# Program Name

Indicate if  $\Box$  AA;  $\Box$ AS;  $\Box$ AA-T;  $\Box$ AS-T;  $\boxtimes$ Certificate

Program Name: IMMT / Industrial Maintenance Mechanic & Technology / Certificate of Achievement Level III

Submitter: Roland O'Neal

# I. Program Description

In this section, programs will answer the questions "Who are we? What do we do?" The purpose of this section is to orient the reader/ reviewer to the program and provide context to the program review. This section should be kept short, a few paragraphs at the most, and include the following:

# Mission/Vision

BCC is committed to providing our students with educational tools to achieve personal goals through professional growth and career/workforce development. This program is based on Nationally recognized skills in Industrial Maintenance Mechanics. This program will strive to provide a learning environment conducive to the success of the student to achieve the basic working knowledge in Industrial Maintenance as it is applicable to the progressive nature and technological changes in industry today. The mission and vision of the program is to provide skilled trades training to meet the shortage of skilled labor in the workforce.

# Description – short description only

The IMMT program will provide the student with a broad base of technical skills in IMMT, with an added emphasis in Mechanical Technology and Application. Prepare students to enter the maintenance construction field in a variety of trades and positions which include Residential, Commercial and Industrial, general industrial laborer, industrial helper second class to journeyman status. Obtain NCCER credentials as well as an Associates degree and certifications.

# Alignment to/ support of BCC Strategic Goal

The program offering's prepare students in basic skills, career and technical education, lifelong learning opportunities, and comprehensive lower division courses that meet articulation agreements for student to have the opportunity to transfer to upper division and industry leading institutions.

Partnering with local agencies, businesses, schools, and military bases to promote positive community skilled work force development and economic growth, and to support the training of skilled labor to meet the growing shortage of skilled labor in today's economy.

# II. Program Effectiveness

In this section, programs will answer the question "How is the program doing?" by reviewing and analyzing data. The purpose of this section is to evaluate the program holistically in terms of fostering student success, helping students reach their goals, and furthering the mission of BCC.

Programs will be provided with data on Students, Courses, Program, and Faculty. For each item below, review the data provided. Look for trendlines, outliers, etc., and provide a short analysis (2-3 sentences) for each. If data are not available (i.e., student satisfaction surveys), indicate that on the form. For Program Learning Outcomes Assessment data, review the eLumen Report and summarize findings in the PLO section below.

# Course Data and Analysis

# Course Success Rate by

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

Mode of instruction: 2020/2021 Live/online 83.7%, 2021-2022 Hybrid 87.5%, 2022/2023 Hybrid 91.9%

Scheduling: classes are held in the evening

Faculty status: one full time instructor for (100%) IMMT, one adjunct instructor for (50%) IMEI

# Retention Rate by

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

Mode of instruction: 2020/2021Live/online, 90.7 2021/2022 Hybrid, 93.8% 2022/2023 Hybrid 97.3%

Scheduling: classes are held in the evening

One full time faculty for (100%) IMMT, one adjunct for (50%) IMEI

# Section Count by

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

Mode of instruction: 2020/2021 Live, 14 2021, 2022 Live/online. 13 2021/2022 Hybrid - 13

Scheduling: classes are held in the evening

One full time faculty for IMMT/ 100% , One Adjunct faculty for IMEI / 50%

# Enrollment Count by

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

Enrollment counts: 2020/2021- (101), 2021/2022 - (85), 2022/2023 - (147)

Scheduling: classes are held in the evening

One full time faculty for (100%) IMMT, one adjunct (50%) IMEI

# Class Size Average by

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

Class size average: 2020/2021 - (7.21) Live, 2021/2022 - (6.54) Live/online, 2022/2023 - (11.31) hybrid

# Scheduling: classes are held in the evening

# One full time faculty for (100%) IMMT, one adjunct (50%) IMEI

# Student Equity Data

Specifically address any equity gaps. What innovative plans or projects will help to close these gaps? The equity gap currently is the lack of a perment classroom and lab structure for continued grow and expansion of the training portion of this program. New on campus facilities would improve the equity gap.

Efficiency: WSCH, FTES N/A

# *Curriculum – Course Outline of Record*

Curriculum is updated when NCCER updates and releases new publications, the COR has been updated and used to update PLO and SLO mapping.

# Overall Observation of Data on Courses

This section provides an opportunity to tie in all the data about the courses. 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."

Overall data indicates the IMMT courses are well liked with a high success (100%) and retention rate. The instructor/Faculty are all highly knowledgeable subject matter experts (SME) in their field. The course is designed to give the student learner a fundamental knowledge of the Skilled Maintenance trades for Residential, Commerical, and Industrial applications. And to train students to acquire living wage employment. We have been successful in several areas of getting students job interviews and hiring opportunities.

