



**BAKERSFIELD COLLEGE: CAREER TECHNICAL EDUCATION**

**TWO YEAR PROGRAM REVIEW FORM**

**PROGRAM INFORMATION**

Chair Name	Jason Dixon	Date	9/1/18
Department	Engineering & Systems	Discipline	Electronics
Most Recent Program Plan Completed On		Date	9/1/18
Most Recent Program Review Completed On		Date	9/1/18
Faculty Name	Sean Caras		
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**1. MEETS A DOCUMENTED LABOR MARKET DEMAND**

Source of information (check all that apply)

<input type="checkbox"/>	Bureau of Labor Statistics ( <a href="http://www.bls.gov">http://www.bls.gov</a> )
<input checked="" type="checkbox"/>	State of California Labor Market Information ( <a href="http://www.labormarketinfo.edd.ca.gov/">www.labormarketinfo.edd.ca.gov/</a> )
<input type="checkbox"/>	Advisory Committee Meeting held on <span style="float:right">Attach Minutes</span>
<input type="checkbox"/>	Professional Association
<input checked="" type="checkbox"/>	Other <span style="float:right">EMSI Modeling Specialists</span>

**Findings**  
 For the SOC codes related to our program, there were 5,012 jobs currently filled, with a +2.57% change from 2018-23 (nation was 2.3%). **The median hourly earnings was \$24.44** (nation was \$20.66). **The total annual openings for our SOC codes was 465.** There will be some overlap of job openings with several other CTE programs that can fill them, such as Machining/Manufacturing Technology, Ag Mechanics, and others. However, there will still be a large deficit between the job openings and the number of students we are training to be job-ready in our program.

**This is a high-wage, high-demand program** with a projected increase in openings even as we are only able to produce enough students to fill a fraction of the needed positions.

**2. DOES NOT REPRESENT UNNECESSARY DUPLICATION OF OTHER MANPOWER TRAINING PROGRAMS IN THE AREA.**

List programs from other institutions (private/fee based/public):

<i>Name of Institution</i>	<i>Name of Program</i>	<i>Distance to College</i>	<i>Public/Private</i>	<i>Approx Enrollment</i>
None			<input type="checkbox"/> Public <input type="checkbox"/> Private	
None			<input type="checkbox"/> Public <input type="checkbox"/> Private	
None			<input type="checkbox"/> Public <input type="checkbox"/> Private	

**Findings**  
 There are no public institutions offering a similar “program” to ours within Kern County. Taft College has articulated the courses that feed our Industrial Automation Bachelor’s degree, but that was done mainly to give their students a pathway into our B.S. degree, rather than to create a duplicate program. It does not appear that they are offering those courses to a significant level yet.

**3. DEMONSTRATED EFFECTIVENESS AS MEASURED BY EMPLOYMENT AND COMPLETION OF STUDENTS**

Core Indicator Data Reviewed X Yes  No Date 9/1/18

Insert Scores Below:

Success: 88.04% Completion: 94.74% Employment: 88.57%

Non-Traditional: 6.52% Non-Traditional Completion: 2.78%

**Findings**  
 Success (+0.5%), completions (+7.7%), and employment (+16.6%), were above the negotiated level. NT participation (-15%) and NT completion (-21%) continue to be below the negotiated level but compared with State average (NT participation -1%, and NT completion -4%) we are close to the actual performance of similar programs in the state.

Our current institutional data shows an increase in female students (part of the non-traditional category) from **12** in '13-'14 to **45** last year. A majority of Perkins/VTEA funding for our college is spent on personnel – many are dedicated to the improvement of core indicators.

**4. REVIEW/APPROVALS**

Date	Signature	Title
		Department Head
		College Dean
Presentation to Curriculum Committee		<a href="#">Click here to enter a date.</a>
Presentation to College Council		<a href="#">Click here to enter a date.</a>
Presentation to Board of Trustee		<a href="#">Click here to enter a date.</a>

[Using EMSI / Educational Analyst / Programs / Program Report](#)

Run a historical Program Report for 2010 to 2015 to show the following data:

What TOP code(s) are you using for this report?

**We did NOT use our TOP code, as it does not show the correct occupations. We have used our own custom list of SOC codes with EMSI to get our numbers. These are the SOC codes used (in order of openings):**

49-9041	Industrial Machinery Mechanics
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-9099	Installation, Maintenance, and Repair Workers, All Other
49-9098	Helpers--Installation, Maintenance, and Repair Workers
49-9043	Maintenance Workers, Machinery
17-3023	Electrical and Electronics Engineering Technicians
49-9052	Telecommunications Line Installers and Repairers
49-9022	Electrical and Electronics Repairers, Commercial and Industrial Equipment
51-2022	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers
49-9069	Precision Instrument and Equipment Repairers, All Other

**Note: This data is from 2013-2018, which is how EMSI provides it.**

A) number of jobs within the above occupation(s) for 2010

**The number of jobs in 2013 was 4,419.**

B) number of jobs within the above occupations(s) for 2015

**The number of jobs in 2018 was 5,012.**

C) number and percent change (2010to 2015)

**The percent change in jobs 2013-18 was +13.4% when using the two data points above. Note EMSI gave a different change at -5.86% for the projection. We are not sure why the EMSI projection was different than the actual change.**

D) the average hourly earnings for the above occupation(s)

**The median hourly wage was \$21.82.**

E) number of completions (awards) from our college 2010-2015

**According to our institutional data 2013-18, there were 341 completions (AS, CA, JSC).**

F) number of completions (awards) from regional colleges 2010-2015

**The completions from regional colleges was zero.**

**Then run a projection Program Report for 2015 to 2020 to show the following data:**

**Note: EMSI runs their projection for the time period 2018-2023**

A) number of jobs within the above occupation(s) for 2015

**The number of jobs in 2018 was 5,012**

B) number of jobs within the above occupations(s) for 2020

**The number of jobs in 2023 was not given by EMSI on their report. Mathematically, 5012 jobs in 2018 with a projected growth of 2.57% means a projected number of jobs in 2023 would be 5,140.**

C) number and percent change (2015 to 2020)

**The percent change from 2018-23 was +2.57%.**

D) the average hourly earnings for the above occupation(s)

**The median hourly wage was: \$24.44**

E) number of annual openings and total replacement jobs

**The number of annual openings between 2018-23 are: 465**

**Does the above program meet a documented labor market demand? Please explain.**

**Yes, not only does it meet the demand, we show that demand far exceeds the supply of trained technicians we supply. Additionally, there is a projected growth of 2.57% (which exceeds the national growth of 2.3%).**

**We have a diverse list of occupational codes (job titles) for which our program trains students. This diversity allows the program to weather economic downturns in specific industry sectors and still have demand for our trained students.**

**Using EMSI / Career Pathways / Occupation Analysis / Occupational Program Report list all related programs of study by other educational institutions in our region:**

**From EMSI:**

Institution	Certificates (2017)	Degrees (2017)	Total Completions (2017)
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Bakersfield College	53	8	61
Cerro Coso	0	0	0
Community College			
San Joaquin Valley	0	0	0
College-Bakersfield			
Taft College	0	0	0

**This shows that we are the lone provider of this training in Kern County.**

**Does the above program represent unnecessary duplication of training programs in our area? Please explain.**

**No, we are the lone provider of this training in Kern County.**