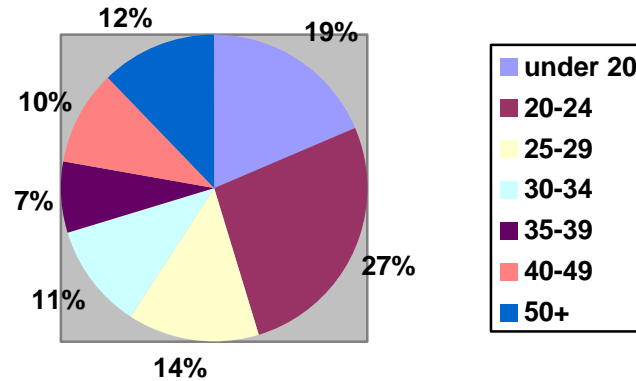
The automotive program is male dominant with 90% male, 9% female and 1% unknown



	Spring 2005	Summer 2005	Fall 2005	Spring 2006	Summer 2006	Fall 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
Female	21	8	23	23	5	30	9	7	14	24	7	16	17
Male	150	43	143	151	25	145	170	37	158	157	32	160	169
Unknown	2	1	1	0	0	4	2	1	3	3	0	5	2
total	173	52	167	174	30	179	181	45	175	184	39	181	188

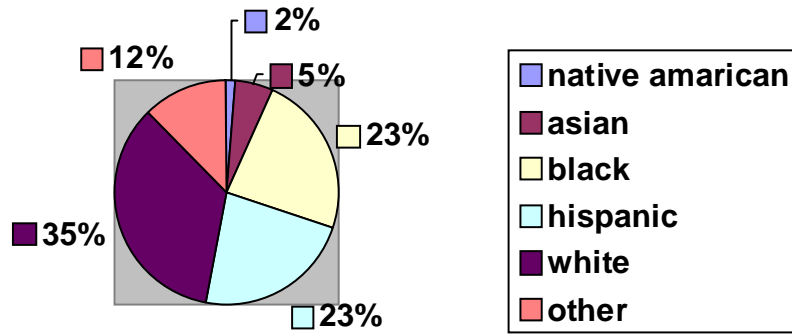
Age

Spring of 2009 22 % of the students are over 40 years of age. 18% are 30 to 39 years of age. 41% are 20 to 29 years of age. 19% are under 20 years of age.



	Spring 2005	Summer 2005	Fall 2005	Spring 2006	Summer 2006	Fall 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
Under 20	58	22	59	53	12	59	45	22	56	52	15	54	35
20-24	44	10	50	46	5	46	45	9	47	62	11	49	50
25-29	24	6	17	21	7	29	29	11	20	22	3	20	26
30-34	9	1	9	11	1	11	11	1	13	18	4	21	21
35-39	11	1	3	9	1	9	12	0	5	6	0	9	14
40-49	20	7	20	20	0	11	17	1	23	16	2	11	19
50+	7	5	9	14	4	14	22	1	11	8	4	17	23
Total	173	52	167	174	30	179	181	45	175	184	39	181	188

Ethnicity



	Spring 2005	Summer 2005	Fall 2005	Spring 2006	Summer 2006	Fall 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
Am. Indian or Alaskan Native	4	0	1	4	0	1	1	0	4	3	0	1	3
Asian or Pacific Islander	10	4	9	7	2	8	8	3	71	8	1	9	10
Black Non-Hispanic	39	8	26	22	7	24	21	10	18	28	10	52	44
Hispanic	50	20	41	43	8	50	57	9	51	50	13	44	43
White Non-Hispanic	61	18	83	83	11	84	79	21	81	85	13	60	65
Other	9	2	7	15	2	12	15	2	14	10	2	15	23
Total	173	52	167	174	30	179	181	42	175	184	39	181	188

5.16 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

COMPLETED

1. Renewed automotive articulation agreement with local high schools
2. Revised Course of Records per 1.25 of the 2005 Program Review document.
3. Continue to offer Automotive Career Day to local high schools.
4. Automotive instructors participated in professional organizations and training from the automotive industry
5. Replaced and updated numerous tools and equipment (still need to update and replace equipment on an ongoing basis).
6. Added new rattler honing equipment to the engine program.
7. Added new electrical trainers, J1850 OBDII trainer, Airbag trainer, Anti-lock brake trainer,
8. Added new DRBIII and Starscan factory tools for Chrysler vehicles.
9. Updated cylinder head repair equipment in the engines program.
10. Purchased welding equipment for auto shop.

WORK IN PROGRESS

1. Increase automotive supply budget
2. Develop an Automotive Management Certificate (recommended by the advisory committee.
3. Expanding course offering to students (when budget allows)
4. Hire a replacement full-time instructor (recommend by CATTs evaluation team and Advisory committee.

5. Upgrade/replace worn out audio visual equipment, only one overhead still working.
6. Enlarge tool room and automotive library.
7. Build a pool of adjunct instructors.
8. Request Perkins IV funding for the automotive department.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.29 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to division overview

6.30 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

The Automotive Department is working together as a team to develop criteria for assessing SLO's and PLO's following the guidelines set by the technical education department.

6.31 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

After assessing SLO's, I have found that some of the SLOs need to be revised to reflect the correct outcomes. Revisions will be made as soon as possible.

I have attended one weave (software for SLO assessment) session this semester. I plan on attending several more as soon as time allows.

6.32 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

The Automotive Department is in a major transition stage at this time (see area 2.1 of this document) I have discussed SLO assessment with all the adjunct instructors on all courses taught during the fall 2009 semester. We will evaluate and assess SLOs as a team at the end of the semester.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

I have collaborated with Tim Sturm (Auto Body instructor) on several occasions about Automotive Career Day. With the body shop moving into the automotive complex, I feel the need for us to work together as a team in planning automotive events. I would like to get other programs involved with career day. With career day set for spring 2010 and the body shop projected completion in mid spring, the 2010 career day could be on the best the college has ever presented.

