What is an Instructional Program?

An Instructional Program or program of study is comprised of selected courses that lead to a degree or certificate. We have several types of instructional programs—the Associate of Arts (AA) degree, the Associate of Science (AS) degree, the Associate of Arts Transfer degree (AA-T), the Associate of Science Transfer degree (AS-T), and the Certificate.

All Instructional Programs are situated within a specific Guided Pathway that consists of a community of related disciplines. For example, the Biology AS-T is part of the STEM Pathway, which includes the disciplines of Science, Technology, Engineering, and Mathematics.

| Program | Name |
|---------|------|
|---------|------|

| Indicate the type of | f program he | ere: □ AA; | ⊠AS; | ⊔AA-T; | ⊔AS-T; | □Certificate |
|----------------------|--------------|------------|------|--------|--------|--------------|
| | | | | | | |

Program Name: Automotive Technology
Academic Year: Fall 2023/ Spring 2024

Name of Faculty Submitter(s): Eric Blaine

I. Program Description

The purpose of this section is to provide the reader and/or reviewer with a brief snapshot of the program. This section should be kept short, a few paragraphs at the most, and address the following:

- A. What is the program mission and how does it support the institutional mission? The Automotive Department of Barstow Community College offers a curriculum that is current in technology and career-oriented, thus enabling BCC to provide the automotive business and industry with skilled graduates.
- B. What is the program vision and how does it support the institutional vision?

 Our Automotive Program supplies the automotive industry with highly trained employees that are skilled in the latest technology including the fast evolving alternative fuel industry.
- C. Please provide a short program description:

 The Automotive Department of Barstow Community College offers a curriculum that is current in technology and career-oriented, thus enabling BCC to provide the automotive business and industry with skilled graduates.
- D. How does your program align to and/or support one or more of the following BCC Strategic Priorities?
 - The automotive program at Barstow Community College is aligned with Strategic Priorities, Ignite a culture of learning and innovation and Build Community. In our classes, we not only train future mechanics, we create leaders in industry. We welcome mistakes because we see them as a stepping stone to perfection. We allow the students to adjust and coerrect before we intervene. Students are encouraged to teach processes to fellow students with confidence.
 - Innovate to Achievable Equitable Student Success

- Ignite a Culture of Learning and Innovation
- Build Community
- Achieve Sustainable Excellence in all Operations

II. Program Effectiveness

The purpose of this section is to evaluate the program holistically by reviewing and analyzing data in the areas of Students, Courses, Program, and Faculty.

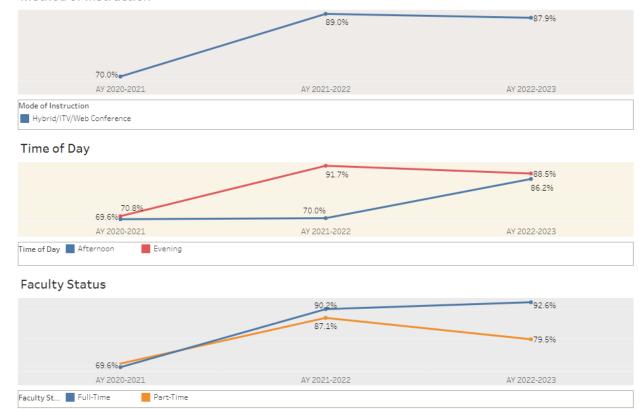
For each item below, review the data provided. As you examine the data, be on the lookout for trends and outliers while also considering how the data connects to fostering student success, helping students reach their goals, and furthering the mission of BCC.

Provide a short analysis (2-3 sentences) for each item. If data are not available (i.e., student satisfaction surveys), please indicate that on the form.

Course Data and Analysis

- A. Course Success Rate by
 - Mode of instruction
 - Scheduling
 - Faculty Status (PT vs FT)

Method of Instruction



In terms of mode of instruction, the graph emulates the direct effect that the pandemic had on the start of the automotive hybrid courses with a low percentage of success rates. In the past, Success rates in terms of time of day has always reflected as afternoon classes showing high numbers, but As you can see at the end of 2022-2023 afternoon and evening couseses almost mirror one another at the end of 2022-2023. The resoning is that we changed one of the auto classes to an evening class, which in turn added numbers to that time of day. This was due to our students really not knowing what to expect as they return to class. 2022-2023 success rate in terms of time of day are normalizing, in which now we can start to decipher any problems with time. The faculty status success rate tend to mirror one anther, and both part time and full time averaging 70% and above.

