CTE Update

PALO VERDE COLLEGE

AUTOMOTIVE TECHNOLOGY
REPORTING FALL 2022 TO SPRING 2024

1. PURPOSE OF THE PROGRAM

"Palo Verde College provides opportunities for personal and professional growth to a diverse community of learners in an academic environment committed to student success and equity by supporting student achievement of basic skills, certificate, degree, university transfer, and career goals." PVC Mission Statement

a. **Describe the program, its mission, and target population.**

The AUT program at Palo Verde College is a comprehensive program designed to prepare students for continued higher education opportunities and entry into the world of work. The AUT program offers an AS degree in AUT, and four certificates. Each of these certificates are designed to integrate into the AS degree so that a student pursuing the AS degree will exit the college with one or more certificates along with their Associate's Degree. These programs have been developed so that they are latticed and stackable, leading to completion and pursuit of both certificates as they work toward their AS Degree in Automotive Technology.

Program courses are available to students enrolled in AUT certificate programs, as well as other College programs and certificates. AUT courses are also available to others seeking to acquire or upgrade their automotive skills for personal and career reasons. The Automotive Technology department also works collaboratively with Palo Verde High School to offer courses in the AUT field to qualified high school students during their traditional school day.

The purpose of the Automotive Technology program is to provide students with necessary training and skills to work and excel in an automotive industry that is constantly changing with the advancement of technology. The Automotive program provides students with entry level skills, professional development opportunities for working technicians and ASE certification options.

The AUT program serves students of all ages and demographics. There are traditional college students enrolled in the program and concurrently enrolled high school students and adult learners. Each of these populations require different support and instruction methods.

b. **How has the program changed in the last two years? In major ways, minor, or no real changes to speak of? Explain.**

During the past two years, the AUT program has:

- Purchased special tools and equipment that is required to diagnose and service modern vehicles.
- The program is participating in the FORD ACE training program. It is a program designed to introduce students to the Ford Motor Company. It offers the same training that dealership personnel are participating in.
- The Professional Technologies division pleaded for a replacement for the CTE advisor position. After the previous advisor left, no one was hired to replace this position. Enrollment dropped in our courses because we did not have someone registering students. Now it appears that we have the support of this position and things are now back on track.
- The AUT department will be using virtual reality training provided by Zspace that was purchased for the CTE promotional trailer.
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2. DEMAND FOR THE PROGRAM

Is the demand high, adequate demand for our students, or low demand? Support your answer with labor market data, advisory input, etc.

Demand for the AUT program is evidenced through the consistent enrollment of students through face- to-face enrollment of community and concurrently enrolled high school students, and correspondence and distance education modalities. The demand for the AUT programs is also evidenced through the Advisory Committee Group membership, attendance, feedback and input provided each year.

Labor Market Analysis for:
0948.00 Automotive Technology
Inland Empire/Desert Center of Excellence, May 2024
Prepared by: Chris Cruzcosa, ccruzcosa@iegocollaborative.org

C·O·E
CENTERS OF EXCELLENCE FOR LABOR MARKET RESEARCH

Summary

Program LMI Endorsement	All LMI Criteria Met	Some LMI Criteria Met (Proceed with Caution)	LMI Criteria NOT Met
	✓	☐	☐

Program LMI Endorsement Criteria		
Supply Gap	**Yes** ✓	No ☐
	Comments: There is *projected* to be **1,009 annual job openings** throughout the Inland Empire/Desert region, which is more than the **613 annual average awards conferred by educational institutions over the last 3 years.** Supply data includes both community college awards (196) and non-community college awards (417).	
Living Wage	**Yes** ✓	No ☐
	Comments: **The annual job openings** for this occupation **have estimated entry-level hourly wages above the IE/D living wage of 13.74.**[1]	
Education	**Yes** ✓	No ☐
	Comments: **Most job postings for target occupations require a high school or equivalent degree (81%).** See exhibits 8 and 9 for more details.	

Job Demand

In 2022, there were 10,244 jobs in occupations related to vehicle technology in the IE/D region. Regional employment for this occupation group is projected to increase by 3% through 2027 with 1,009 job openings projected annually. Exhibit 1 displays the job count, five-year projected job growth, and job openings in the region.

