

# Instructional Program Review Template

## 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 program here:  AA;  AS;  AA-T;  AS-T;  Certificate

Program Name: Industrial Maintenance Electrical and Instrumentation, Level 2

Academic Year: 2023-2024

Name of Faculty Submitter(s): Toby Hill

---

## 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 IME&I Level 2 program provides a focused pathway for students to obtain knowledge and skills in the industrial electrical field. This program supports our institutional mission by providing our students, community, and military population with quality skill trade courses and hands-on experience to achieve personal goals and professional growth.

- B. What is the program vision and how does it support the institutional vision?

Program is intended to give students the skill trade educational tools to achieve personal goals and professional growth. CTE courses support our institutional vision by empowering students to achieve their personal best toward skill trade careers.

- C. Please provide a short program description:

IMEI Level 2 courses give electrical instruction in residential, commercial, and industrial fields. This includes electrical industrial safety, National Electrical Code, and electrical drawings.

- D. How does your program align to and/or support one or more of the following BCC Strategic Priorities?

The IMEI Level 2 program is aligned with BCC's "Ignite a Culture of Learning and Innovation" strategy. Courses are developed to place successful students into career positions. This is in collaboration with industrial partners looking for trained skilled tradespersons.

- Innovate to Achievable Equitable Student Success

# Instructional Program Review Template

- 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)

Mode of instruction success rate went from 100% to 98% from 2021-2022 to 2022-2023 with Traditional instruction. These courses are typically taught in the evenings or afternoons, providing high success rates. Part-time instruction accounted for 60% load and full-time instruction was 20% load in 2021-2022. Part-time instruction accounted for 100% load and no full-time instruction in 2022-2023. Part-time was 100% and full-time was 100% success rate for 2021-2022. Part-time was 98% success rate and no full-time for 2022-2023. Success rates have climbed again after pandemic fluctuations.

#### B. Retention Rate by

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

For mode of instruction retention rate went from 100% to 98% from 2021-2022 to 2022-2023 with Traditional instruction. These courses are typically taught in the evenings or afternoons, providing high retention rates. Part-time instruction accounted for 60% load and full-time instruction was 20% load in 2021-2022. Part-time instruction accounted for 100% load and no full-time instruction in 2022-2023. Part-time was 100% and full-time was 100% retention rate for 2021-2022. Part-time instruction was 98% retention rate and no full-time for 2022-2023. Retention rates have climbed again after pandemic fluctuations.

# Instructional Program Review Template

## C. Section Count by

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

Mode of instruction provided 12 for years 2021-2022 and 2022-2023 by Traditional instruction. For these years courses were completed in the afternoons. 4 sections were completed by Part-Time faculty and 2 by Full-Time in 2021-2022. 6 sections were completed by Part-Time faculty and no Full-Time in 2022-2023.

## D. Enrollment Count by

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

The instruction was by traditional method, 2021-2022 and 2022-2023 had 78 enrollments. For these years courses were completed in the afternoons. Part-time and full-time faculty had 279 enrollments over the last two years. FT-11 PT-17 for 2021-2022 and FT-N/A PT-50 for 2022-2023.

## E. Class Size Average by

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

Class size increased from 2021-2022 to 2022-2023 from 4.67 to 8.33. These courses are usually evening or afternoon traditional and hybrid instruction. Part-time average was 4.25 and full-time average was 5.50 for 2021-2022. Part-time average was 8.33 and no full-time for 2022-2023.

## F. Efficiency: WSCH, FTES, FTEF

This program is taught by part-time and full-time faculty. WSCH efficiency was 68.9 in 2021-2022 and 117.7 in 2022-2023. FTES/FTEF was 2.3 in 2021-2022 and 3.9 in 2022-2023. Both enrollment and efficiency have gone up from 2021-2022 to 2022-2023.

## 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.

Multiple options for knowledge acquisition

OER materials

Use of Early Alert

Audio files as video alternatives

Provides students an opportunity for feedback on instruction

Ensures all student races and backgrounds are represented in the classroom and the curriculum

## Instructional Program Review Template

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Presentation of resources from campus departments       | <input checked="" type="checkbox"/> Correlates learning with real-life experience | <input checked="" type="checkbox"/> Includes resources in syllabus  |
| <input checked="" type="checkbox"/> ADA compliant materials                      | <input checked="" type="checkbox"/> Probing and clarifying techniques             | <input checked="" type="checkbox"/> Provide reminders to students throughout course about resources available |
| <input type="checkbox"/> Use of graphic organizers                               |   | <input checked="" type="checkbox"/> Collaborative note-taking   |
| <input checked="" type="checkbox"/> Promotes peer community building and support | <input checked="" type="checkbox"/> Creates space for students to ask for help    | <input type="checkbox"/> Other:<br>Click or tap here to enter text.   |
| <input checked="" type="checkbox"/> Seeks multiple perspectives                  | <input type="checkbox"/> Utilizes learning pact                                   |   |

