



Barstow Community College  
**INSTRUCTIONAL  
PROGRAM REVIEW**

(Refer to the [Program Review Handbook](#) when completing this form)

PROGRAM:

Academic Year:  FULL PROGRAM REVIEW Date Submitted:

Academic Year:  ANNUAL UPDATE Date Submitted:

**By:**

Faculty Lead:

Members:

1. Mission and Vision
2. Description and Overview
3. Program Data
4. Curriculum
5. Internal Factors
6. External Factors
7. Continuing Education and Professional Development
8. Prior Goals and Objectives
9. Action Plan: Goals/Objectives/Actions
10. Resources

## 1. Program Mission and Vision

### A. Program Mission

The mission of the Automotive-Diesel technology program is to serve the community as a provider of an industry certified entry-level workforce capable of employment in specialized automotive and diesel industry disciplines.

### B. Program Vision (*Where would you like the Program to be three years from now?*)

Our vision within the Auto/ Diesel department is to provide students with the basic understanding of automotive service, maintenance, and repair that meets NATEF and ASE Standards. These courses are designed to qualify our students for entry level positions in the automotive and diesel field.

### C. Describe how mission and vision align with and contribute to the College's [Mission](#) and [Vision](#)

The Auto/ Diesel department has the most diverse student base throughout Barstow Community College. Mr. Locke (Diesel Instructor) and I (Eric Blaine, Automotive Instructor) have well over 20 years of experience working with the military and have learned that each soldier has to be treated fairly yet on an individual basis. We use this experience to make each student feel welcome and comfortable throughout the semester. The Auto/ Diesel program has certificates in Automotive Technologies and Diesel Technologies which will provide students the ability to enter the automotive or diesel field as an entry level Trades Helper or Journeyman. We also have an AS degree in both Automotive and Diesel Technologies which is transferable to another 2 year college as well as a 4 year university. Mr. Locke and I work side by side with our students which creates a strong working relationship and develops skills and confidence. I personally utilize a group competition angle in my classes, which helps student become team players and develop people skills. All Students have an Ed plan before they enter my class, though my college experience comes in handy when advising students. Our office at the CTE bldg. post job opening throughout our community as they open. When they pertain to the automotive and diesel industry I post these jobs in our class/ shop. Our department hosts advisory meeting with the local businesses, including Santa Fe, Fort Irwin, and MCLB at least twice a year. We basically brag about our department in hopes of enticing these employers to hire our students. I believe this has been highly effective due to the amount of student we've lost to employment. Our department is the epitome of workforce development. Our main goal is to provide students with the ability to start or change their lives with a certificate or AS in Automotive or Diesel Technologies. As technology in the Auto/ Diesel industry advance we as instructors obviously need training. I've been to several automotive training sessions at Rio Hondo Community College on simulation equipment, eco-friendly vehicles, and a first responder's course.

DATE: 10/01/2014

ANNUAL UPDATE #1: We have begun offering soldiers diesel courses at the National Training Center, Fort Irwin in order to conveniently provide the opportunity to receive a certificate or AS in Diesel Technology.

## 2. Program Description and Overview

Assume the reader does not know anything about the Program. Describe the Program, including—but not limited to—the following:

- A. Organization, including staffing and structure
- B. Who do you service (including Demographics)?
- C. What kind of services does your program provide?

D. How do you provide them?

At Barstow Community College, Career Technical Education Department we offer several courses in order to obtain a certificate or AS degree in Automotive or Diesel Technologies. Within this department we have one full time automotive instructor and one adjunct diesel instructor.

**Automotive Technology Certificate:** Required 24 units with courses ranging from Auto 51a-56

**AS Automotive Technology:** Required 20 units from automotive courses + General eds

**Diesel Technology Certificate:** Required 20 units with courses ranging from DIESEL 63-65, 67, 703

**AS Diesel Technology:** Required 20 units from Diesel Courses + General Ed

We definitely have a diverse student base. Our students range from 7<sup>th</sup> grade to 70 year old women. Most of our student are either on probation or parole and are looking to change their lives for the better. We tend to have a high success rate among this group and they help guide the younger generation in my classes. We get students from Barstow, Yermo, Daggett, New Berry Springs, Apple Valley, and Victorville.