Exhibit 1. Five-year projections for occupations related to vehicle technology, IE/D Region, 2022-2027

Occupation	SOC	2022 Jobs	2027 Jobs	2022 - 2027 % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Automotive Service Technicians and Mechanics	49-3023	10,244	10,517	3%	5045	1,009
Total		**10,244**	**10,517**	**3%**	**5045**	**1,009**

SOURCE: LIGHTCAST 2024.1

Earnings

Exhibit 3 displays the hourly earnings for occupations related to vehicle technology and includes comparison of hourly earnings as compared to the MIT IE/D living wage of $25.73.[3]

Exhibit 3. Hourly earnings by percentile for occupations related to vehicle technology, IE/D Region, 2022

SOURCE: LIGHTCAST 2024.1

3. QUALITY OF THIS PROGRAM

What is the quality of this program? Is it of the highest quality, adequately meeting student needs, or needing significant improvement? List core indicators, student learning outcomes, partnerships, certificates, degrees, articulation, faculty qualifications, diversity, grants, and equipment as evidence to support your answer.

Through analysis of the SLOs identified for the courses offered during this reporting period, students have demonstrated understanding, success, and application of the SLOs identified for these courses

All courses in the AUT Department have SLOs identified for each course and program. In addition, each course has its SLOs assessed on a regular basis as identified by Palo Verde College's Instruction Office. Regular meetings are held with each CTE funded program to discuss SLO data and its impact on student success.

The AUT Department has demonstrated success in all SLOs identified within the AUT program. Rigorous and relevant SLOs have been identified, developed, assessed, and implemented within the AUT Department. Continued emphasis will be placed on the collection, implementation, and assessment of SLOs within the AUT Department.

All AUT Course Learning Outcomes (CLO) are mapped to Program Learning Outcomes (PLO) which in turn are mapped to the Institutional Learning Outcomes (ILO).

The Palo Verde College AUT Department has met or exceeded all 34 Core Indicator areas addressed in Perkins I-C funding during the 2022-24 program review update cycle.

Having a dedicated CTE advisor has helped to support students enrolled in AUT courses. The advisor's active participation and attendance at the local high schools has led to high-quality advising services to those students enrolled in AUT courses as well as for those students interested in learning more about Palo Verde College's AUT course offerings.

4. EXTERNAL ISSUES

Cite relevant legislation, Chancellor's Office mandates, VTEA, Tech Prep, CalWORKs, WIA, BIG career ladders, etc. that are contributing positive or negative factors for the program. Explain each mitigating factor and the impact on the program.

The Palo Verde College AUT Department offers most of its courses during the Palo Verde High School traditional school day. Students at PVHS can take college courses concurrently during their school day at no cost. These high school students typically make up 70-80% of the enrollment in these courses. For this reason, PVC will need to continue marketing their programs to PVHS students and parents through events such as Career Day, Transfer Day, Financial Aid events at PVHS Campus, and through other community events. Having a good working relationship with the Unified School District Administration and the local high schools is vital to the success of this task. Transportation costs for transporting the high school students is paid by Palo Verde College. Continued support for transportation will be needed.

Currently the Professional Technologies Division is operating under a modified academic calendar. The purpose of this alternate calendar is to more closely align our academic calendar to the local Unified School District, since such a large portion of our students are concurrently enrolled high school students.

Having a dedicated full-time CTE advisor has been vital to the success of these tasks. Continued funding of this dedicated position is vital to all CTE programs offering concurrent instruction to local high school students. Because of this CTE Advisor position, all CTE funding has been cut from all CTE Programs. Without this funding, equipment cannot be replaced, upgraded, or purchased. Having someone whose sole focus is on the registration, retention, success, and job/career training for these students is vital to the goals of each department in the Professional Technologies Division. We are hoping the college will begin funding the CTE Advisor position from another funding source.

The AUT program is funded through Perkins, Strong Workforce, and LOT funds. Perkins is used to purchase equipment to enhance the AUT program. LOT funds are used to purchase the consumable supplies that support the AUT program. Strong Workforce funds have been used to revamp and modernize the technology in the AUT program. The AUT Program will continue to need funding from these sources. Unfortunately, budget adoption and development has not been a transparent process and often times, the departments are unable to purchase supplies because the person overseeing the budget lets these orders fall through the cracks. In addition, it is very hard to project what items will be needed each year, only to find that the budget was not funded.

5. REVENUE AND EXPENSES

a. State the revenue of the program (using FTE data, grants, and anything else) for the preceding two academic years.

