# PROGRAM COMPREHENSIVE REPORT

**2022 - 2023**

Program Review (P) - Automotive/Diesel

# Program Planning

2022 - 2023

## General Information

**Briefly describe your program.**
Transportation Department (Automotive/Diesel)

Students who participate in the automotive program will explore the technology that constitutes the modern automobile. Students will also have the opportunity to explore the service and repair techniques and learn the latest technology required to maintain a vehicle to industry standards. The Automotive Career Education program is a Master Certified Automotive Service Excellence (ASE) program. This certification ensures the student will receive training in automotive repair that meets industry standards. Upon completion of the program a student will be prepared for an entry-level position in the automotive industry.

The Diesel Mechanics program will provide hands-on, work-based training experience and the classroom curriculum required for careers in diagnosis and repair of the electronics, engines, and various equipment in medium/heavy duty trucks. Diesel Mechanics Program at Ventura College is designed to prepare students for immediate employment in the Ventura County diesel engine repair workforce. Students will be groomed in the advanced knowledge and high technology skills that will prepare them as diesel technicians for the 21st Century. The program curriculum incorporates lecture and lab activities correlated around competencies in: maintenance and inspection of heavy-duty diesel engines, technical, operational, and diagnostic skills of diesel electrical systems, power train units, steering and suspension components, brakes, electrical and fuel systems.

**How does your program support VC's mission?**
The transportation department supports VC's Mission by creating one of the best quality environments to learn a technical trade.
**Which disciplines are included in your program?**
Automotive Career Education / Diesel Mechanics
**SWOT Analysis: What are the strengths of your program?**
Automotive strengths come from its community and manufacturer specific partnerships. Partnerships include, Toyota TTEN, Subaru University, and NC3. Diesel strengths include its strong community presence and willingness to participate in the program/student growth.
**SWOT Analysis: What are the weaknesses of your program?**
Both Automotive and Diesel disciplines struggle with training space. The majority of our education happens in a lab environment structured around a real world shop setting. Automotive has struggled to maintain an outdated shop setting, and Diesel has yet to acquire a space on campus to train in. Diesel currently trains in a 3rd party shop off campus.
**SWOT Analysis: What are some opportunities for your program?**
As we venture into the age of "automotive electrification" we have the opportunity to evolve with the industry to provide a stronger workforce. This new workforce will include a new classification of automotive technician. Diesel has the opportunity to increase its student enrollment to meet the demands of industry partnerships willing to hire both part time and full time students.
**SWOT Analysis: What are some threats to your program?**
Threats come from producing a student that does not meet the needs of the industry / community. If we cannot keep up with the current demand, our industry / community partners will look elsewhere and participate in programs that produce the highest quality employment prospect / student.

# Program Planning

## Enrollment & Demographics

**General Observations**
Automotive went through a name change, AUTO - ACE. Program Enrolment Discipline reflects name change and shows a prediction of ACE reaching enrollments even with or higher than the previous program AUTO. Diesel Enrollment trended down very slight through COVID and now we are presented with opportunity to build up Diesel and maintain a proper student cohort.

**Over the past five years, what was the trend in your program's enrollment?**
Remained Constant

**Has there been a substantial decrease in any of your program's disciplines?**
No

**If yes, please list disciplines and reasons for the decrease in enrollment.**
N/A

**Are student gender demographics similar between your program and the college?**
No

**Are student ethnic demographics similar between your program and the college?**
Yes

**Please describe any areas where your program's demographics vary from the college.**
Our program varies from the college by gender demographics. Our program is only 4.5% Female, where as VC overall is 57.8% Female.

## Course Success Rate

**General Observations**
In the past 5 years Automotive/Diesel course success rates are at the highest point, while VC overall shows a steady to sharp decline and lands at its lowest point.

**Was the most recent year's course success rate higher than the college standard of 66.7%?**
Yes

**Was the most recent year's course success rate higher than the overall college average?**
Yes

**Has your course success rate increased, decreased, or remained constant over the past 5 years?**
Increased

**Click the "Disciplines" tab - Describe any differences between the disciplines in your program.**
Course success rates between discipline remain close, ACE 85.7% VS Diesel 88.2%

**Click the "Ethnicity" Report on the right - Are there gaps in your course success rate by ethnicity?**
No

**How have these gaps changed over the past five years?**
Remained Constant

**Click the "Gender" Report on the right - Are there gaps in your course success rate by gender?**
No

**How have these gaps changed over the past five years?**
Remained Constant

**Describe what your program has done over the past 3 years to close equity gaps in course success.**
Maintained resources for all students whether for gender or ethnicity. Online text book formats are available in multiple languages. Maintaining a positive learning environment where all humans are accepted.