The automotive department provides courses in Steering and suspension, brakes, electrical systems, Fuel systems, A\C and Heating systems, Transmissions, and engine performance. The Diesel department offers courses in Steering and Suspension, Brakes, Electrical Systems, Auxiliary Systems, Fuel Systems, Engine performance, and Engine Service.

We provide these classes with lectures and hands-on labs.

DATE: 10/01/2014

ANNUAL UPDATE #1: As of Fall 2014, we added 2 more adjuncts.  
We now offer diesel classes at Fort Irwin.

### 3. Program Data

#### A. PERFORMANCE DATA

Discuss the program's performance on the specific data items listed below:

##### 1) Full-time/Part-Time Faculty Ratio

---- Fall 2012 ----

FT faculty = 0/ Part-time faculty = 3

Part-time faculty = 100% of the program's instructors

---- Spring 2013 ----

FT faculty = 1/ Part-time faculty = 2

Part-time faculty = 66% of the program's instructors

---- Fall 2013 ----

FT faculty = 1/ Part-time faculty = 2

Part-time faculty = 66% of the program's instructor

---- Fall 2014-----

FT faculty = 1/ Part-Time = 4

Part-Time Faculty = 80% of the program's instructors

##### 2) Course Completion Rate

	TRADITIONAL	ONLINE
a) Full-time:	0.96	Not Applicable
b) Part-time:	0.92	Not Applicable
<b>3) Course Success/Retention Rate</b>		
	TRADITIONAL	ONLINE
a) Full-time:	Enrolled at census: 177 Successful Compl: 167 Success Rate: 94%	Not Applicable
b) Part-time:	Enrolled at census:38 Successful Compl: 31 Success Rate: 83%	Not Applicable
<b>4) WSCH/FTEF Ratio</b>		
	TRADITIONAL	ONLINE
a) Full-time:	2.59	Not Applicable
b) Part-time:	1.20	Not Applicable
<b>5) Fill Rate</b>		
	TRADITIONAL	ONLINE
a) Full-time:	1 <sup>st</sup> day max: 92.86% Census max: 84.3% EOT max: 81%	Not Applicable
b) Part-time:	1 <sup>st</sup> day max: 54.4% Census max: 42.2% EOT max: 38.9%	Not Applicable

Discussion:

DATE:

ANNUAL UPDATE #1:

**B. Progress on Program Level Outcomes (PLOs) and Student Learning Outcomes**

- 1) Summarize the progress your program has made on program and/or course level SLO measures. (Include *Outcome Statements* in this summary.)

**Program Outcomes:**  
1. Possess skills for entry-level placement utilizing the laboratory/shop requirements identified by NATEF.  
2. Successfully complete the ASE certification examination.  
3. Develop effective communication and interpersonal skills and future continuing education.

In 2012-2013, Auto course outlines of record were updated to accurately list the SLOs for each course taught in that academic year. All student learning outcomes were assessed for each course taught. We plan continue to assess each class as it is taught. This is the first year we have developed SLOs for the auto/ diesel program.

- 2) Describe any program, course, and/or instructional changes made by your program as a result of the outcomes assessment process.

Although we are not NATEF certified, we striving to build the equipment and tools in order to be considered. We train for ASE certification throughout the semester. We would like to host the exam on campus but the task seems more difficult than anticipated. Our communication and interpersonal skills have increased as we get more experience.

- 3) Reflecting on the responses for #1 and #2 above, what will you implement for the next assessment cycle?

Any remaining course outlines will be updated as the classes start the 2 year cycle.