B. Retention Rate by

- Mode of instruction
- Scheduling
- Faculty Status (PT vs FT)



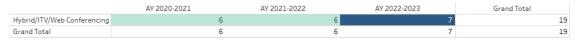


The retention rates have remained steady at over 85% in all AUTO corses. The low retention rate in AUTO 55 was due to the lack of equipment during our move to the new facility and the pandemic. Steering and suspention requires large equipment such as; Alignment lift, alignment tree, and an alignment machine. Our space was limited as we waited for contruction to finish.

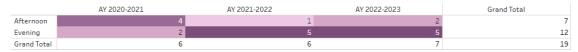
C. Section Count by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

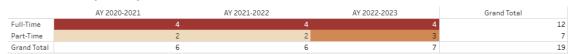
Section Count by Instructional Method



Section Count by Time of Day



Section Count by Faculty Status



All Automotive courses are taught as Hybrid as of Spring 2019. In terms of scheduling, 2020-2021 seems a bit odd, though this was at the end of the pandemic and students were more likely to take early classes as opposed to evenings. Full time faculty will have a high section count due to the fact that the full time teaches more classes.

D. Enrollment Count by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

Enrollment Count by Instructional Method

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|-----------------------------|--------------|--------------|--------------|-------------|
| Hybrid/ITV/Web Conferencing | 72 | 82 | 107 | 261 |
| Grand Total | 72 | 82 | 107 | 261 |

Enrollment Count by Time of Day

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|-------------|--------------|--------------|--------------|-------------|
| Afternoon | 47 | 10 | 29 | 86 |
| Evening | 25 | | 78 | 175 |
| Grand Total | 72 | 82 | 107 | 261 |

Enrollment Count by Faculty Status

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|-------------|--------------|--------------|--------------|-------------|
| Full-Time | 47 | 51 | 68 | 166 |
| Part-Time | 25 | 31 | 39 | 95 |
| Grand Total | 72 | 82 | 107 | 261 |

Instructional count increased all three years in terms of instructional method. All Automotive courses are taught as Hybrid as of Spring 2019. Afternoon courses fluxuated coming out of the pandemic, though afternoon would have seen more of an increased but in 2023 we started offering more evening courses. Both full-time and Part-time had a gradual increase for the past 3 years.

E. Class Size Average by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

Students per Section by Instructional Method

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|-------------------------|--------------|--------------|--------------|-------------|
| Hybrid/ITV/Web Conferen | 12.00 | 13.67 | 15.29 | 13.74 |
| Grand Total | 12.00 | 13.67 | 15.29 | 13.74 |

Students per Section by Time of Day

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|--------------------|--------------|--------------|--------------|-------------|
| Afternoon | 11.75 | 10.00 | 14.50 | 12.29 |
| Evening | 12.50 | 14.40 | 15.60 | 14.58 |
| Grand Total | 12.00 | 13.67 | 15.29 | 13.74 |

Students per Section by Faculty Status

| | AY 2020-2021 | AY 2021-2022 | AY 2022-2023 | Grand Total |
|-------------|--------------|--------------|--------------|-------------|
| Full-Time | 11.75 | 12.75 | 17.00 | 13.83 |
| Part-Time | 12.50 | 15.50 | 13.00 | 13.57 |
| Grand Total | 12.00 | 13.67 | 15.29 | 13.74 |

Class size average by time of day has increased in the passed 3 years except for afternoon 2021-2022. This is due to the addition of 1 evening course and the increase by 2023 is because of increased enrollment. Students per section by faculty status part-time average was high do to the addition of AUTO 57 summer course, though full-time seen an increase in students by the 2022-2023.

F. Efficiency: WSCH, FTES, FTEF

The automotive program only has one full-time faculty, which is also shared with the diesel program, and he teaches 2 automotive courses per semester. The WSCH for full-time increased from 34,765 to 42,232 within the past 3 years due to incread inrollment and we increased the amount of students per class. Part-Time also had a major increase from 28,991 to 34,295 due to the same reasons as full-time. Faculty load keeps increasing as we add courses each year.