## Student Completion

**Does your program offer a degree or certificate of achievement?**
Yes

# Program Planning

**How does your program contribute to VC's goal of increasing our degree/certificate/transfer rate?**
By creating multiple levels of certificates that can be achieved as you walk through the recommended course order. Students have the opportunity to achieve a certificate after every semester completed.
**Within the past five years, what is the trend for your program's degree/certificates awarded?**
The trend seems to be remaining constant. Both disciplines showed a decrease during COVID however, the disciplines are now trending back up. Data collected is not enough to see how the multiple certificate layout will affect overall certificate achievement. (ACE 2021-2022 start)
**Are any of the degrees/certificates in your program on the program warning list?**
Yes
**Describe why this degree/certificate has fewer than 15 awards over the past five years.**
Diesel Mechanics - AS first year of completion was 19-20. The trend showed an upward slope in 20-21 but then came back down during COVID.
**Describe why this degree/certificate should continue to be offered.**
This degree is relatively new and data collected does not accurately reflect the possibilities that it creates. In continuing to offer this degree it supports the VC mission in creating as many opportunities for students as possible.
**Click the “Award Ethnicity” Report on the right – Are there equity gaps by ethnicity?**
No
**If yes, please describe.**
N/A
**Click the “Award Gender” Report on the right – Are there equity gaps by gender?**
No
**If yes, please describe.**
N/A
**Click the "CSU/UC Transfers" Report on the right - How has the number of CSU Transfers changed over the past 5 years?**
Remained Constant
**Click the "CSU/UC Transfers" Report on the right - How has the number of UC Transfers changed over the past 5 years?**
Remained Constant
**Click the “Transfer Ethnicity” Report on the right – Are there equity gaps by ethnicity?**
No
**If yes, please describe.**
N/A
**Click the “Transfer Gender” Report on the right – Are there equity gaps by gender?**
No
**If yes, please describe.**
N/A

## Course Offerings

**General Observations**
ACE is in its beginning stages and have not been offered for more than 5 years, Diesel has 0 classes not offered in 5 years.
**Are there any disciplines in which 30% or more of classes haven't been offered in the past 5 years?**
No
**If yes, please enter the discipline(s), and the reason(s) why the classes haven't been offered.**
N/A

# Program Planning

## CSLOs

**Briefly summarize the results of your Course SLOs.**
About 90% of each SLO has maintained a target met of above 80%, A few courses have SLO targets at or below 60%.
**Which SLO initiatives had the greatest impact on student learning in your program?**
SLO's that involve critical thinking, diagnostic, and hands on learning have the greatest impact for our program.

## PSLOs

**Briefly summarize the results of your Program SLOs.**
ACE has not yet had a PSLO assessment, Diesel PSLO's have remained above an 85%
**Which PSLO initiatives had the greatest impact on student learning in your program?**
ACE no data, Diesel Understanding, analyzation, and diagnostic skills have had the greatest impact.

## Labor Market Data - CE Only

**Describe the 3-year projections for the occupations that your program prepares students for.**
Data is somewhat incomplete. Automotive jobs show a steady incline from 2019-2022, however data here projects a slight drop at -2.4% moving into 2025. Diesel jobs show a steady increase from 2019-2022 and project a +3.9% increase moving into 2025.
**Are any occupations projected to decline?**
Yes
**If yes, which occupations?**
Automotive service technicians at -2.4% moving into 2025. Data for 2 other occupations incomplete.
**Describe the median hourly earnings for the occupations that your program prepares students for.**
Median hourly wages are a livable source of income for Ventura County.
**What steps is your program taking to ensure that graduates are hired by regional employers?**
Partnering with industry to provide internships and job shadowing that allow students to "earn and learn". Students get the opportunity to work in the industry at a part time position that allows them to hone their skills and still go to class. With this experience graduating students are ready for a full time position upon completion from the program.

## Objective

**3-Year Objective**
Stabilize and improve automotive and diesel student success rates greater than 85%.

**What specific actions will you take to meet this objective?**
In order to stabilize and improve student success rates transportation must stay as current as possible to industry standards and operational facilities for lab work assigned. Continuous review and improvement of curriculum, facilities, and student resources will help us meet and maintain this objective.