AUT FTES Generated	
Academic Year	**FTES**
2022-2023	43.47
2023-2024	53.17

1 FTES=	$7346
96.64 FTES=	$709,917.44

Special Admit Credit FTES 2023-2024 $7346

California Community Colleges 2023-2024 Advance Apportionment Memo. July 21, 2023. https://www.cccco.edu/-/media/CCCCO-Website/docs/apportionment/2023-24-ad-memo.pdf?la=en&hash=B75D7C0017BE6546CC3C3B4D50DD23AC66A4B5E9

b. State the expenses of the program (salaries, equipment purchases, contracts, and supplies) for the preceding two academic years.

We had requested this data numerous times and were not provided it. We were informed that we should just complete the program review and note that we were not provided with the data for this from the business office in a timely manner.

c. State the dollar value of in-kind contributions of time and/or resources the preceding two academic years.

N/A

6. TWO YEAR PLAN

List recommendations, project future trends, personnel and equipment needs, as well as continuing and new goals. Describe activities to achieve these goals, timelines to complete these goals, and measures for evaluating success in achieving them.

The AUT department will continue to need student workers to support the program. It is important to have the assistance of these positions as well as offering critical job experience opportunities for students pursuing degrees and certificates in the AUT field. The AUT department will seek funding for these positions on an ongoing basis.

The AUT Department also receives specialized funding such as Perkins I-C, CTE Transitions, Strong Workforce, Lottery, and General Budget. It is critical for CTE programs to have financial support as there are additional expenses associated with CTE programs. The AUT department will continue being involved in Perkins funding.

The AUT Department will also continue pursuing high school enrollment. The lead AUT faculty knows the importance of offering these courses to local high school students. Continued funding for transportation of these students will be needed. The CTE faculty in CIS, AUT, WEL, and BCT offer courses 5 days a week to students. This is not the traditional college faculty work schedule. The instructors in these departments know the value of offering these courses to these students as many of them attend Palo Verde College upon graduation from high school with a Certificate or more already completed. The AUT department will continue pursuing high school enrollment and encourage administration to support the transportation costs associated with this endeavor.

- Purchase mobile lift columns to facilitate EV battery removal.
- Purchase Electronic system trainers for the Electrical course.
- Continue evaluating degrees and certificates in the AUT department for rigor, need, and applicability.
- Continue evaluating and assessing data collected from SLO analysis.

a. Describe the alignment between continuing and new program goals and institutional goals and objectives stated in the current Integrated Strategic Plan, which can be found on the college website.

The AUT program is aligned to both the institutional goals and objectives stated in the current Integrated Strategic Plan. The AUT program has CLOs, PLOs, and ILOs developed and implemented for each of its courses, programs, certificates, and degree. The AUT department is constantly working with the curriculum committee and instruction office so as to stay current and make sure its goals are aligned with the goals and outcomes of the College mission.

ADDITIONAL DATA

STUDENT SUCCESSFUL COMPLETION & RETENTION

PALO VERDE COLLEGE

Program Review

Enrollment - Course Retention - Course Success

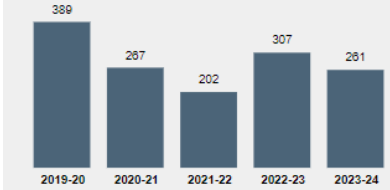
Term	Credit Type	Division	Department	Course Name	Instructional Method
All	All	All	Automotive Technology	All	All

Enrollment = # of students with any grades OR status of 'A' or 'N'

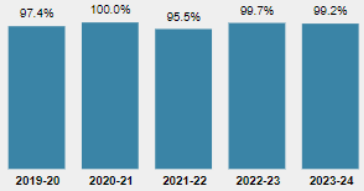
Course Retention = % of non-W enrollments out of A,B,C,P, NP,D, F and W grades.

Course Success = # of A,B,C, and P grades / # of A,B,C,P, NP,D, F and W grades.