DATE:

ANNUAL UPDATE #1:

**C. Supporting Assessment Data (See Handbook for additional information)**

- 1) Provide a list of any additional measures (not included in 3.A.) that you have chosen to gauge your program's effectiveness (e.g.: transfers, degrees, certificates, satisfaction, student contacts, student headcount, Perkin's data, etc.).

Our department gauges our program's success by the amount of students who become employed. We may not have a method to measure or gauge the amount of students who leave before semester end or drop the program because of employment. We have both certificates in Diesel and Automotive Technologies. We also have AS degrees in Automotive and Diesel Technologies.

- 2) Summarize the results of these measures.

- 3) What did you learn from your evaluation of these measures, and what improvements have you implemented, or do you *plan*\* to implement, as a result of your analysis of these measures? (\*List any resources required for planned implementation in #10: Resources.)

- 4) Include DCP Program Assessment Benchmarks, providing analysis of data on long term goals and objectives.

DATE:

ANNUAL UPDATE #1:

D. Two-Year Scheduling Plan

- 1) What is the program's Two-Year Scheduling Plan? What changes, if any, have been made since the last Program Review?

**Automotive Technology:**

**Fall ( odd years )**

- Auto 51a Intro to Auto
- Auto 55 Steering and Suspension
- Auto 54 Brakes

**Spring ( Even Years )**

- Auto 51a Intro to Auto
- Auto 52 Electrical Systems
- Auto 57 Heating and A/C Systems

**Fall ( Even Years )**

- Auto 51a Intro to Auto
- Auto 56 Fuel Systems
- Auto 53 Transmissions and Transaxles

**Spring ( odd )**

- Auto 51a Intro to Auto
- Auto 58 Basic Engines

**Diesel Technology:**

**Fall ( odd )**

- Desl 63 Intro to Diesel Engines
- Desl 70 Steering, Suspension and Brakes

**Spring ( Even )**

- Desl 63 Intro
- Desl 67 Auxiliary Systems

**Fall ( even )**

- Desl 63 Into
- Desl 64 Fuel Injection Systems

**Spring ( odd )**

- Desl 63 Intro

Desl 65 Starting, Charging, and Electrical Systems

Changes: I split the Automotive and Diesel into two separate AS degrees.

- 2) How effective has the Two-Year Scheduling Plan been in meeting student needs and educational goals?

Although more work must be done with the courses, this two year plan is quite effective with meeting the student's educational goals. 51a, Intro to Auto, needs to be offered every semester.

- 3) Reflecting on these results, what are the goals for the next assessment cycle?

We would like to add more courses and combine some of the existing courses. We also would like to change the number sequence.

DATE: 10/01/2014

ANNUAL UPDATE #1: By adding the 2 adjuncts, our 2 year plan can be completed within 2 years.

#### 4. Curriculum

- A. List any new courses or program changes since the last program review. Be sure to include any newly approved prerequisites or corequisites.

The department created another discipline through curriculum to focus on diesel. The new Discipline is DESL. The following courses are in the DESL discipline: DESL 63, 64, 65, 67, 70 Though these are revised classes, they do have pre-requisites. Also a new Short title for AUTO is being approved to help map out the remaining auto courses better.

- B. Explain the current evaluation process. How and when was the curriculum last evaluated? (*Appropriateness, archiving, deleting, revising, etc.*)

The curriculum for AUTO was evaluated in 2012-2013 – resulting in the new department and change of department name. The curriculum process at this time, relies on program review and curriculum requirements. There is no standing curriculum discussion in the department since until very recently only adjuncts taught in the discipline.

- C. List any courses not in full compliance with Curriculum Committee Standards, including those that have not been updated in the past six years (*see Curriculum Manual for additional information, if necessary*).

Heating and A/C course for automotive, Transmission and Transaxle for Diesel, Engine Performance for Auto and Diesel, and Several courses need to be combined.

- D. Curriculum Development: What is the plan for maintaining the currency and viability of your curriculum (*including all modes of delivery*)?