B. Specifically discuss any equity gaps that have surfaced in the data.  
The data does not show any major equity gaps, success and retention rates are fairly equal across the board. There was low enrollment for African Americans. We do have a goal of encouraging more African Americans and females to join the program and industrial maintenance field. There are lower enrollment numbers for these areas and we want to be sure our program qualities are known to all.

C. What innovative plans or projects will help to close these gaps?  
There are already plans to market toward female and African American students and research prime marketing locations to accomplish this goal. Attention to African American progress and additional assistance will be a focus point. Getting the program information and success stories of females and African Americans out to target areas should help increase these numbers. High schools and job fairs are places that marketing is currently taking place.

### Curriculum

A. Have all program courses been peer reviewed within the last 5 years (ACCJC Standard 2.2, 2.3)?  
If no, please name the course and when it is scheduled for peer review.

- Yes                                       No

B. Have all courses been taught at least once within a two-year time frame? If no, please list the course(s) that has/have not been taught within the last two academic years and why (ACCJC Standard 2.5).

- Yes                                       No

Click or tap here to enter text.

C. Have there been any changes to the curriculum (courses or program) since the last full program review? What changes and why?

No curriculum changes have been made since last full program review.

## Instructional Program Review Template

- D. If you feel there are any relevant curriculum details not covered in the above three questions, please list them here (optional).  
None

### 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. Students will be able to apply the skills necessary to implement electrical circuits following the National Electrical Code (NEC)	Data shows that students are successfully completing the courses pertaining to safety and electrical code. Safety is repeated through multiple programs as a core fundamental to the craft.	Program completion data can be added to with the students successfully acquiring jobs after the program. CTE has been accumulating data on these successful students.
B. Students will be knowledgeable about the required materials of the trade and have the ability to install them properly.	The hands-on experience gives students more retention of the trade names of equipment, parts, and tools.	This segment of the program will continue to be stressed and repeated for retention.
C. Students will have the skills necessary to potentially receive industry-recognized certifications in a variety of crafts.	Students are able to choose their preferred field to pursue. Explaining the vast amount of jobs in these different fields has given students more paths for their success.	Students will be encouraged to focus on a field of electrical work that fits their liking. This shows to produce the best success and keeps students engaged in the courses.
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?  
Focus on course specific material aligning with local industry needs has been improved.
- B. Please reflect on the PLO data above and discuss any possible strengths the program has based on the data.  
Building more industry partnerships improves opportunities for students in these fields.

# Instructional Program Review Template

- 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?  
The hands-on lab portion of courses could be improved with more efficiency and time allotted.
  - What actions can help grow or improve these areas moving forward?  
Having an assistant to manage a small group of students during lab work would help efficiency. Looking into other similar programs on lab organization may improve the process.
- D. Please reflect on assessment data trends based on ethnicity, race, and gender.
- What actions can the program take to support equitable outcomes?  
Equitable outcomes were high in success rate for most students in this program. Extra focus and instruction can be put into any diversity that fall short in program success.
  - Are there specific student groups the program would like to focus their efforts on?  
Most student groups show to be successful in program courses. African American students will be a focus to ensure instruction is suitable and additional assistance given if needed.

## Program Data and Analysis

### A. Demographics

Males between the ages of 25 to 29 have been the majority of program awards in the last 3 years.

### B. Award Count

2021-2022 produced 2 Award and 2022-2023 produced 11 Awards.

### C. Student Equity Program Data

- Specifically discuss any equity gaps that have surfaced in the data.  
This line of work has not traditionally enticed females or black students. This trend is changing and BCC is targeting their marketing toward these two student areas.
- What innovative plans or projects will help to close these gaps?  
Target marketing could help bring awareness to females and black students. CTE hosts a Open House Car Show to welcome the public to see its facilities and promote the programs. CTE also holds job fairs that bring people into the facility. Public awareness and student success help improve enrollment.

### D. Student or Program Satisfaction Survey Results

Survey information is not available at this time.