Student Equity Course Data

A. What equitable practices are being performed by most or all courses within the program (ACCJC Standard 2.2, 2.6, 2.7, 2.8, 2.9)? Please review the following equitable practices and check all that apply.

| | □ Use of Early Alert | □ Provides students an |
|-----------------------|-------------------------------------|-----------------------------|
| knowledge acquisition | □ Audia filas as vidas | opportunity for feedback on |
| □ OER materials | ☐ Audio files as video alternatives | instruction |

| ⊠ Ensures all student races and backgrounds are represented in the classroom and the curriculum | | Seeks multiple perspectives | |
|--|--|--|---|
| | | ☑ Correlates learning with real-life experience ☑ Problem and electricing | ☑ Provide reminders to students throughout course about resources available |
| | sentation of resources ampus departments | □ Probing and clarifying techniques | □ Collaborative note-taking □ a.v. |
| □ ADA | compliant materials | □ Creates space for □ | ☐ Other: Click or tap here to enter |
| □Use o | of graphic organizers | students to ask for help | text. |
| | notes peer community g and support | ☐ Utilizes learning pact | |
| В. | We've had a gender gap tha | y gaps that have surfaced in the data t's pleged our department for the 12 hen it comes to female students. | |
| C. | At this point the Automotive | ojects will help to close these gaps? Department may need to seek help fent way to help female students under aining POVs. | |
| Curricu | ulum | | |
| A. | | en peer reviewed within the last 5 year e and when it is scheduled for peer re No | |
| В. | | at least once within a two-year time been taught within the last two acade | • |
| | | □ No t. | |
| C. Tech. V | review? What changes and v All Automotive courses have | s to the curriculum (courses or progra why? been converted to Hybrid in order to er Assist Systems (ADAS) training in a f | stay current with modern |
| D. | If you feel there are any releplease list them here (option Click or tap here to enter tex | - | the above three questions, |

Program Learning Outcome Assessment Data (Standard 2.9, 4.3)

Use the section and questions below to summarize findings, trends, and future action for the PLO assessment data.

| Program Learning Outcomes | Assessment Results – Summary of Data | Please list any future plans based on results |
|--|---|--|
| A. Possess skills for entry- level placement utilizing the laboratory/shop requirements identified by NATEF. | 2020 to 2023 over 80% of the students passed with a C or better in regards to the outcome. All effects of the pandemic seem to have no impact on our current courses. | Our statistic in regards to student success are extremely high, so our teaching strategies should remain the same, though we should definitely follow the advancements in technology due to the fast moving alternative fuel industry. |
| B. Successfully complete the ASE certification examination. | Although we train each student on the procedures and type of questioning on the ASE, we have not tracked our students ASE certifications success. | We may need to find way to track ASE testing for our students. |
| C. Develop effective communication and interpersonal skills and future continuing education. | No data collected | Comprehensive testing has been incorporated to promote critical thinking and provide instructors the opportunity to engage with the student to enhance their communication skills. |
| D. Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| E. Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

- A. Since the previous program review, what changes or actions, if any, have been taken to improve outcomes?
 - Every course is now taught as hybrid courses. We now offer ADAS training.
- B. Please reflect on the PLO data above and discuss any possible strengths the program has based on the data.
 - Our automotive program has a extremely high retention and success rates, which is 100% related to experienced instructors, well equipped lab, and amazing leadership.

- C. Please reflect on the PLO data above and identify areas for student-centered growth or improvement.
 - Are there specific courses/SLOs that the program would like to focus on for growth and improvement?

We defifinitly need to build on alternative fuel vehicles.

- What actions can help grow or improve these areas moving forward? Provide training for instructors lacking the experience in the alternative fuel vehicle realm and follow the fast moving technology in that field.
- D. Please reflect on assessment data trends based on ethnicity, race, and gender.
 - What actions can the program take to support equitable outcomes?

 Although, we tend to have great results, interms of success and retention, with our female students, we tend to adhere to gender role stereotypes in terms of automotive being a male dominated occupation. All races, genders and ethnicities are welcomed as BCC students and we are excited by the divercity that each student brings each semester..
 - Are there specific student groups the program would like to focus their efforts on? We would like to see more female interest in automotive.

Program Data and Analysis

A. Demographics

Employment in the Automotive field in Barstow Ca.:

- -Santa Fe has 1,000 Employees
- -Fort Irwin has 8,900 employees
- -MCLB has 1,700 employees
- -Raytheon has 400 employees
- -Variuos Shops throughout Barstow has 150 employees

B. Award Count

Click or tap here to enter text.

C. Student Equity Program Data

- Specifically discuss any equity gaps that have surfaced in the data.
- Click or tap here to enter text.
- What innovative plans or projects will help to close these gaps? Click or tap here to enter text.