AUTO and DESL are primarily hand-on and there are no clear plans to change mode of delivery at this time

DATE: 10/01/2014

ANNUAL UPDATE #1: No updates.

## 5. Internal Factors *(see Handbook for worksheet)*

### A. Strengths

Full-time Auto instructor will be able to take lead in managing the Class/ shop, counsel students, and promote both programs.  
We rely on advisory committees in order to stay current and understand what employers are looking for. We attend all job fairs in our community and have developed a close relationship with high schools and jr. high schools throughout Barstow and neighboring towns.

### B. Weaknesses

We are lacking vehicles, equipment, and tools. We also could use a full-time Diesel instructor due to the demand of our community. We need a part-time lab tech in order to oversee and maintain tool, equipment, and lab setup.

DATE: 10/01/2014

ANNUAL UPDATE #1: We have found several resources that are willing to donate vehicles and we are looking into donations from the DOD and MCLB. We also have been adding tools and equipment, such as a new brake system solvent tank, A/C machine, and a fluke multimeter.

## 6. External Factors *(see Handbook for worksheet)*

### A. Opportunities

Find vehicle sources. Update equipment. Improve tool supply.

### B. Threats

State budget. Underprepared students

DATE: 10/03/2014

ANNUAL UPDATE #1: We have found several resources that are willing to donate vehicles and we are looking into donations from the DOD and MCLB. We also have been adding tools and equipment, such as a new brake system solvent tank, A/C machine, and a fluke multimeter.

## 7. Continuing Education/Professional Development

### A. What continuing education and/or professional development activities have program/unit members participated in during the current cycle?

AUTO instructors regularly attend the Barstow Community College CTE training  
In addition to first responders training and A-Tech simulators training at Rio Hondo Community College.

### B. What are the continuing education and/or professional development plans for the upcoming cycle?



I would like get eco-friendly vehicle training, bio-fuel training, and training for air brakes.

DATE: 10/03/2014

ANNUAL UPDATE #1: No updates

### 8. Prior Goals/Objectives

Briefly summarize the progress your program/ has made in meeting the goals and objectives identified in the most recent Program Review or Annual Update. (Include measurements of progress or assessment methods.)

- 1) One task to accomplish goals and objectives from last Program review update was to Split Diesel from Auto. This was done.
- 2) The goal to hire a full-time AUTO faculty was met – a Temporary full-time faculty was hired in Spring 2013. In Fall 13, this position became tenure track.

DATE: 10/03/2014

ANNUAL UPDATE #1: New Goals: I would like to put a time line on becoming NATEF certified. I would like BBC to become a testing site for the ASE certification exams. I would like to open an A/C class by spring

### 9. Goals/Objectives/Actions (ACTION PLAN)

- A. **GOALS:** Formulate Program Goals to maintain or enhance program strengths, or to address identified weaknesses.
- B. **ALIGNMENT:** Indicate how each Goal is aligned with the College’s [Strategic Priorities](#).
- C. **OBJECTIVES:** Define Objectives for reaching each Goal.
- D. **ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE:** Create a coherent set of specific steps (Actions/Tasks) that must be taken to achieve each Objective.
- E. **OUTCOMES:** State intended Outcomes and list appropriate measures and assessment methods for each Outcome.
- F. **ADDITIONAL INFORMATION:** This area provides for the additional communication of information necessary to further “close the loop” on the goal or action plan, as it relates to Institutional Planning. This may include references to other institutional documents, such as governing or compliance documents (i.e. Board Policy, Administrative Procedures, Title V), institutional planning documents (i.e. [Strategic Plan](#), [Educational Master Plan](#), [Facilities Plan](#), [Technology Plan](#)), or Board, Presidential, Supervisory or Departmental recommendations or goals, etc. (See *Handbook for additional examples*.)