### E. CTE-specific data

- CTE Advisory Boards
- Labor Market data
- Program Viability  
A Welding, Industrial Maintenance, Electrical & HVAC Advisory Meeting was held. They discussed the labor market information for building & construction trades, architecture &

## Instructional Program Review Template

engineering occupations, energy & utilities, and mechatronics. CTE data shows that the industrial maintenance field is thriving and continues to need the labor force. Marketing is being done to present the many job positions and benefits that are available in local areas. The program continues to expand with the new positions created with new technologies such as Mechatronics, Robotics, and CNC Machinery.

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

BCC CTE programs also run in conjunction with NCCER national recognized certificate programs. Students benefit from program courses to complete college certificates and degrees, as well as, national recognized certificates of hands-on learning certificates through NCCER. Several instructors are certified NCCER instructors and provide students with a second level of experience to add to their resumes and applications. BCC offers fewer program courses due to its demographics compared to colleges in larger more commercial cities. Other colleges are able to offer more programs because of their higher population and work force demand.

**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?

The program has been successful in student awards, but more importantly it is successful at providing students with careers. These courses provide hands-on training that keep student interest and engagement. Working with industry partners, students are being sought for jobs during or after completing CTE programs. Companies also send current employees to get training/schooling through the program to build on experience. NCCER certificate students are another success count that needs to be tracked. State grant money is often available to expand these programs for the needs of the work force. Expansion often falls short when it comes time to hire new instructors to teach these new programs.

2. Provide an analysis of the “big picture” by reflecting on how your program data compares to the Institution-set Standards below.

The number of certificates shows to be below Institution-Set Standards, but the number of degrees is on track above Institution-Set Standards.

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

*\*Applicable to CTE*

# Instructional Program Review Template

## Guided Pathways and Response

- A. Name of the Guided Pathway that your program is a part of  
Trades and Applied Technology
- B. List the other programs (clusters) that are part of your Guided Pathway  
Industrial Maintenance Electrical and Instrumentation, AS Degree Certificate of Achievement, Industrial Maintenance Electrical and Instrumentation
- 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.*

Meetings are held with the CTE department staff to ensure collaboration of department goals. Students often enroll in Industrial Maintenance Mechanical and welding courses. All programs provide experience that leads students to a more specified occupation.

## Faculty/ Program Staff Data and Analysis

### A. Faculty Load (FTEF)

FTEF was .40 for full-time faculty and .60 for part-time faculty for 2021-2022, 1.0 total.

FTEF was 1.00 for part-time and none for full-time for 2022-2023, 1.00 total.

### B. FT/PT/OL Faculty Ratio

In 2021-2022 full-time faculty completed 2 sections and part-time faculty completed 4 sections. Full-time had 20%, Part-time had 60%, and Overload was 20% in 2021-2022. In 2022-2023 part-time faculty had 100%

### C. Faculty Professional Development

1. Please list any professional development that faculty members have participated in (Standard 3.2)  
Faculty for CTE hold meetings for program assessment, marketing, and direction. Faculty also attend industrial partner conferences for alignment of need and demand. Instructors undergo evaluations for assessment and improvement.
2. Please list any professional development that faculty members would benefit from (Standard 3.2)  
Attending conferences pertaining to new technology and industry needs would be beneficial. Cross training with other programs and colleges may also be beneficial to program success and growth.
3. Does the program have sufficient staffing and support? Please discuss. (Standard 2.7)  
For program growth and success, a second part-time instructor would allow for additional course/program levels. This is dependent on student numbers and demand.



# Instructional Program Review Template

## 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.*

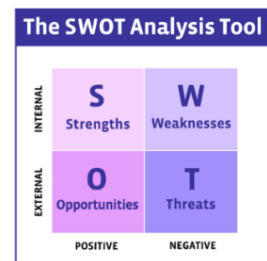
Provide an analysis of the “big picture.”

The majority of the courses in the IMEI program are taught by Part-time faculty. Program courses require mathematical skills that sometimes challenges students. Demand for skilled tradesman is high and these programs could be expanded if there were instructors to teach new programs. Post pandemic shows increased enrollment and better efficiency of WSCH/FTEF and FTES/FTEF.