Except for registration and involvement in our Automotive Career Day the involvement of the counseling center is minimal for the automotive program. Students are encouraged to seek counseling and career advisement. Most guidance for this program comes from the automotive faculty. Those who counsel vocational students need to get into the programs and physically visit shops on a regular basis to really learn what is needed.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

Once a year we host the Automotive Career Day in our automotive shop. All of the local high schools, students, teachers, counselors, administrators, and board members are invited

Approximately 3 years ago automotive teachers and administrators from the college and high schools signed an articulation agreement with Quartz Hill, Palmdale, Littlerock and Antelope Valley High schools.

I am currently involved with Quartz Hill High School in their Tech Prep program. (See 2.2 of this document)

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

1. Hire a full time instructor. (Replacement)
2. Implement automotive management certificate program.
3. Hire third full time instructor for management courses. (New position) (see 3.4 of this document)

4. Expand course offerings to improve certificate completion rate.
5. Purchase audio visual equipment for classrooms and lab area.
6. Install partition between engine and transmission lab area.
7. Make more classroom space available for additional course.

Objectives: Significant steps or actions needed to achieve the goal.

1. Funding to replace full time instructor.
2. Funding for new full time instructor for management program.
3. Increase in the automotive budget (other than Perkins IV funding) to improve facility.
4. Instructor training in the alternative fuel vehicles.
5. Division support in assisting program to developing its full potential.

Time Frame: Period of time the goal and objectives will be addresses.

1. Replacement instructor needed as soon as possible.
2. The other goals and objectives to addressed within the next four years.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

1. Full time instructor to replace Chris Eckheard who resigned in August 2009.
2. Automotive management course was recommended by the advisory committee.
3. CATT's recommended a third instructor for the automotive program to meet student needs.
4. Expansion of classrooms needed to implement the management program and the alternative fuel vehicle courses.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response.

Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

1. Fill full time instructor position (replacement) vacated by Chris Eckear.
2. Hire new full time instructor for management program.
3. Build team of adjunct instructors. The Automotive Department currently employs 5 adjunct instructors.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

1. Roll up doors still do not work (one door has not worked for over 4 1/2 years)
2. Expansion of classrooms, only two classrooms available in TE 160. Room number one has a maximum capacity 48 students. Room number two has a maximum capacity of 24 students. Shop area has a maximum of 24 students.
3. Enclose south side of building for addition classroom or lab space.
4. Heating and A/C still not working correctly. In the summer of 2008 classroom temperature exceeded 100 degrees in TE-171. Lab area coolers have not worked for many years (did not work when I was hired)
5. Recommend installation of security cameras in and outside of building. Over the last year, there have been parts, tools and equipment stolen from the automotive department. Some of the vehicles in our department have been damaged for no apparent reason (wiring cut, hoses slashed, and parts broken). A good security system would help to insure vandalism and theft are kept to a minimum.

10.10 Identify funding needed to support student learning.

10.11

1. Increase the supply budget.
2. I will apply for Perkins IV funding in spring of 2010 for more equipment upgrades.
3. Facility funds are not available at this time due to budget concerns.

Area 11 Recommendations and Comments

11.15 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

Refer to division overview

11.16 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

Refer to division overview

**CLOTHING
AND
TEXTILES**

Comprehensive Program Review Report
Program: Clothing and Textiles
Academic Year Reviewed:
Due October 31

Area 1 Mission

1.9 State the mission of the program.

Please refer to the Division Overview

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

Please refer to the Division Overview

Area 2 History

2.25 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.
SLO's and PLO's have been written for all classes in the Clothing & Textiles Program

2.26 Briefly describe the program's activities and services in the past four years.

2.27 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

Clothing & Textiles had not received any outside funding during the last four years.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.49 Identify degrees and certificates currently offered in the program.

Clothing & Textiles offers an AA in Clothing and Textiles.
Clothing & Textiles offers a Certificate program.

3.50 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

3.51 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

3.52 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

3.53 Are all Course Outlines of Record (CORs) current?
All course outlines of record are current.

Clothing & Textiles

- [CT 050](#) 2/2006
- [CT 100](#) 3/22/2007
- [CT 101](#) 2/2005
- [CT 102](#) 2/2005
- [CT 110](#) 2/2005
- [CT 112](#) 2/2005
- [CT 115](#) 2/2005
- [CT 120](#) 2/9/27/2007
- [CT 141](#) 2/2005
- [CT 213](#) 3/2005
- [CT 225](#) 12/11/2008
- [CT 242](#) 3/2005
- [CT 243](#) 3/2005

A chart will be developed during the Spring 2010 semester for revision of all classes. Current instructors will be included in the revision of their individual courses.

3.54 How does the program ensure that all faculty utilize CORs when designing course syllabi?

All faculty are sent a copy of the COR prior to the beginning of each Fall semester.

Area 4 Student Support and Development

4.17 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Please refer to the Division overview

4.18 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

The Clothing and Textiles classroom has not been equipped with full audio visual equipment, to allow for a full range of instructional media. Instructor cannot utilize audio visual material that is supplied with the current textbooks.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.17 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

The information that was supplied from Institutional planning shows the growth of the department

Class cuts have slowed the number of students that have been able to either complete a certificate or a degree in Clothing and Textiles.

Currently I am being approached by a number of students who are concerned about their ability to complete their degree in view of current program cuts. Many students need only one or two more classes to complete their certificates.

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

CT Certificates

Major	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
CT Cert		5		3	11

CT Degrees

Major	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
AssocArts		3		2	2 2



Refer to attached chart.

We were not supplied the information on the computer to complete charts in this area.

5.18 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

This information was supplied to the college by the California Community College; Family and Consumer Science Designee. Joann Digges, Project Director compiled this information in the FCS Statewide Collaborative Grant.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.33 *Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.*

Student learning outcomes have identified both positive and negative aspects in the classroom behavior of students. The lack of audiovisual visual equipment has negative affected student learning.

Students are not able to adequately view instructor demonstrations in the classroom. This problem was covered in the previous program review, but nothing has been to address the problem.