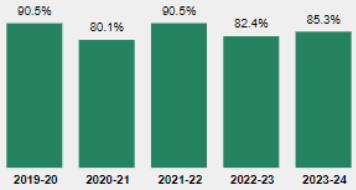
Enrollment by Year



Course Retention Rate by Year



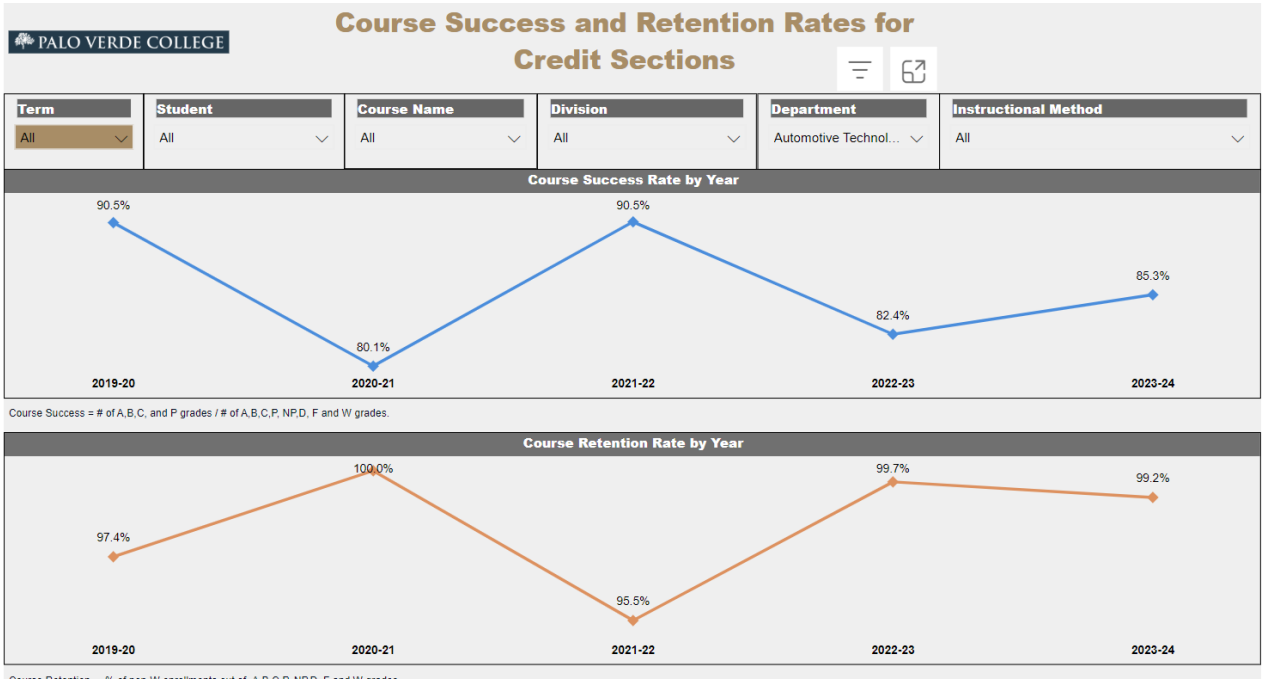
Course Success Rate by Year



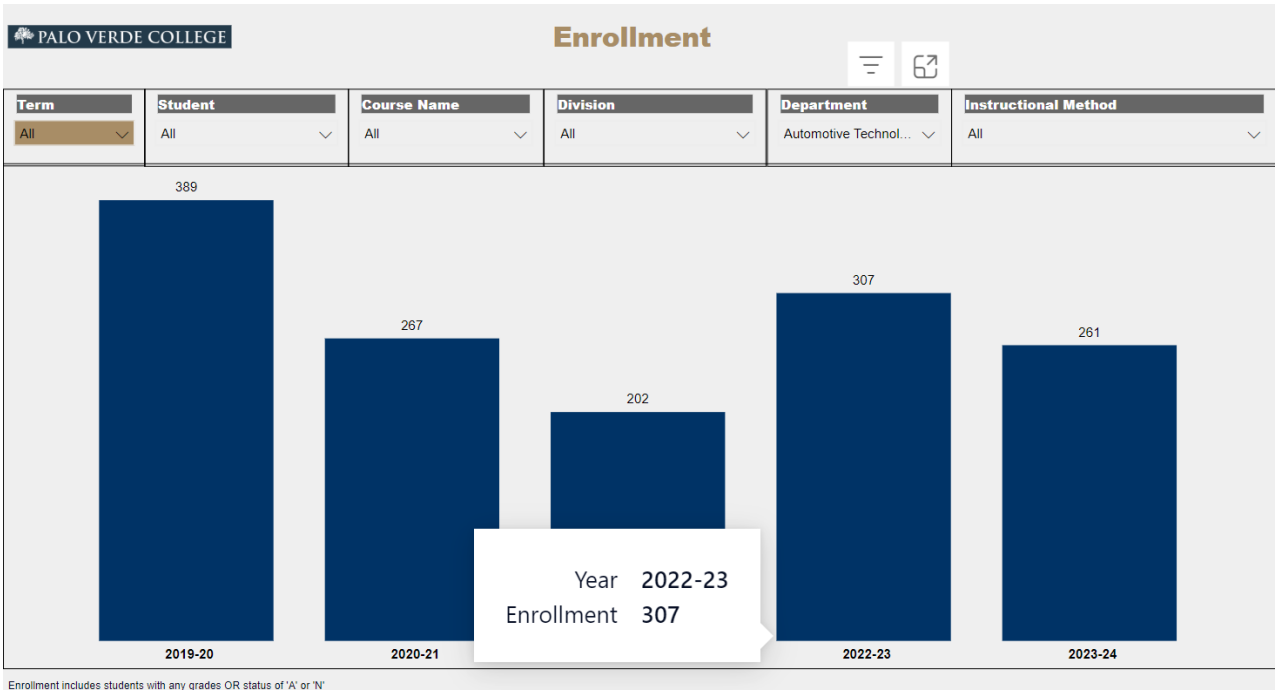
Year	2019-20			2020-21			2021-22			2022-23			2023-24		
Instructional Method	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate
Correspondence	63	95.2%	88.9%	183	100.0%	78.0%	1	100.0%	100.0%				17	100.0%	100.0%
Distance Education				84	100.0%	84.8%									
Face-to-Face	326	97.9%	90.8%				201	95.5%	90.5%	307	99.7%	82.4%	244	99.2%	84.5%

Year	2019-20			2020-21			2021-22			2022-23			2023-24		
Division	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate
Professional Technologies	389	97.4%	90.5%	267	100.0%	80.1%	202	95.5%	90.5%	307	99.7%	82.4%	261	99.2%	85.3%

Year	2019-20			2020-21			2021-22			2022-23			2023-24		