Program Learning Outcomes	Assessment Results – Summary of Data	Use of Results
<ol> <li>Demonstrate use of tools and equipment commonly used in the trade.</li> </ol>	2020/2021 – 83.7% 2021/2022 – 87.5% 2022/2023 – 91.9%	Curriculum is current and industry specific.

2.	Demonstrate the ability to use scribing and quantitative skills pertaining to basic layout on the jobsite.	Click or tap here to enter text.	Curriculum is current and industry specific.
3.	Work with various types of piping, valves and perform basic hydrostatic and pneumatic testing on the jobsite	Click or tap here to enter text.	Curriculum is current and industry specific.
4.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
5.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

# Program Data and Analysis

# Demographics

The IMMT courses are equity and equality friendly and supports all genders, race, and ethnicities. Historically this course comprises of black, Hispanic, white, Asian/filipino, native American and pacific islander.

# Award Count

2020/2021 - (5), Associates degrees

2021/2022 - (2) Associates Degrees.

2022/2023 - () Associates Degrees

# Student Equity Data

Specifically address any equity gaps. What innovative plans or projects will help to close these gaps?

N/A, There are no equity gaps to mention, this course is gender friendly and all inclusive. The perception that the skilled trades are male only is a falsehood, BCC encourages and welcomes female and all gender specific groups.

# Student or Program Satisfaction Survey Results

N/A, Student survey's indicates that the courses are well liked, and the instructor is extremely knowledgeable and well liked in the subject matter.

# CTE-specific data

- CTE Advisory Boards
- Labor Market data
- Program Viability

Advisory meetings are held at least once per year per discipline.

Labor market: Employment for IMMT technician is expected to rise 4% and have 152,400 job opening over the next ten years 2022 to 2032.

There are no plans to change mode of delivery or curriculum, a rebranding of the name will be discussed to improve enrollment, interest, and understanding of the program.

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

When new curriculum from the publisher is released we adopt and update our adoptions to meet advisory and manufacture needs, Other institutions offer similar programs to our IMMT and IMEI programs, however they have followed our lead as BCC offers both mechanical and Electrical. BCC has the potencial to be the preferred institution of training in the IMMT/IMEI fields, if supported and recognized.

# Overall Observation of Data on Program

This section provides an opportunity to tie in all the data about the program. 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 data indicates that our IMMT program is effective in retention and success rates, and students gaining employment in living wage occupations. Due to the pandemic like all institutions we have lower enrollment rates for 2020/2021 school year. The data needs to be used to improve quality of instruction, facilities and recognition of the faculty. I still see the same issues as of 2015 the start of the program.

# Guided Pathways and Response

List the other programs that are part of your Guided Pathway 2 year plans are working and updated, SLO/PLO mapping is current, the IMEI, Welding & Safety programs are all within the pathway of the IMMT program.. Provide a summary of the collaboration with other programs in the pathway.

Examples: meetings, projects, etc.

Welding/IMEI/Auto, these CTE programs are inclusive to the IMMT program and have contributions to facilitate learning objectives within each division.

Faculty/ Program Staff Data and Analysis

*Faculty Load (FTEF)* Click or tap here to enter text.

*FT/PT Faculty Ratio* **100% one full time faculty IMMT** 

50% one adjunct for the Electrical/IMEI,

There are two additional adjunct faculty members who can teach the IMMT as certified NCCER ICTP certified. However, we will need additional help as instructors leave or retire. My recommendation is not to wait as we will surely miss an opportunity to acquire quality knowledgeable instructors who have industry experience.

# Faculty Professional Development

CTE faculty professional development is welcomed yet never used because of scheduling, budget or professional development that lacks interest from the faculty or seen as useless in the field of study.

Example of useful training: Fabtech for the welding program, Skills USA for all programs etc.

# Program Staffing and Support

CTE has one Dean, one full time faculty (100%) for the IMMT, one adjunct for the (50%) IMEI.

# Overall Observation of Data on Faculty

This section provides an opportunity to tie in all the data about the faculty. 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 IMMT program is lead by one full time certified NCCER Master Trainer with over 40 years of industrial experience, three adjunct faculty, all NCCER ICTP certified with a combined 60 plus years experience to teach the IMMT/IMEI/Weld programs. Two of the ICTP faculty have Master Degree credentials and can teach multiple subjects.

# 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.

# The SWOT Analysis Tool



	Positive/ Helpful	Negative/ Harmful
Internal	STRENGTHS	WEAKNESSES
	Full time faculty has over 40	Only one full time faculty IMMT
	plus years of field experience in	and one part time adjunct
	the craft. Three adjunct faculty	faculty for the IMEI as of this
	have a combine 60 years plus	recording. Retirement
	experience, two with Master	
	degrees in education.	
External	OPPORTUNITIES	THREATS
	The shortage of skilled labor	State funding, budget cuts, lack
	present BCC with an	of support within and not taking
	opportunity of growth within	advantage of the opportunity to
	our IMMT/IMEI & Welding	grow our IMMT/IMEI/Welding
	programs.	programs. Poor planning and
		management of resources.