6.34 *How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?*

All instructors are encouraged to present their view in developing SLO's and PLO's.

6.35 *What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLO's and PLO's.*

6.36 *If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.*

Projection system so students can view instructor demonstrations in the classroom.
Audio visual equipment to use text supplied technology.
Cad courses to be able to add classes that are most needed to keep up with technology in the industry.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

Unknown

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

Unknown

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

The department needs to be upgraded to current technology in order to utilize CD supplied with current textbooks. The department was supposed to have the equipment installed for the last two years, but it has not been installed.

Objectives: Significant steps or actions needed to achieve the goal.

Time Frame: Period of time the goal and objectives will be addressed.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

CAD systems need to be added to the curriculum to meet current industry standards. All areas of clothing and textiles incorporate technology in the individual fields of employment.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

Sewing equipment needs to be upgraded to current industry standards. Repairs on equipment needs to be scheduled on a yearly basis to repair equipment that is not functioning properly.

10.12 *Identify funding needed to support student learning.*

Please refer to division Overview.

Area 11 Recommendations and Comments

11.17 *List recommended changes to the Educational Master Plan to:*

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*

- *Address external mandates such as state requirements, industry and professional standards, etc.*

Above.

11.18 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

Professor Evelyn Tiede
Fall 2009

ELECTRICAL TECHNOLOGY

Comprehensive Program Review Report

Program: Electrical Technology

Academic Year Reviewed: 2009-10

Due October 31

Area 1 Mission

1.10 State the mission of the program.

- Refer to Division overview.

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

- Refer to Division overview.

Area 2 History

2.28 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the Electrical program section include:

- Enrollment growth in the program due to consistent scheduling patterns for both day and evening classes.
- Completed Accreditation through Department of Apprenticeship Services, school number 155.

2.29 Briefly describe the program's activities and services in the past four years.

- All Electrical Technology course SLOs were updated to the current format.
- The Electrical technology program was used by the CCCOC as a pilot program for the General Electrician certification.
- Two graduates from the program have returned to the program as adjunct instructors.
- Worked with the Interior Design and Photo programs on a joint low voltage lab.

2.30 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

Program	2005/06	2006/07	2007/08	2008/09	2009/2010
Electrical Technology	\$13,500.00	\$24,500.00	\$52,000.00		

Perkins IV funding was used to upgrade and modernize major pieces of equipment, upgrade and expand inventories and replace outdated computer systems.

- Electrical labs were updated and stocked with new material.
- Purchased state-of-the-art trainers, and labs to meet the needs of students for the lab work.
- New chairs were purchased for the lab.
- New computers were installed with internet access in all classrooms in TE-7.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.55 Identify degrees and certificates currently offered in the program.

- The Electrical Technology program offers both a certificate and associates degree.

3.56 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

- Currently updating all COR's to maintain compliance.
- Changing pre-requisites to meet the new needs of the program.

3.57 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

- With the changes in energy production we are looking to add both a solar energy class and a wind energy class.
- We are also looking to add a Motor class as well as a class for fiber optics.

3.58 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

- The Electrical Program keeps the same schedule with all course offerings being full at the start of each semester. All courses' are being offered on a rotating day/evening schedule every other semester, with some courses being offered both day and evening each semester. The program has shown steady growth in students completing their certificates and Associate Degrees.

3.59 Are all Course Outlines of Record (CORs) current?

ELEC Course	Last Revised	Next Revision
----------------	-----------------	------------------

110	Fall 2009	Fall 2012
115	Fall 2009	Fall 2012
120	Fall 2009	Fall 2012
130	Fall 2009	Fall 2012
140	Fall 2009	Fall 2012
150	Fall 2009	Fall 2012
160	Fall 2009	Fall 2012
220	Fall 2009	Fall 2012
250	Fall 2009	Fall 2012

3.60 How does the program ensure that all faculty utilize CORs when designing course syllabi?

- All adjunct and full time instructors are involved in the development of CORs and teach to the CORs.
- Maintain continuous input from Adjunct faculty through Instructor meetings.

Area 4 Student Support and Development

4.19 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

- Refer to Division Overview

4.20 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

- Refer to Division overview.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.19 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

- The Electrical Program has maintained a steady fall semester enrollment carrying these students through the spring semester.

Enrollment Spring 2004 to Spring 2009										
SP 04	FA 04	SP 05	FA 05	SP 06	FA 06	SP 07	FA 07	SP 08	FA 08	SP 09
20	73	83	102	112	104	145	136	120	130	118

- The Electrical Program has shown steady growth in both certificates and associate degree completers.

Certificates				
2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
3	4	5	10	14
Associate Degree				
1	1	3	5	6

- The program has a predominately male enrollment with a flat growth rate running at capacity.
 - Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

- All adjunct instructors participate in the Office Hours program to advise students regarding career and educational opportunities.
- Full-time instructor able to offer Work Experience opportunities for the students.

5.20 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

- Developing a plan for expansion when the Technology II building is complete.
- Now that the program has been full-time for four years the \$5000.00 a year budget is not adequate, the cost of replacements and new technology is forcing us to update gear annually. A budget of \$10000.00 is a better amount for the needs of the program.
- Have developed relationships with local high schools mentoring students in Robotics and continued efforts to build a better relationship with our local ROP.
- Working on plans to increase students receiving certificates and associate degrees through instructor consulting.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.37 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

- Refer to Division overview.

6.38 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

- All adjunct have had training and are working with the full time instructor to ensure that all SLOs are assessed.
- By the end of the Spring 2010 semester the assessment of 90% of all SLOs will have been completed for the first time.

6.39 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

- Assessment templates have been provided to all instructors in the Electrical program to facilitate uniform reporting of SLOs.
- Reporting assessment data by all instructors in the Electrical program will be expected for the 2010 year.