Complete the following table with your Program’s **ACTION PLAN**, which must include a **minimum of 3 goals**:

ACTION PLAN				
GOAL	ALIGNMENT WITH <a href="#">BCC STRATEGIC PRIORITIES</a> <small>(click link for list of Strategic Priorities)</small>	OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
#1 Formulate a strong and convincing argument to hire a full-time diesel instructor.	<p><i>List all that apply:</i></p> <ul style="list-style-type: none"> <li>- <b>Foster</b> innovative learning environment</li> <li>- <b>Provide</b> Successful college learning experience</li> <li>- <b>Promote</b> and support student engagement</li> <li>- <b>Cultivate</b> and enhance local partnerships</li> <li>- <b>Attract</b>/develop excellent employees</li> <li>- <b>Strengthen</b> college planning/decision making</li> </ul>	#1 Teach more courses – Stabilize and develop courses and curriculum	<ul style="list-style-type: none"> <li>- Create Position</li> <li>- Show need</li> <li>- Hire</li> </ul>	Offer more courses to stay in-line with the 2 year plan – in Desl courses 63-67, 70
		#2 Provide support for Diesel Program and become the advisor to students	<ul style="list-style-type: none"> <li>- Attend CTE meetings</li> <li>- Attend CTE meetings)</li> <li>- Have counseling hours set during the day for all Auto/ Diesel students</li> </ul>	<p><b>OUTCOMES:</b> SLO/ PLOs</p> <p><b>MEASURES:</b> PLOs</p> <p><b>ASSESSMENT:</b> Document hours spent counseling students</p>
		#3 Develop needed advisory committees	<ul style="list-style-type: none"> <li>- Set meetings at least twice a year</li> <li>- Meet with individual reps at least once a month</li> <li>- Ask for input from businesses</li> </ul>	<p><b>OUTCOMES:</b> Keep an ongoing relationship with the businesses we support</p> <p><b>MEASURES:</b></p> <p><b>ASSESSMENT:</b></p>
<i>Additional Information:</i>				
DATE:	<input type="text" value="10/03/2014"/>	ANNUAL UPDATE #1:	<input type="text" value="At this time we may need to reevaluate or goal to hire a full time diesel instructor."/>	
#2 Training for alternative fuel, hybrids, and electrical vehicles	<p><i>List all that apply:</i></p> <ul style="list-style-type: none"> <li>- <b>Foster</b> innovative learning environment</li> <li>- <b>Provide</b> Successful college learning experience</li> <li>- <b>Promote</b> and support student engagement</li> <li>- <b>Cultivate</b> and enhance local partnerships</li> <li>- <b>Attract</b>/develop excellent employees</li> <li>- <b>Strengthen</b> college planning/decision making</li> </ul>	#1 Keep program current	<ul style="list-style-type: none"> <li>- Get training grants</li> <li>- Get donations from dealerships</li> </ul>	<p><b>OUTCOMES:</b> Attract more grants, donations, and students</p> <p><b>MEASURES:</b> Compare courses with other 2 year programs.</p> <p><b>ASSESSMENT:</b></p>
		#2 Stay competitive	<ul style="list-style-type: none"> <li>- Offer courses for new technologies</li> <li>- Look at other programs at other colleges</li> </ul>	<p><b>OUTCOMES:</b> Attract more students</p> <p><b>MEASURES:</b> Class rosters</p> <p><b>ASSESSMENT:</b></p>
		#3 Purchase vehicles	Training tools	<p><b>OUTCOMES</b></p> <p><b>MEASURES:</b></p> <p><b>ASSESSMENT:</b></p>
<i>Additional Information:</i>				