## 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
<b>Internal</b>	<b>STRENGTHS</b> The IMEI program is very effective in preparing students for a career in the field. Numerous students every semester end up with a job in the field, usually with an industry partner. Trends are continually creating demand and growth in expanding fields tied to this program. Students who pursue a career in the skilled trades often take a liking to the Electrical and IMEI courses. This program excites students and maintains their interest to strive for completion and pursuit of a career.	<b>WEAKNESSES</b> The high desert does not provide a large pool of career opportunities in Industrial Maintenance. The program would like to encourage more woman to pusue this career path. There is a bottleneck in the training for this program due to a shortage of simulators and training equipment. Tracking of student employment during or after program completion is a difficult challenge. The students acquiring careers out of these programs are a paramount factor for data.
<b>External</b>	<b>OPPORTUNITIES</b>	<b>THREATS</b>

# Instructional Program Review Template

	Marketing has been developed to encourage more woman toward this program and field. As the demand for Mechatronics, Robotics and Process Systems increases our program has the demand for growth. Tracking of student success with job/career acquisition must be deligated to someone to ensure data is collected.	Rebuilding enrollment numbers after pandemic and adjusting for the workforce needs. Program growth is needed to meet current industry technology. Construction growth or new industry is needed to provide more local job opportunities.
--	---	--

### 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

Increase enrollment in this program as demand in the field is continually expanding.

A. This Goal is

- New
- Continued
- Modified

*If modified please list how and why.*

Click or tap here to enter text.

# Instructional Program Review Template

- B. 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*)

Strategic Priority 2: Ignite a Culture of Learning and Innovation

Strategic Priority 4: Achieve Sustainable Excellence in all Operations

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.

Support existing marketing for the program and continue to look for opportunities to pursue. Make sure courses are designed and supplied to handle a larger class size. Work with marketing to build flyers, commercials, and social media advertisements attracting new students. Assess the course material to see what lab equipment, tools, and parts are needed for the flow of a larger class size.

- E. Please list outcome statements for each objective.

Marketing in general and to specific demographics (females and African Americans) will increase interest and enrollment. This will also lead to enrollment into other CTE programs and courses through interaction. Building up class equipment and simulators will give more hands-on experience and time to each student.

- F. Briefly explain how you will measure the outcome.

Monitor enrollment numbers, as well as, award success rate.

- G. Please list resources (if any) that will be needed to achieve the goal.

Marketing to build flyers, commercials, and social media advertisements to attract new students. An additional part-time instructor would be needed to maintain a larger student pool and new next level courses.

# Instructional Program Review Template

---

## GOAL #2

Build up course lab equipment to meet the student demand.

B. This Goal is

- New
- Continued
- Modified

*If modified please list how and why.*

Click or tap here to enter text.

C. 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*)

Strategic Priority 1: Innovate to Achieve Equitable Student Success

Choose an item.

Choose an item.

Choose an item.

D. Relationship to Guided Pathways

- Clarify the Path
- Entering the Path
- Staying on the Path
- Support Learning

H. Please list objective(s) for achieving this goal.

Assess and decide which pieces of equipment and simulators need to be expanded for sufficient flow of student learning. Plan for newer simulators and equipment to meet the needs of current industry demand. More students should be able to engage in lab exercises, increasing their hands-on experience. Lab exercises should process more smoothly and timely. Decide course by course how many simulators, tools, or equipment is needed to keep students active in learning. Then request purchase of the needed equipment. Research manufacturers and other college programs to find simulators and equipment to meet the future needs of program.

I. Please list outcome statements for each objective.

# Instructional Program Review Template

Providing more equipment and simulators for students to utilize will increase the hands-on experience each student gets to acquire. This will benefit students in work experience and confidence so they can pursue and manage jobs. It will take the program courses from being compressed and short of time to streamlining their hands-on instruction.

J. Briefly explain how you will measure the outcome.

With sufficient equipment, students will increase their hands-on experience and courses should flow more smoothly. Student interest should increase in course work and into the program as a whole.

K. Please list resources (if any) that will be needed to achieve the goal.

Purchasing of new equipment and simulators.

---

## GOAL #3

Click or tap here to enter text.

C. This Goal is

- New
- Continued
- Modified

*If modified please list how and why.*

Click or tap here to enter text.

D. 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.

E. Relationship to Guided Pathways

# Instructional Program Review Template

- Clarify the Path
- Entering the Path
- Staying on the Path
- Support Learning

L. Please list objective(s) for achieving this goal.

Click or tap here to enter text.

M. Please 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.

O. 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.

Continuing Goal #1 to increase enrollment into our program, marketing is in place and showing to be effective.

Program growth with additional/new equipment and simulators is an ongoing project.

# Instructional Program Review Template

## 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 Budget Allocation Proposal form 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.*

<b>Goal #</b>	<b>Objective #</b>	<b>Resource Required</b>	<b>Estimated Cost</b>	<b>BAP Required? Yes or No</b>	<b>In No, indicate funding source</b>
#2	#1 & #2	Electrical equipment and simulators.	\$10,000.	Yes	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.