6.4 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

- As early as we are in assessment, we can not make any suggestions as yet.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

- Joint low voltage exterior lighting lab with the Interior Design and Photo programs in the fall semester of 2008 and again the fall semester of 2009.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

- The electrical program has maintained an active relationship with local high schools with mentoring of the Lancaster High School Robotics team.
- All adjunct and full time instructors work in the electrical field and they provide an important link with the local contractors and businessmen.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

- Form better relationships with local businesses.
- Build a more active Advisory Committee.
- Continued mentoring at the High School level.

Objectives: Significant steps or actions needed to achieve the goal.

- Visit Advisory committee members to bolster support of the program.
- Send out emails to Advisory committee members to keep them up to date with advances in the program.

Time Frame: Period of time the goal and objectives will be addresses.

- Plan Advisory meetings every six months.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

- This goal strengthens the relationship between the Electrical program and employers in the community by providing employees to local industry.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 List faculty and staff requirements to meet program needs in the next four years.

Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.

- At this time there is not a need for a second full time instructor.

10.2 List facilities (remodels, renovations or new), equipment and technology needed to

provide a safe and appropriate environment for student learning in next four years.
Place items on list in order (rank) of importance.

- The facilities we have at this time are adequate, but as the program grows we will need more space. As Technology II is developed we would like to have additional lab and classroom space.

10.13 Identify funding needed to support student learning.

- The last four years we have had an operating budget of \$5,000.00 and with the help of Perkins funding it has been enough money to keep the program running. We now need an increase in our yearly budget to \$10,000.00 to accommodate the current enrollment.

Area 11 Recommendations and Comments

11.19 List recommended changes to the Educational Master Plan to:

- Meet student needs.
- Respond to PLOs and SLOs.
- Reflect changes in the disciplines, educational methodology, and technology.
- Address external mandates such as state requirements, industry and professional standards, etc.

11.20 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

- There are no suggestions for additional input at this time.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

ELECTRONICS TECHNOLOGY

Comprehensive Program Review Report
Program: ELECTRONICS TECHNOLOGY
Academic Year Reviewed: 2009-10
Due October 31

Area 1 Mission

1.11 State the mission of the program.

Refer to Division Overview

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

No changes to the original

Area 2 History

2.31 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have significant impact on the Electronics Technology program include:

- Major enrollment growth occurred in the ELTE section in the last four years.
- All core courses were revised and updated to industry standard.
- New courses developed based on input from the advisory committee.
- Old and out of date classes were removed from catalog.

2.32 Briefly describe the program's activities and services in the past four years.

- ELTE 105, Intro to Robotics, is a new course that was developed and being offered.
- Four adjunct faculty were hired for the night program due to major enrollment growth.
- Recruiting students from AVC intermediate math classes.
- Making contacts with the employers in the aerospace industry.
- SLOs have been developed for all the ELTE courses. All courses that were taught during the 2008/2009 year; conducted assessments on .
- ELTE program hosted guest speakers from FAA, Edwards Air Force Base and NASA to address students understanding for there expectation and hiring procedures.

2.33 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

Program	2005/06	2006/07	2007/08	2008/09	2009/2010
Electronics Technology	\$102,138			\$44,500	\$25,000

Perkins IV funding was used to upgrade and modernize major pieces of equipment, upgrade and expand inventories.

- ELTE lab established adequate and modern parts inventory.
- Purchased state-of-the-art trainers, and meters to meet the needs of students for the lab work.
- New workbenches and chairs were purchased for both rooms.
- New computers were installed with internet access in both rooms.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.61 Identify degrees and certificates currently offered in the program.

- ELTE program offers a Certificate Program and Associate Degree.

3.62 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The ELTE Program has developed the course offerings that provide basic knowledge of the electronics career field. This ensures that students have the skills necessary to work for a variety of electronics and aerospace companies and are prepared to find and maintain employment.

The ELTE program requirements have been updated to comply with Collegiate Training Initiative, a nationwide program between colleges and the FAA that enables electronics students to get internships and, potentially, full-time jobs with the agency. FAA hired 16 students from AVC's ELTE program in the past four years.

A new course that was developed for the ELTE curriculum was ELTE 105 Intro to Robotics. The ELTE 180 was developed by the grouping of ELTE 140 and 220. This course is designed for students convenient.

3.63 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The ELTE program is heavily implicated with basic math and algebra concepts. Electronics program has always infused basic skills into contextualized learning.

Students coming to ELTE program now require significantly more instruction in basic skills and concepts.

3.64 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The ELTE program keeps the same schedule for the Fall and Spring semesters offered on a regular rotation so that students can complete the program within six semester time frame.

The Electronics Technology program developed and implemented course sequencing to assist the students in completing their certificates and associate degrees in a timely manner.

3.65 Are all Course Outlines of Record (CORs) current?

ELTE Course	Last Revised	Next Revision
101	Spring '07	Spring '10
110	Spring '07	Spring '10
125	Fall '08	Fall '11
130	Fall '08	Fall '11
135	Fall '08	Fall '11
180	Fall '08	Fall '11
140	Fall '08	Spring '11
220	Fall '08	Spring '11
235	Fall '08	Fall '11
105	Fall '07	Fall '10
252	Spring '07	Spring '10
254	Spring '07	Spring '10

3.66 How does the program ensure that all faculty utilize CORs when designing course syllabi?

- All faculty are required to list CORs for the ELTE course they are teaching in their syllabi.
- All faculties are supplied with examples of syllabi authorized by the college, to assist in syllabi development for an ELTE course.
- Staff meeting are scheduled prior to the start of a term to assist in COR incorporation of syllabus.

Area 4 Student Support and Development

4.21 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Refer to division overview.

4.22 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

In the last four years the assigned ELTE classrooms are now all equipped with full audio visual equipment, which allows for use of a full range of instructional media.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.21 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

The Electronics Technology program has experienced growth in the last three years.

Full-Time Student Enrollment									
F '05	Sp '06	Su '06	F '06	Sp '07	F '07	Sp '08	Su '08	F '08	Sp '09
38	27	10	23	14	34	50	31	59	57

As a result, the completion rates have also increased for the students.

Associate Degrees				
2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
6	2	6	4	8
Certificates				
2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
5	1	4	3	9

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

Refer to division overview.