**Which of the following Educational Master Plan Goals does this objective align with?**
Goal 4: Enhance institutional effectiveness and accountability to improve innovation and student outcomes

**Which of the following Student Equity Plan Goals does this objective align with?**
Goal 2: First-Term to Second-Term Persistence

**Review Type**
Comprehensive

**Program Review Cycle**
2019 - 2022, 2022 - 2025

**Objective Status**
Active

**Completion Date**
07/14/2025

**Year 3: Describe Progress Made Towards This Objective**

### Resource Requests

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
AUD1901

**Description of Resource Request**
On campus storage for  the Diesel Program ( 3 -5 containers).

**Estimated Cost**
$9,000 - $15,000

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2020-2021, 2019-2020, 2018-2019

**Priority**
04

**Primary Contact For This Resource Request**
Blane Schloo

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
We a running out of space on campus and a the Gibbs facility to store our training equipment and tools. We also are restricted on the donations we can except because we lack an adequate place to store items on campus. We currently have companies willing to donate valuable items to the program. Donations are a critical component of building a successful program.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
TBD

**Please explain how critical this request is to your program's goals.**
In order utilize the given training space on campus storage for training equipment becomes crucial. As we gain the proper training equipment needed for the growing Diesel program having storage for rotating equipment becomes necessary.

**How many students will be impacted by this request?**
50

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
Helps by utilizing the given training area in a safe, effective and secure manner.

**Resource Requests**

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
AUD1902

**Description of Resource Request**
Forklift for Diesel Program.

**Estimated Cost**
$40,000

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2020-2021, 2019-2020, 2018-2019

**Priority**
05

**Primary Contact For This Resource Request**
Blane Schloo

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
We currently use the maintenance forklift anytime we need to move heavy items related to the program. As the program continues to grow a forklift dedicated to the program is critical. Automotive has a forklift, but it is not adequate to move the items we need to move.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
TBD

**Please explain how critical this request is to your program's goals.**
Safe and effective movement of heavy items creates a more efficient work environment.

**How many students will be impacted by this request?**
50

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
Improves safety and effectiveness of current operating conditions.

**Resource Requests**

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
DM2103

**Description of Resource Request**
Mobile Gantry Crane System

**Estimated Cost**
10k

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2020-2021

**Priority**
06

**Primary Contact For This Resource Request**
Blane Schloo - Russell Gardner

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
In preparation of moving the DM program to a permanent location on campus discussions were brought up as how to accomplish a needed crane system for heavy component lifting. Many mobile gantry crane systems are available that make permanent installation unnecessary. Purchasing a proper system to have ready once move is complete is expected for proper student succession rates.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
Umatilla

**Please explain how critical this request is to your program's goals.**
Mobile gantry cranes are crucial to Diesel engine repair. It assists in the lifting of heavy items during assembly and disassembly of engines.

**How many students will be impacted by this request?**
50

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
It will create a safer and more effective lab environment that meets industry standards and needs.

**Resource Requests**

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
Aut2104

**Description of Resource Request**
Secured vehicle storage space (Parking)

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2020-2021

**Priority**
07

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
Currently Automotive struggles with finding parking for our training vehicles and is using vital shop space to keep these training vehicles secure. Finding and securing a space to store our training vehicles when not in use will increase student space, safety and productivity.

**Equipment, Technology, or Facilities Request**

**Please explain how critical this request is to your program's goals.**
By creating a secure parking area for vehicles that are not being used for training will open up the amount of lab space students can use. This will increase student productivity and success rates.

**How many students will be impacted by this request?**
100

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
Improves current learning environment by better utilizing the given training space.

**Resource Requests**

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
Aut2105

**Description of Resource Request**
Privacy slating added to the existing fence structure surrounding the Automotive Lab area.

**Estimated Cost**
4500.00

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2020-2021

**Priority**
03

**Primary Contact For This Resource Request**
Russell Gardner

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
Currently the Automotive shop space is secured by a chain link fence that is falling apart and needs repair. Auto has also suffered break ins through the fence on numerous occasions and theft was encountered. During the weened market place a tremendous amount of foot traffic passes right through our shop area where many of our training vehicles are exposed.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
CALIBRACHOA

**Please explain how critical this request is to your program's goals.**
Securing our training vehicles ensures that the possibility of theft and damage lowers. Much of our fleet parking resides outside on our shop training area. Ensuring the students have the best quality training vehicles will improve overall student success.