Course Name	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate	Enrollment	Retention Rate	Success Rate
AUT-100	49	98.0%	89.8%	13	100.0%	84.6%	28	92.9%	89.3%	54	100.0%	74.5%	47	100.0%	89.1%
AUT-101	47	97.9%	91.5%	18	100.0%	88.2%	27	96.3%	92.6%	39	100.0%	87.2%	19	100.0%	83.3%
AUT-102	55	96.4%	87.3%	12	100.0%	81.8%	37	94.4%	88.9%	55	100.0%	83.3%	35	97.1%	79.4%
AUT-103	55	96.4%	80.0%	12	100.0%	81.8%	33	97.0%	90.9%	54	100.0%	83.0%	46	97.8%	80.0%
AUT-107	27	100.0%	96.3%	65	100.0%	80.6%	1	100.0%	100.0%				9	100.0%	100.0%
AUT-108	36	91.7%	83.3%	62	100.0%	66.7%							7	100.0%	100.0%
AUT-109				56	100.0%	87.3%							1		
AUT-110	69	100.0%	98.6%	11	100.0%	81.8%	38	94.7%	92.1%	52	100.0%	82.4%	43	100.0%	81.0%
AUT-111	27	100.0%	96.3%	18	100.0%	87.5%	18	94.4%	88.9%	29	96.6%	82.8%	33	100.0%	96.9%
AUT-200	24	95.8%	95.8%				20	100.0%	90.0%	24	100.0%	87.5%	21	100.0%	81.0%