5.22 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

Refer to division overview.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.40 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to Division overview

6.41 How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

All adjunct faculty have been provided with a complete set of CORs and for the Electronics Technology program.

SLO assessment reporting completed in more than 95% of the courses for 2009.

6.42 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all and PLOs.

- Assessment template has been provided to all instructors in the ELTE program to facilitate uniform reporting of
- Reporting assessment data by all instructors in the ELTE program are expected for the 2010 year.

6.43 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

It is too early in the data collection timeline to identify specific deficiencies or needs in the ELTE program.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

No collaboration with other programs at this time.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

All adjunct Electronics Technology instructors are actively employed in the Aerospace industry. They provide an invaluable link between the college, the students, and the aerospace industry in this valley.

ELTE program participated in:

- Salute to youth
- Tech Prep Articulation Review Meetings
- Internships with Federal Aviation Administration
- Internships with NASA
- Women in Aerospace Careers

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

- To provide support to the aviation and defense industries.
- Start an internship program with Edwards Air Force Base.
- FAA, NASA, Edwards Air Force Base
- Hire an ELTE Instructional Assistant.

Objectives: Significant steps or actions needed to achieve the goal.

- Collaboration with FAA, NASA, and Edwards Air Force Base
- Contingent on the State's budget situation.

Time Frame: Period of time the goal and objectives will be addresses.

- Plan for Advisory Committee to meet every six months in the 2010 year.
- Two to three year period to start and implement the internship program agreements.

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

- This goal strengthens the relationship between the ELTE program and employers in the community by providing employees to local industry.
- This goal contributes to the college's support of continuing educational goals of the students.

- The full-time faculty member has to clean, repair, inventory, set up labs, for the classes. Help during lab time to ensure the safety of students and proper use of equipment.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

ELTE program needs an instructional assistant. The program currently has no dedicated assistant; instructor has to perform all upkeep and maintenance on equipment and shop.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

A new facility is needed before TE1 is demolished. ELTE is not included in the current Facilities Master Plan.

10.14 *Identify funding needed to support student learning.*

There are no current needs to expand the Electronic Technology program at this time.

Area 11 Recommendations and Comments

11.21 *List recommended changes to the Educational Master Plan to:*

- *Meet student needs.*
- *Respond to PLOs and .*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

11.22 *What changes in the program review process would improve institutional*

effectiveness or make the results more helpful the program?

There are no suggestions for additional input at this time.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

FIRE TECHNOLOGY

Comprehensive Program Review Report

Program: Fire Technology

Academic Year Reviewed: 2009-10

Due October 31, Completed 10/28/2009

Area 1 Mission

1.12 State the mission of the program.

No changes to the original

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

No change needed from division wording

Area 2 History

2.34 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the Fire Technology program include:

- Hiring of Second Full time instructor in Fire Technology, and 4 additional Adjunct instructors in support of the Fire Fighter One Academy.
- Established a part time Fire Fighter One Academy that is certified by the California State Fire Marshal's office
- Wildland Fire Technology Associates Degree approved by the State Chancellors Office
- Added 4 additional new courses to better reflect the skills needed by students to be competitive in the job market.
- Archived 3 courses which are out dated or were replaced by new courses reflective of the Fire Service needs and skills.

2.35 Briefly describe the program's activities and services in the past four years.

- The Fire Technology section has expanded its course offering to accommodate more daytime students than in the past.
- All Fire Technology course SLOs were updated to the current AP&P format.

2.36 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

- Yes the Fire Technology Program did receive Perkins Funds three of the last 4 years. These funds were used to purchase State of the art Self Contained Breathing Apparatus, Ladders for student use, hose and Appliances for both the Wildland and Municipal Fire programs. Additionally various power saws were purchased for both programs as well as rescue tools and ventilation equipment

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.67 Identify degrees and certificates currently offered in the program.

Fire Technology offers two Associate degrees and certificates, one of each in Fire Technology and in Wildland Fire Technology.

Fire Technology has also added a Certified Firefighter One Academy and offers a State California State Firefighter I Qualification Certificate.

3.68 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The Fire Technology program has made cut backs in course offerings as a cost saving method for the current and future budget concerns of the college. This has had a negative impact on Fire Technology students and their ability to get into required courses and maintain a completion within two years. Some core courses have been reduced as well as electives, some of which are now only offered once per year or every other year.

Fire Technology has added several new courses.

FTEC 117 Preparing to be a Firefighter has been added and is helping students to better understand the challenges to becoming a firefighter and to recognize and appropriately respond the challenges placed in front of them.

FTEC 216 Engine Company Operations provides the student with the knowledge and skills to successfully perform the skills required as a engine company firefighter.

FTEC 217 Truck Company Operations provides the student with the knowledge and skills to successfully perform the skills required as a truck company firefighter.

FTEC 295A and FTEC 295 B Firefighter I Academy which provides the student with the knowledge to meet California State Fire Training requirements for a Firefighter I Academy.

Some Fire Technology courses that were not offered for a number of years, or were no longer relevant to the career field were deleted from the course inventory.

3.69 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

No change needed from division wording

3.70 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The Fire Technology program maintains a balanced schedule with most course offering being full at the start of each semester. When the budget allows, the addition of one additional full-time instructor will assist students by allowing the program to offer more classes and reduce the dependence on adjunct faculty. With the current budget and course reductions, many students may not be able to get the courses they need in a timely fashion to complete their degrees.

3.71 Are all Course Outlines of Record (CORs) current?

See next page:

FTEC Course	Last Revised	Next Revision
111	05/05	12/10
112	05/05	12/10
113	05/05	12/10
114	05/05	12/10
115	05/05	12/10
117	??/08	12/13
120	pending	12/14
122	pending	12/14
123	??/08	12/14
125	pending	12/14
126	pending	12/14
127	pending	12/14
128	pending	12/14
129	pending	12/14
130	pending	12/14
131	pending	12/14
132	pending	12/14
137	pending	12/14

FTEC Course	Last Revised	Next Revision
138	pending	12/14
139	03/05	12/10
141	04/05	12/10
142	pending	12/14
144	01/06	11/11
149	04/05	10/13
150	pending	12/14
215	09/07	04/12
216	01/06	11/11
217	01/06	12/11
222	09/07	03/12
240	pending	12/14
250	pending	12/14
295 A	04/08	04/13
295 AL	04/08	04/13
295 B	04/06	04/13
295 BL	04/08	09/13

3.72 How does the program ensure that all faculty utilize CORs when designing course

syllabi?