D. Student or Program Satisfaction Survey Results

E. CTE-specific data

- CTE Advisory Boards
- Labor Market data
- Program Viability

Click or tap here to enter text.

F. Comparative data (compared to BCC and/or compared to other programs)

Click or tap here to enter text.

G. Institution-Set Standards and the Big Picture

This section provides an opportunity to tie in all the data about the program to tell the story behind the numbers. Be sure to consider what an outsider to your program or career technical field may not know about current trends or changes.

- 1. How is your program doing overall based on observation of program data? Click or tap here to enter text.
- 2. Provide an analysis of the "big picture" by reflecting on how your program data compares to the <u>Institution-set Standards</u> below.

Automotive course completion rate is almost 10% higher than the institutional standard. We had 14 students receive degrees, although the majority of our students become

| | Institution Set (Floor) | Stretch Goal (Aspirational) | Program Data |
|----------------------------|-------------------------|--------------------------------|--------------|
| Course Completion Rates | 74% | 76% | |
| Certificates | 81 | 97 | |
| Degrees | 437 | 524 | |
| Transfers | 213 | 287 | |
| *Licensure Exam Pass Rates | 70% | 79% | |
| *Employment Rates | 60% | 73% | |

employed before they finish. We Rarely have transfer students. We have a 100% success rate for students taking the 609 AC Certificate.

^{*}Applicable to CTE

Guided Pathways and Response

- A. Name of the Guided Pathway that your program is a part of Industry
- B. List the other programs (clusters) that are part of your Guided Pathway Diesel, Welding, and Industrial Maintenance
- C. Provide a summary of how your program collaborates with other programs (clusters) in your Pathway.

Examples of collaboration: meetings, projects, conferences, other cross-disciplinary professional development, etc.

Paired advisory committees, CTE Meetings

Faculty/ Program Staff Data and Analysis

A. Faculty Load (FTEF)

Full-time 1.60/ Part-time 2020-2021 0.08 and 2022-2023 1.20

B. FT/PT/OL Faculty Ratio

Click or tap here to enter text.

C. Faculty Professional Development

1. Please list any professional development that faculty members have participated in (Standard 3.2)

Click or tap here to enter text.

2. Please list any professional development that faculty members would benefit from (Standard 3.2)

Click or tap here to enter text.

3. Does the program have sufficient staffing and support? Please discuss. (Standard 2.7) Click or tap here to enter text.

D. Overall Observation of Data on Faculty

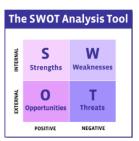
This section provides an opportunity to tie in all the data about faculty to tell the story behind the numbers. Be sure to consider what an outsider to your program or career technical field may not know about current trends or changes.

Provide an analysis of the "big picture."

SWOT Analysis

Conducting a SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) is another tool that can help areas evaluate themselves. The SWOT Analysis not only looks internally, but externally as well.

The SWOT Analysis provides a way for areas to highlight their accomplishments and also identify possible gaps or issues that need to be addressed.



| | Positive/ Helpful | Negative/ Harmful |
|----------|----------------------------------|----------------------------------|
| Internal | STRENGTHS | WEAKNESSES |
| | Click or tap here to enter text. | Click or tap here to enter text. |
| | | |
| External | OPPORTUNITIES | THREATS |
| | Click or tap here to enter text. | Click or tap here to enter text. |
| | | |

III. Program Goals, Objectives, and Outcomes

The purpose of this section is to use data to develop goals and objectives for the next three years. Reflect on the responses to all the previous questions and the SWOT analysis in Section Two.

As you develop goals and objectives,

- Formulate **two to three Program Goals** to maintain or enhance program strengths, or to address identified weaknesses (cite evidence from assessment data and/or other student achievement data, course, faculty, etc).
- indicate the **status** of the Program Goal (ex: is the goal new, a carry-over from the previous program review cycle, etc.)
- Indicate how each Goal is aligned with the College's Strategic Priorities.
- Indicate how each goal is aligned with the Pillars of Guided Pathways.
- List at least one objective for reaching each goal.
- Develop an outcome statement for each objective.
- Explain how you will measure the outcome.
- List any **resources** that will be needed to achieve the goal.