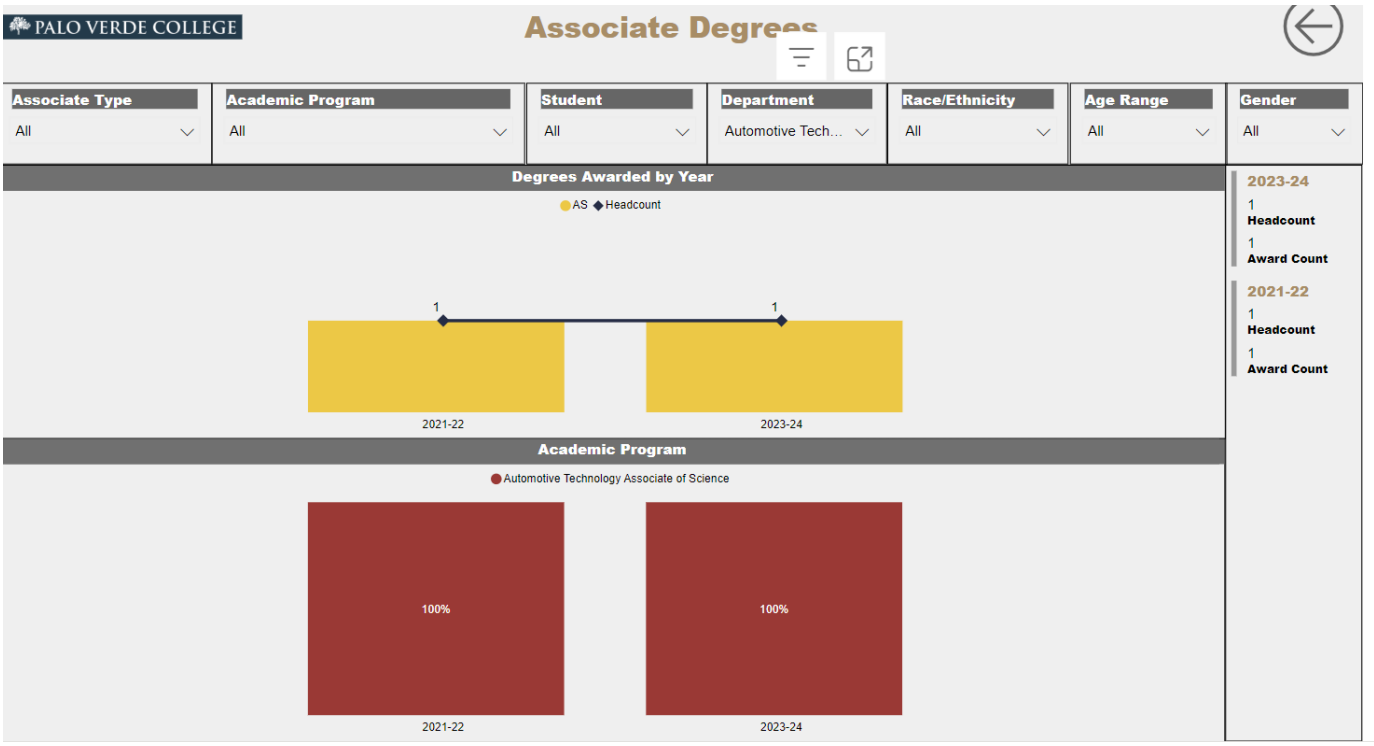


ENROLLMENT TRENDS



PROGRAM AWARDS

Name of Award	2022-23	2023-24
AA, Automotive Technology	-	1
Automotive Technology, Cert of Achievement	14	21
Automotive Technology, Cert of Career Prep	1	-



PALO VERDE COLLEGE
Certificates
Certificate Type
Chancellor Approved ...
Academic Program
All
Student
All
Department
Automotive Tech...
Race/Ethnicity
All
Age Range
All
Gender
All
Certificates Awarded by Year
Certificate - 16 to 30 Credits
Certificate - 18.0-29.9 Units
Headcount
17
17
2
2
14
14
21
21
2019-20
2021-22
2022-23
2023-24
Academic Program
Automotive Technology Certificate of Achievement
100%
100%
100%
100%
2019-20
2021-22
2022-23
2023-24
2023-24
21
Headcount
21
Award Count
2022-23
14
Headcount
14
Award Count
2021-22
2
Headcount
2
Award Count
2019-20
17
Headcount
17
Award Count

PALO VERDE COLLEGE
Certificates
Certificate Type
Locally Award Certifica...
Academic Program
All
Student
All
Department
Automotive Tech...
Race/Ethnicity
All
Age Range
All
Gender
All
Certificates Awarded by Year
Certificate - 6.0-17.9 Units
Headcount
20
1
1
2020-21
2021-22
2022-23
Academic Program
Automotive Technology
100%
100%
100%
2020-21
2021-22
2022-23
2022-23
1
Headcount
1
Award Count
2021-22
1
Headcount
1
Award Count
2020-21
20
Headcount
20
Award Count