Full-time faculty maintains a very close working relationship with part-time faculty in the Fire Technology program. Collaboration between full-time and adjunct faculty helps to assure consistency throughout each program.

Area 4 Student Support and Development

4.23 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

No change needed from division wording

4.24 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

In the last four years the assigned Fire Technology classroom is now equipped with full audio visual equipment, which allows for use of a full range of instructional media.

The rest of the original is fine

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.23 The program was provided with a substantial amount of data from the Office of Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program's planning and resource needs. Why might these trends be occurring?

Enrollment trends in the Fire Technology program are strong and have grown over the previous 3-4 years. The Firefighter I Academy was started in fall 2007 with 25 students with a cap of 40. The fall 2009 enrollment for this class was 40. During fall 2009 enrollment started with 742 available seats in classes with 42 not filled, with the majority of those in one short-term class with a prerequisite that is taught early in the semester. There is significant demand for the Wildland Firefighter courses sought in spring semester which support the college fire crew as well as allow immediate job placement for fire technology students in temporary entry level firefighter positions with the federal fire agencies and Calfire.

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?

The Fire Technology program has been very successful in meeting the needs various learner populations in the past. The number of degrees and certificates has increased slightly over the past few years; though there is still room for improvement. One of the reasons we attribute to the slow changes in degrees and certificates is that many students acquire sufficient skills to get hired in firefighter jobs and do not apply for the certificate.

With the current fiscal crisis and course reductions Fire Technology will not be able to meet the need of various learned populations due to reductions in course offerings and delayed introduction of new courses.

5.24 Report on the progress of recommendations and accomplishment of goals identified in the program's last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

- Hiring of a second full-time Fire Technology Instructor.
- Development of the new Fire Technology courses have been completed and added to the offerings in 2007, 2008, 2009
- Development of California State Fire Marshals certified Firefighter I Academy first class started fall 2007.
- Installation of multi-media equipment in all classroom used by Fire Technology instructors was completed. Spring 2008
- Increased interior storage for training aids and equipment completed spring 2008. Additional outside storage space secured in the summer of 2008 for large bulky items

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.44 *Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.*

No change needed from division wording

6.45 *How have adjunct faculty and/or part time staff in your program been made aware of the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?*

No change needed from division wording

6.46 *What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.*

The full time instructors are presently working to complete the entry of SLOs into the WEAVE program to document SLO results.

6.47 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

It is too early in the use and tracking of the SLO process to develop any trends at this time.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

Fire Technology worked with Administration of Justice. And the college Career Center to stage a highly successful Public Safety Career day in the spring of 2009. Fire Technology also is working with Corporate and Community Education to provide Wildland Firefighter training to the Edwards Air Force Base Fire Department.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The full-time and all adjunct Fire Technology instructors are either active or retired fire service professionals. They have provided an invaluable link between the college, the students, and the Southern California Fire Service Community as well as contacts at the State and National levels. The full-time faculty members Co-Chair the Fire Technology Committee and are members of various Fire Service Associations.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

- Hiring of two to three adjunct Instructors for the Firefighter I Academy for student and staff safety during active live fire training days at the drill tower.
- Hiring of one additional full-time Fire Technology Instructors.

Both of these goals are contingent on the State's budget situation. The first one is a safety and State Certification Issue for the Firefighter I academy.

Time Frame: Period of time the goal and objectives will be addresses.

Unknown

Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

The justification for the third full-time Fire Technology instructor is based upon growing enrollment, Firefighter I Academy work load and the Adjunct to full time ratio. The additional Adjunct instructors for the Firefighter I academy is necessitated due to the need to meet a specific instructor/student ration of 4/1 due to the extreme safety environment during live fire training. The program would then be better able to serve the growing needs of Fire Technology students.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

10.1 *List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.*

Though present long range plans for the Fire Technology program are for it to be moved in its entirety to the proposed Palmdale Campus site, it will eventually need to be relocated from TE2 when it is planned for demolition. The sequences of these events are not likely to occur within the next 4 years, this concern needs to be considered in the Facilities Master Plan. Perhaps a solution is to leave the Fire Technology program on the Lancaster Campus in a new facility vs. its relocation to Palmdale.

10.2 *List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.*

Repair and or replace the HVAC unit on the East side of TE2-120 so that it works properly. Evaluate the possibility of the installation or a suspended ceiling in TE2-120 to better insulate the room both from a noise and temperature prospective. Summer temperatures in the room easily reach 84-86 degrees and winter morning and night temperatures are frequently 50 degrees or less.

10.15 Identify funding needed to support student learning.

No change needed from division wording

Area 11 Recommendations and Comments

11.23 List recommended changes to the Educational Master Plan to:

- *Meet student needs.*
- *Respond to PLOs and SLOs.*
- *Reflect changes in the disciplines, educational methodology, and technology.*
- *Address external mandates such as state requirements, industry and professional standards, etc.*

With the constant changing areas of Fire Technology, new and innovative courses will need to be developed as the profession evolves. New technology in the industry will require new technology in the classroom. Those changes are not foreseeable at this time.

11.24 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

None identified at the present time.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

INTERIOR DESIGN

Comprehensive Program Review Report

Program: Interior Design

Academic Year Reviewed: 2009/10

Due October 31

Area 1 Mission

1.13 State the mission of the program.

No changes to the original

1.2 Comment on the areas of the mission, vision, and Institutional Learning Outcomes (ILOs) of the college that are most closely related to the mission of the program.

No changes to the original

Area 2 History

2.37 Identify major changes and/or developments, including change or growth in other programs, which significantly impacted the program in the last four years.