ACTION PLAN					
GOAL	ALIGNMENT WITH <a href="#">BCC STRATEGIC PRIORITIES</a> <small>(click link for list of Strategic Priorities)</small>	OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT	
	DATE: <input type="text" value="10/03/2014"/>	ANNUAL UPDATE #1:	<input type="text" value="No updates."/>		
#3	Formulate a strong and convincing argument to hire a part-time lab technician.	<i>List all that apply:</i> - <b>Foster</b> innovative learning environment - <b>Provide</b> Successful college learning experience - <b>Promote</b> and support student engagement - <b>Attract</b> /develop excellent employees - <b>Strengthen</b> college planning/ decision making	#1 Set up labs	- Instructed to set up labs pertaining to lecture - Lab will be set up before arrival - Lab put away and cleaned before end of class	<b>OUTCOMES:</b> Gives Instructor more lecture and training time. <b>MEASURES:</b> Improved retention due to more time on lesson and with students <b>ASSESSMENT</b> Retention reports and class satisfaction surveys.
			#2 Maintain shop	- Prevent equipment damage - Prevent safety hazards and injuries	<b>OUTCOMES:</b> Keep shop clean and organized. <b>MEASURES:</b> <b>ASSESSMENT:</b>
			#3 Weekly inventory	- Keeps tools clean - Prevents injuries - Will be able to identify problems with theft	<b>OUTCOMES:</b> Keeps equipment and tools in order and Keeps theft down <b>MEASURES:</b> <b>ASSESSMENT</b>
<i>Additional Information:</i>					
	DATE: <input type="text" value="10/03/2014"/>	ANNUAL UPDATE #1:	<input type="text" value="We may need to change the part-time lab tech to full time."/>		
#4	Purchase A/C Machine	<i>List all that apply:</i> - <b>Foster</b> innovative learning environment - <b>Provide</b> Successful college learning experience - <b>Promote</b> and support student engagement - <b>Attract</b> /develop excellent employees - <b>Strengthen</b> college planning/ decision making	#1 Offer Heating and Air conditioning Course	-become more competitive with other colleges	<b>OUTCOMES:</b> Attract more students <b>MEASURES:</b> Census at day one <b>ASSESSMENT:</b> last census
			#2 Train students for 609 certification	-help student become more desirable to employers	<b>OUTCOMES:</b> Students become employed
			#3 Offer 609 cert exam at the end of the course.	-We will be able test as soon as course is completed -Keeps content fresh for students	<b>OUTCOMES:</b> Students obtain 609 Cert <b>MEASURES:</b> Log all certs <b>ASSESSMENT:</b> Compare semesters
<i>Additional Information:</i>					

ACTION PLAN				
GOAL	ALIGNMENT WITH <a href="#">BCC STRATEGIC PRIORITIES</a> <small>(click link for list of Strategic Priorities)</small>	OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
	DATE: <input type="text" value="10/03/2014"/>	ANNUAL UPDATE #1:	<input type="text" value="We have in fact purchased an A/c Machine."/>	
#5		<i>List all that apply:</i>	#1	
			#2	
			#3	
<i>Additional Information:</i>				
	DATE: <input type="text"/>	ANNUAL UPDATE #1:	<input type="text"/>	
#6		<i>List all that apply:</i>	#1	
			#2	
			#3	
<i>Additional Information:</i>				
	DATE: <input type="text"/>	ANNUAL UPDATE #1:	<input type="text"/>	

## 10. Resources Required

List all significant resources needed to achieve the objectives shown in the table above, including personnel, training, technology, information, equipment, supplies, and space. Every request for additional resources must support at least one objective.

Also list any resources required to implement planned improvements noted in 3.C.

**IMPORTANT:** A [BUDGET ALLOCATION PROPOSAL](#) must be completed and submitted for **EACH** new resource requested. *(Click the link to access the form.)*

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	If No, indicate funding source
1	1, 2, 3	Full-time faculty	\$83,040.00	Yes	
2	3	Training for alternative fuel, hybrids, and electrical vehicles	\$3000	Yes	
3	1, 2, 3	Hire part time lab technician	\$20.00 Hour	Yes	
4	3	Purchase A/C Machine	\$7000	Yes	

ANNUAL UPDATE #1:

DATE:

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	If No, indicate funding source