

## Heavy Equipment Technician

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### Submitter's Information

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**Title** Professor, Mechanized Agriculture

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**Extension** n/a

**Region** Central/Mother Lode

**College** Bakersfield College

**CTE Dean** Cindy Collier

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### Program Information

**Program Name** Heavy Equipment Technician

**Projected Start Date** 2018-06-10

**Program Type(s)** Certificate of Achievement 18+ Semester (27+ Quarter) Units

**Certificate Required Units** 24

**Units of Major Degree** n/a

**Total Units for Degree** n/a

**TOPs Code** Agricultural Power Equipment Technology (011600)

**Program Goals** The objective of this program is to prepare students with the knowledge to successfully enter the workforce as a heavy equipment technician. Throughout the program students will have the opportunity to earn stackable certifications with the end goal to achieve a Heavy Equipment Technician Certification. The stackable certifications will include: agricultural and Industrial safety, small engine repair, diesel engine repair and heavy equipment systems.  
Completion of this program will prepare student do enter the workforce in the heavy equipment repair Industry including but not limited to : agriculture, industrial, construction, material handling, and mining. A lab fee of \$20 is required for most classes to cover the cost of gaskets, sealants, and fluids

**Program Description** This course is designed to train students for a career in heavy equipment repair in industries such as but not limited to: agriculture, industrial, construction, material handling, and mining. While completing the required courses students will have the opportunity to earn individual stackable certifications. After

<b>Investment is targeting ...</b> - Enter selected TOP codes and Program Titles in the cells to the right.	<b>TOP Code(s)</b> 11600	<b>Program Title</b> Agriculture Power Equipment Technology
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<b>Geography - The program identified specifically targets the labor market need for trained workers in...</b> - Select a region/subregion or a single county geography using the drop down lists embedded in the green or blue cell.	<b>Region/Subregion list</b> - South CV	<b>County list</b> Kern
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**Demand** - the program(s) prepare students to work in the following occupations...

**Supply** - On average, how many awards (certificates and degrees) area conferred by community colleges and other post-secondary institutions in the region/county identified?

SOC Code	Occupational Title	Annual Openings	Institution Type	# of Awards Conferred (Annual Average)
1 49-3041	Farm Equipment Mechanics and Service Technicians	21	Community Colleges	0
2 49-3042	Mobile Heavy Equipment Mechanics	31	Other Post-secondary Institutions	0
3 49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	3		
4 49-9041	Industrial Machinery Mechanics	57		
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**Summary of Data Entered:**

Demand	112
Supply	0

**Analysis:**  
Demand is greater than or equal to supply (Undersupply): Eligible for Funding

successful completion of all required courses students will have also earned a Heavy Equipment Technician Certificate of Achievement.

**Program Requirements**

Core Courses	Title	Units
MCAG B3	Small Engine Repair	3
MCAG B4	Agriculture Safety	3
MCAG B11	Introduction to Diesel Engine Repair	3
MCAG B12	Advanced Diesel Engine Repair	3
MCAG B13	Hydraulics	3
MCAG B14	Heavy Equipment Systems	3
MCAG B20	Industry Internship	6
Total Core Courses 24		

In addition to the core courses, the student is recommended to take at least 6 units from the following courses:

Elective Courses	Title	Units
WELD B53A	Stick Metal Arc Welding	2
MCAG B10	Farm Power Operation	3
Total Elective Courses 5		

Total Units Required for Certificate 24

Display of Proposed Sequence

First Semester	Units	Second Semester	Units
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MCAG B4	3	MCAG B12	3
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MCAG B3	3	MCAG B13	3
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MCAG B11	3	MCAG B14	3
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WELD B1B or MCAG B10	WELD B1B or MCAG B10
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Total 12	Total 12
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Third Semester	Units
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MCAG B20	6
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Total 6
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**Program Projections**

The current infrastructure would allow for 24 students co complete the program annually without the addition of faculty

Our goal is to turn out 10 program completers the first year

**Labor Market Information**

[Download Local Share LMI Worksheet.xlsx \(/storage/lmi/43-17-Local Share LMI Worksheet.xlsx\)](#)

**Create At**

10/04/17 - 10:10 AM

**Status**

**Recommended**

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Central/Mother Lode Region Specific Questions

**Advisory Minutes**

[Download Advisory Minutes 09-28-2017.docx \(/storage/Central/Mother Lode/43-17-38-Advisory Minutes 09-28-2017.docx\)](#)

Mechanized Agriculture Department  
Advisory Committee Meeting  
September 28, 2017  
Bakersfield College Administrative Conference Room

Meeting was called to order at 3:30pm

Members present :

Matt Riley- Professor, Bakersfield College  
Jerry McKellar- Berchtold Equipment Company  
Jayson Heard- Berchtold Equipment Company  
Mike Schott- Bolthouse Farms  
Tim Swatzell- Gibbs International  
Chuck Brummer- Kern Machinery Inc  
Santiago Alcantar- Kern Machinery Company  
Corny Rodriguez- Dean, Bakersfield College  
Cindy Collier- Dean Bakersfield College

Corny Rodriguez asked the committee present questions regarding job demand and starting salaries for Equipment technicians in the Kern County area.

Chuck Brummer replied that Kern Machinery company is always in need of technicians and training 30 students a year to enter industry would not put a dent in the local demand for technicians

Jerry McKellar agreed with Chucks statement and added that all mechanics they hire start at the state set minimum wage of \$21 per hour. Both Chuck and Tim confirmed this as well.

Mike Schott replied that Bolthouse farms always has the need for technicians as well but they do not typically start new hires at as high of a rate because they provide the tools their mechanics use. HE stated they start technician around \$17 per hour depending on training but they do advance in pay as their skills grow

Matt Riley Introduced his plan for Bakersfield Colleges Heavy Equipment Technician Program, discussing and reviewing the proposed sequence of courses, individual course objectives, and the hours students would spend training. Every person present was given a course outline to review and offer feedback.

Santiago requested we include technical writing skills in each course as they require their technicians to communicate the repairs completed on customer equipment in the form of a written description attached to the service order- All members agreed

Tim Requested we add SCR systems to the emissions units to cover the entire industry- All members agreed.

**Matt asked the committee present for approval of the proposed courses and pathway- All members approved the proposed courses and pathway sequence**

Mike added holding up the program template "if I had an applicant come in showing me this and he had learned these skills I would hire him every time". Jerry and Chuck both agreed

Meeting adjourned 5:10pm