New developments over the last four years that have had, or will have a significant impact on the ID section include:

- Hired a full-time Instructor which has provided leadership to the program.
- Hired fourth adjunct Instructor, enriching the program with additional interior design experience and knowledge.
- Enrollment growth in the ID program due to full-time leadership, and scheduling patterns for both day and evening classes.
- Installation of multi-media system which allows for use of a full range of instructional media.

2.38 Briefly describe the program's activities and services in the past four years.

- The ID program has shifted the course offerings to accommodate both day and evening students' needs to complete the program.
- COR revisions completed in spring 2007 include ID 100, ID 105, ID 110, ID 115, and ID 116.
- COR revisions completed in Spring 2009 include ID 120 and ID 125.
- Certificate and degree requirements updated to require course completion of ID 200 and ID 205.
- Emphasis on field trip experiences, both local and out of the area.
- Major donations from local businesses of fabric, wood, furniture catalogs, and trade publications.
- All ID courses SLOs were updated to the current AP&P format in 2009.

- ID program hosted a guest speaker several times, to address students concerning the recent changes in California's education and certification requirements and for Interior Designers.

2.39 Did the program receive outside funding (e.g. Perkins IV and/or grants) during the last four years? If yes, briefly identify the years funded and how those funds were used to improve the program and student learning.

- Although this is not an equipment driven program, Perkins IV funding was received for light demonstration boxes currently being used in several ID courses.

Area 3 Curriculum (3.5 and 3.6 updated annually)

3.73 Identify degrees and certificates currently offered in the program.

- ID offers a certificate and associate of arts degree.

3.74 Discuss the adequacy of course offerings relative to appropriate aspects of the college mission and ILOs. Summarize recent additions, deletions, or revisions of courses.

The Interior Design program requirements have been adjusted to comply with national educational standards established by FIDER, prompting the removal of CT 102 Principles of Clothing Construction. Two new courses were added to the ID curriculum, ID 200 the Fundamentals of Lighting Design, and ID 205 Professional Interior Design Business Practices.

3.75 Reflect on the relevant trends in curriculum with regard to knowledge requirements and instructional methods.

The ID program is in the process of developing both a computer aided drafting course, as well as an interior design building and safety codes course. The addition of these two new courses will increase the units required to earn a certificate and/or associate degree from 36 to 40 units, aligning the ID program with California state certification requirements for Interior Designers.

3.76 Recommend ways to improve completion of certificate, major and transfer requirements. Are all courses offered on a regular rotational basis so that students can complete their programs within a reasonable time frame?

The Interior Design program is in the process of developing and implementing course sequencing to assist the students in completing their certificate or associates degree in a timely manner. This includes all courses being offered on a rotating day/evening schedule every other semester, with some courses being offered both day and evening each semester. Students in the ID program have benefited from the addition of a full-time Instructor who is able to advise them on an individual basis regarding the progression of their coursework.

3.77 Are all Course Outlines of Record (CORs) current?

ID Course	Last Revised	Next Revision
100	Spr '07	Spr '13
105	Spr '07	Spr '13
110	Spr '07	Spr '13
115	Spr '07	Spr '13
116	Spr '07	Spr '13
120	Spr '09	Spr '12
125	Spr '09	Spr '12
200	Fall '05	Fall '11
205	Fall '05	Spr '10
210	Fall '07	Fall '10

3.78 How does the program ensure that all faculty utilize CORs when designing course syllabi?

- All faculty, full-time and adjunct, are required to list CORs for the ID course they are teaching in their syllabi.
- All faculty, full-time and adjunct, are supplied with examples of syllabi endorsed by the college, to aid in syllabi development for an ID course.
- Staff meetings are scheduled prior to the start of a term to aid in COR incorporation of syllabus.

Area 4 Student Support and Development

4.25 Discuss the adequacy of program services, practices, and technology to address diverse student needs and support student achievement.

Refer to division overview.

4.26 Summarize how recent additions, deletions, or revisions of services, practices, and technology support aspects of the college mission and ILOs.

The classroom assigned to the ID program has been updated with multi-media equipment, which allows for use of a full range of instructional media, including visual media from current trade publications.

Area 5 Data Analysis and Environmental Scan (Updated annually)

5.25 The program was provided with a substantial amount of data from the Office of

Institutional Research and Planning. The self-study team should review and have a dialogue on the data and then identify major changes or enrollment trends expected to be of particular relevance to the program in the next four years. Consider WSCH/FTES, success, retention and persistence as applicable, and the number of degrees and certificates, if applicable. Consider data on gender, age, ethnicity, night vs. day, etc.

- Write about enrollment trends that the self-study team believes are important to the program’s planning and resource needs. Why might these trends be occurring?

The Interior Design program has experienced growth in the last two years, due to the hiring of a full-time instructor. The full-time instructor has leant stability to the program by creating uniform standard expectations for both the adjunct faculty, as well as the students.

Full-Time Student Enrollment									
F '04	S '05	F '05	S '06	F '06	S '07	F '07	S '08	F '08	S '09
114	116	113	104	113	103	129	129	130	135

As a result, the completion rates have also increased for the students, in part due to advice, from the full-time instructor, on course work and certification/degree requirements.

Certificates				
2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
4	5	5	8	8
Associate in Arts Degrees				
0	6	3	7	8

- Considering these trends, how well is the program doing in meeting the needs of the various learner populations attending the college?
 - Hiring of a fourth adjunct instructor
 - All adjunct instructors participate in the Office Hours program to advise students regarding career and educational opportunities.
 - All instructors, both full-time and adjunct, work in the interior design field in various capacities, which allow students current insight into the field they are studying.
 - Formation of an Advisory Committee to strengthen ties with the local trades-people, to help guide the ID program, as well as offer work opportunities for the students.
 - Full-time instructor able to offer Work Experience opportunities for the students in the ID program.

5.26 Report on the progress of recommendations and accomplishment of goals identified in the program’s last program review. Reflect on the strengths, weaknesses, and improvements of the program. Clearly state the performance/quality indicators used by the program.