# III. Program Goals

In this section, programs will answer the question "How can we improve? What do we need to meet our goals?" 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 three to five 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 how each Goal is Aligned with the College's Strategic Priorities.
- Identify explicit **Objectives** for reaching each goal.
- Develop **Outcome** statements and appropriate measures for each objective.

## GOAL #1

To enhance enrollment counts

#### *Objective* 1

Use marketing, rebranding and outreach to stimulate student interest.

#### Actions, Tasks

Use Social media for announcements and advertising, change and develop a rebranding strategy.

#### Outcomes, Measures, Assessment

Outcomes would meet enrollment numbers for sustainability, increase retention and success rates to measure programs success. Students gaining living wage employment.

#### *Objective 2*

Maintain and or increase funding for new technology.

#### Actions, Tasks

Acquire funding through grants and approvals from district.

#### Outcomes, Measures, Assessment

To be housed in a permanent classroom so as to establish a more formal learning environment.

#### Objective 3

To hire more full time faculty for the CTE group. A multi-discplined trades journeymen who can teach multiple subjects (Maintenance. Electrical, Instrumentation, HVAC, Welding, Construction)

#### Actions, Tasks

Obtain another full time faculty who is multi-skilled and credentialled to teach all IMMT/IMEI & welding programs.

#### Outcomes, Measures, Assessment

Outcomes would be to create more flexibility and strength to our teaching and training capacity.

# 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 3: Build Community

Choose an item.

Strategic Priority 4: Achieve Sustainable Excellence in all Operations

## GOAL #2

Move in to permanent classroom on the main campus. New facilities should be complete for spring 2023. (CTE complex completed for 2023)

## Objective 1

Acquire funding from the district to build permanent facilties, not modular temporary buildings that won't support the heavy industrial training needs. New Faciliies should be rady for spring 2023.

## Actions, Tasks

Acquire funding and seek professional guidance from experienced consultants and get started on construction. Studies have been done in the past and the money used for the study was a waste, as no action has been birthed from it.

#### Outcomes, Measures, Assessment

To have perment facilities that support industrial training needs.

#### *Objective 2*

Use funding resources to maximize classroom size and space for labs.

#### Actions, Tasks

Develop and build space for both classroom lecture and a professional lab space for training and student development.

Outcomes, Measures, Assessment Better qualified and trained student workforce.

#### Objective 3

Provide new equipment and technologies for the program as new technologies come forth.

#### Actions, Tasks

Seek professional development programs that align with the training and curriculum of the IMMT/IMEI programs.

#### Outcomes, Measures, Assessment

Better well trained students.

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.

# GOAL #3

Research how the classes could become transferable to attract more students, and to align with UC programs such as mechanical engineering, electrical engineering etc.

# Objective 1

Contact CSU institutions to determine what direction the IMMT program needs to follow to provide a pathway to high educational goals.

## Actions, Tasks

Coordinate required transferable curriculum to meet higher education requirements

## Outcomes, Measures, Assessment

Make the Associates degree transferrable that is recognized other than as a local degree

## Objective 2

Coordinate with councilors and get more engagement from administration, BOT, and other committes to recognize the viability of the CTE programs, especially for students who do not plan on attending a four year university or just need an uplift on current job skills.

#### Actions, Tasks

Bring forth to Academic senate and other campus ccommittes, to be recognized as equal to other programs on campus. We talk about support and say we support the CTE program in general and yet no viable evidence exists to support that claim.

#### Outcomes, Measures, Assessment

Student degrees in the field of IMMT/IMEI would be recognized by industry and professional societies like the IBEW, Ironworkers, Millwrights and other labor unions and institutions. We currently provide third party credentials from the NCCER.

*Objective 3* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

# Outcomes, Measures, Assessment Click or tap here to enter text.

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.

GOAL #4 Click or tap here to enter text.

*Objective 1* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

*Objective 2* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

*Objective 3* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

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.

GOAL #5 Click or tap here to enter text.

*Objective 1* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

*Objective 2* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

*Objective 3* Click or tap here to enter text.

Actions, Tasks Click or tap here to enter text.

Outcomes, Measures, Assessment Click or tap here to enter text.

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.

# IV. Resource Requests:

What does the program need to meet its goals and objectives?

Programs can submit their requests for resources by utilizing the Resource Request Form. Requests should be evidence-based and tied to goals and objectives stated above.

This form may also be updated and submitted in Years Two and Three if needed.