GOAL #1

| ۹. | | |
|----|--|-----------|
| | | New |
| | | Continued |
| | | Modified |

| | If n | nodified please list how and why. | | | |
|-------|------|--|--|--|--|
| | | Click or tap here to enter text. | | | |
| | В. | Alignment to BCC Strategic Priority (Select at least one but also choose all that apply – click Choose an item for the drop-down list to appear) Choose an item. | | | |
| | | Choose an item. | | | |
| | | Choose an item. | | | |
| | | Choose an item. | | | |
| | C. | Relationship to Guided Pathways | | | |
| | | ☐ Clarify the Path | | | |
| | | ☐ Entering the Path | | | |
| | | ☐ Staying on the Path | | | |
| | | □ Support Learning | | | |
| | D. | Please list objective(s) for achieving this goal. | | | |
| | | Click or tap here to enter text. | | | |
| | E. | Please list outcome statements for each objective. | | | |
| | | Click or tap here to enter text. | | | |
| | F. | Briefly explain how you will measure the outcome. | | | |
| | | Click or tap here to enter text. | | | |
| | G | Please list resources (if any) that will be needed to achieve the goal. | | | |
| | G. | Click or tap here to enter text. | | | |
| | | click of tup fiere to effect text. | | | |
| ••••• | | | | | |
| GO | | | | | |
| | | ck or tap here to enter text. | | | |
| | B. | This Goal is | | | |

| | | New | | |
|------|-----------------|--|--|--|
| | | Continued | | |
| | | Modified | | |
| If n | nodified | please list how and why. | | |
| | Click or | tap here to enter text. | | |
| C. | Choose | ent to BCC Strategic Priority (Select at least one but also choose all that apply – click an item for the drop-down list to appear) an item. | | |
| | Choose an item. | | | |
| | Choose | an item. | | |
| | Choose | an item. | | |
| D. | Relatio | nship to Guided Pathways | | |
| | | Clarify the Path | | |
| | | Entering the Path | | |
| | | Staying on the Path | | |
| | | Support Learning | | |
| Н. | Please | list objective(s) for achieving this goal. | | |
| | | Click or tap here to enter text. | | |
| l. | Please | list outcome statements for each objective. | | |
| | | Click or tap here to enter text. | | |
| J. | Briefly | explain how you will measure the outcome. | | |
| | Click or | tap here to enter text. | | |
| K. | | list resources (if any) that will be needed to achieve the goal. tap here to enter text. | | |
| | CHCK OI | tap here to enter text. | | |

| GOAL | #3 | |
|------|----------|---|
| Cli | ck or ta | p here to enter text. |
| C. | This G | ioal is |
| | | New |
| | | Continued |
| | | Modified |
| If n | nodified | d please list how and why. |
| | Click o | or tap here to enter text. |
| D. | Choos | nent to BCC Strategic Priority (Select at least one but also choose all that apply – click e an item for the drop-down list to appear) e an item. |
| | Choos | e an item. |
| | Choos | e an item. |
| | Choos | e an item. |
| E. | Relati | onship to Guided Pathways |
| | | Clarify the Path |
| | | Entering the Path |
| | | Staying on the Path |
| | | Support Learning |
| L. | Please | e list objective(s) for achieving this goal. |
| | | Click or tap here to enter text. |
| M. | Please | e list outcome statements for each objective. |
| | | Click or tap here to enter text. |

N. Briefly explain how you will measure the outcome.

| | | Click or tap here to enter text. |
|-------|----|---|
| | 0. | Please list resources (if any) that will be needed to achieve the goal. |
| | | Click or tap here to enter text. |
| | | |
| ••••• | | |

Previous Goals/Outcomes

Were any outcomes discontinued or completed? Please speak to outcomes you are not carrying forward from the previous program review cycle and discuss why.

IV. Resource Requests:

What resources are needed for the program to meet its goals and objectives? Resource requests should be evidence-based and tied to goals and objectives stated above.

Resources may be requested from the following categories:

- Personnel/Staffing
- Technology Resource
- Facilities Resource
- Professional Development
- Other

For all resource requests programs should utilize the <u>Budget Allocation Proposal form</u> and submit with their program review. If needed, the Out-of-Cycle BAP form may be submitted for resource requests when completing an Annual Update in Years 2 and 3.

| Goal # | Objective # | Resource Required | Estimated Cost | BAP Required? Yes or No | In No, indicate funding source |
|---------------|--------------|----------------------------------|-------------------|-------------------------------|---|
| Click or tap | Click or tap | Click or tap here to enter text. | Click or tap | Click or tap | Click or tap |
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