**How many students will be impacted by this request?**
100

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
This request will help secure vehicles and create a safer, more comfortable training space.

**Resource Requests**

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
Aut2106

**Description of Resource Request**
Updating out door vehicle lifting systems to meet industry and safety standards.

**Estimated Cost**
150,000.00

**Type**
Facilities

**New/Replacement**
Replacement

**Previously Requested in Year(s)**
2021-2022

**Priority**
02

**Primary Contact For This Resource Request**
Russell Gardner

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
The current vehicle lifting systems are deteriorating at a very fast pace and require continuous maintenance. Numerous times per semester we are having to lock out usage on racks for various repair. The racks are out dated per industry standards and the safety of usage has come into question.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
BIRCH

**Please explain how critical this request is to your program's goals.**
Safety of the students is our main priority. Using and training on the current vehicle lifting systems is unsafe and out of date. Vehicle lifting systems are crucial to the training environment and cannot be eliminated. Updating these systems will be crucial to student success and safety.

**How many students will be impacted by this request?**
100

**What, if any, ongoing maintenance and licensing costs will your request require?**
Annual inspections, approximately 2000.00.

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
Creates a safer learning environment while also exposing students to an up to date shop vehicle lifting system.

## Resource Requests

**Resource Request Status**
Active

**Request Year**
2022-2023

**Resource Request Title (First 3 letters of Program Name+2-digit Year + 2-digit Request Number)**
Aut2107

**Description of Resource Request**
Create a shade structure over the out door lab environment / out door vehicle lifting systems.

**Estimated Cost**
260,000.00

**Type**
Facilities

**New/Replacement**
New

**Previously Requested in Year(s)**
2021-2022

**Priority**
01

**Primary Contact For This Resource Request**
Russell Gardner

**Administrator, Faculty, or Staff Request**

**Please provide a detailed justification as to why this position is needed.**
Our current outdoor workspace has no protection from the elements. This causes a very stressful work environment in the sun, and cancelation of labs in the rain. It also has caused the unnecessary degradation of our outside vehicle lifting systems. We would like to request a permanent structure that will support shade and protection from the rain over our out side work area.

**Equipment, Technology, or Facilities Request**

**Pirate's Code**
KALANCHOE

**Please explain how critical this request is to your program's goals.**
Our program training area currently suffers from space issues. We currently have an entire dedicated area out door with no protection from the elements. By creating a shade structure over this area really increases the usable training area for our students. It will provide the instructors with a better lab time agenda as we will be able to use more space during hot/rainy days. During even the most mild of heat, the students are still subjected to the impact of the sun. It creates a frustrating environment for the students to try and learn in. Creating this extra space within our current shop area is one of biggest priorities to our current student success and retention rates.

**How many students will be impacted by this request?**
100

**What, if any, ongoing maintenance and licensing costs will your request require?**
NA

**Have you identified funding sources to cover ongoing costs?**
TBD

**How will this resource improve the current learning environment, campus services, or operating conditions on campus?**
By providing a more comfortable learning environment for the students. We will be able to utilize the current space in a more effective way.

## Objective

**3-Year Objective**
Increase the number of awarded certificates and degrees by at least 50%.

**What specific actions will you take to meet this objective?**
Extensive curriculum changes are needed, including the addition of a stack able certificate program for General and T-TEN automotive students, a new program submission for T-TEN, and an overarching Transportation Technology course to combine Diesel and Auto pathways into one introductory course, serving a large GE class size.

**Review Type**
Comprehensive

**Objective Status**
Active

**Completion Date**
06/30/2018

**Year 2: Describe Progress Made Towards Objective**
A total of 9 programs have been developed with narratives and all associated paperwork, and all related courses have been through 2nd reading in curriculum committee. The project is in a period of waiting as it makes its way through the district and up to the state.

**Year 3: Describe Progress Made Towards This Objective**
Auto has undergone a program change to Automotive Career Education which has included a stack-able certificate program. Program started 20-21 year with only the Certificate of Program Completion and AS available however the stack-able certificates are close behind. DM has begun the process of developing an agriculture mechanics certificate.

**Year 3: Discuss Any Challenges You Encountered in Progressing Towards This Objective**
Completing an overarching introduction course for both automotive and diesel has reached many questions and failure points in meeting discussions. The idea is not quite lost but has had challenges in the creation process of what the course should include.