- Full-time instructor hired in 2007, providing leadership and consistency to the ID program.
- Changes made to the Catalog to reflect current updates implemented to ID coursework, reflecting industry standards and FIDER recommendations.
- Brochures were designed and developed by the Graphic Arts Department, and are a useful tool to advertise the Interior Design program.
- The Interior Design program has participated in the high school career days for both semesters of the 2009 calendar year.
- Installation of multi-media equipment in the ID classroom.
- Installation of full-height cabinets across the back of the classroom, expanding the lab storage capabilities.

Area 6 Student and Program Learning Outcomes Assessment (Updated annually)

6.48 Briefly review program outcomes assessment activities over the past four years and assess in some detail the effectiveness of those methods in documenting and improving student learning.

Refer to Division overview

6.49 How have adjunct faculty and/or part time staff in your program been made aware of

- the need to assess Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs) and been included in assessment activities?

- All adjunct faculty have been provided with a complete set of CORs and SLOs for the ID program.
- SLO assessment reporting completed in more than 90% of the courses for 2009.

6.50 What specific plans have been made for assessing student learning over the next four years? Programs should provide a timeline for defining and assessing all SLOs and PLOs.

- Assessment template has been provided to all instructors in the ID program to facilitate uniform reporting of SLO's.
- Reporting assessment data by all instructors in the ID program will be expected for the 2010 year.

6.51 If the program SLO and PLO assessment results make it clear that particular professional development resources or student services are needed to more effectively serve students, describe the need. List items in order (rank) of importance.

- It is too early in the data collection timeline to identify specific deficiencies or needs in the ID program.

Area 7 Collaboration with Other Programs

Discuss collaborative efforts undertaken with other Instructional, Student Services or Administrative programs. Offer an assessment of success and challenges and note potential changes in collaborative efforts.

- Joint exterior lighting project with the Electrical Technology class for both spring and fall semester 2009.
- In-service instruction by AVC librarian provided to the ID 116, History of Architecture and Furniture class on research techniques used in writing a research paper.

Area 8 Outreach Activities

Discuss any activities or projects undertaken with other educational institutions, the community, or business/industry. Describe any plans to begin new outreach activities.

The full-time and all adjunct ID instructors are either actively employed or past employment in the Interior Design field. They provide an invaluable link between the college, the students, and the interior design community. The full-time faculty chairs the Interior Design Advisory Committee, and is in the process of establishing and providing a working relationship with local employers and students completing the ID program, seeking employment in the field. Students in the ID program have been encouraged to join ASID (American Society of Interior Designers) as student members. Another connection with the interior design community is the relationship of receiving donations from tradespeople, for the use of students in the ID program, fostering a sense of involvement between the two.

Area 9 Goals and Objectives (Updated annually)

List the goals and objectives the program has for the next four years.

Goal: A specific action.

1. Increase job placement for students completing the ID program
2. Increase transfer rate of ID students to a 4 year institution
3. Development of a computer aided drafting course.
4. Development of an interior design building/safety codes class.

Objectives: Significant steps or actions needed to achieve the goal.

1. Strengthen ties with tradespeople through the ID Advisory Committee membership so they have a vested interest in students completing the ID program.
2. Develop articulation agreements with the California State University system.
3. Research and data collection of computer programs used at other educational institutions with similar ID programs, and writing and approval of the course.
4. An interior design safety/building codes course needs to be written

.
Time Frame: Period of time the goal and objectives will be addresses.

1. Plan for Advisory Committee to meet every six months in the 2010 year.
2. Two to three year time frame to develop these articulation agreements.
3. One year to write and submit to AP & P for approval of course.
4. One year to write and submit to AP & P for approval of the course

.
Justification: How does the goal support the mission of the college? How does the goal meet the needs of the community?

1. This goal strengthens the relationship between the Interior Design program and employers in the community by providing employees to local industry.
2. This goal contributes to the college's support of continuing educational goals of the students.
3. This goal serves the needs of the ID students' desires for training in current industry's standards of computer aided drafting. It also aligns the ID program with California state practice certification for Interior Designers.
4. This goal aligns the Interior Design program with California state practice requirements for certification, as well as training in current industry's standards of safety/building codes.

Area 10 Long Term Resource Planning (Updated annually)

If applicable, describe significant long-term resource needs that should be addressed in the next four years. The Educational Master Plan, student learning outcomes assessment reports, and data analysis may provide reference information to support your response. Use lists and tables to clarify program requests and make them easy for the Strategic Planning and Budget Council to review quickly. If there may be negative consequences for enrollment, safety or other important concerns if the funding is not provided please make this known in context.

- 10.1 List faculty and staff requirements to meet program needs in the next four years. Be specific and brief when offering a reason for the position (e.g. replacement, increased demand for subject, growth in student population). Mark the position as new or replacement. Place titles on list in order (rank) of importance.

No additions needed at this time.

- 10.2 List facilities (remodels, renovations or new), equipment and technology needed to provide a safe and appropriate environment for student learning in next four years. Place items on list in order (rank) of importance.

No changes required at this time.

10.16 Identify funding needed to support student learning.

There are no current needs to expand the Interior Design program at this time, due to job availability and economic conditions.

Area 11 Recommendations and Comments

11.25 List recommended changes to the Educational Master Plan to:

- Meet student needs.
- Respond to PLOs and SLOs.
- Reflect changes in the disciplines, educational methodology, and technology.
- Address external mandates such as state requirements, industry and professional standards, etc.

11.26 What changes in the program review process would improve institutional effectiveness or make the results more helpful the program?

There are no suggestions for additional input at this time.

Area 12 Report to the Board of Trustees

Prepare a one page synopsis of the program review.

WELDING

Comprehensive Program Review Report

Program: Welding

Academic Year Reviewed: 2009/2010

Due October 31

Please refer to the Division Overview for all pertinent referenced to the Welding program. There is no full-time faculty member to provide insight, guidance, or leadership for this program.