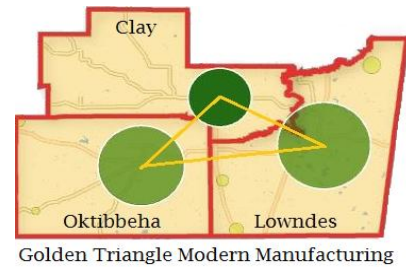


This deliverable contains East Mississippi Community College's Manufacturing Discovery Career and Technical Education (CTE) program that provides an entry point into CTE programs for students not meeting entry standards for the Manufacturing Technology and Engineering Division one or two-year programs. The Manufacturing Discovery program was developed through the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program Round 3 Grant Golden Triangle Modern Manufacturing Project TC-25149-13-60-A-28.

This document contains deliverable #9: Manufacturing Discovery developmental program curriculum.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind expressed or implied, with respect to such information, including any information linked sites and including, but not limited to, accuracy of the information of its completeness, timelines, usefulness, adequacy, continues availability, or ownership.

East Mississippi Community College
Golden Triangle Modern Manufacturing Project



Manufacturing Discovery Development Program – Strategy 1: Build programs that meet industry needs. Action 1.3: Develop a new 15 semester hour CTE program tied to NAM-endorsed certificates that provides concurrent basic skills education and Modern Manufacturing Basic Skills training (including soft skills) to accelerate entry into high demand career pathways for individuals who score low on the CRC, especially those with high school degrees (not eligible for Adult Ed programs).

Relevant Deliverable - Manufacturing Discovery Development Program Curriculum

In accordance with EMCC’s Golden Triangle Modern Manufacturing Project through the U.S. Department of Labor TAACCCT program, the college has developed a Manufacturing Discovery development program curriculum that embeds NAM endorsed and industry recognized credentials; contextualizes safety, lean, measurement and blueprint reading into the program; and utilizes online and technology-enabled systems as instructional tools.

The Manufacturing Discovery program provides an entry point into EMCC’s Manufacturing Technology and Engineering Division Career and Technical Education programs for students not prepared to enter the programs directly. The MTED Navigators assess each potential student using the Workkeys and Accuplacer assessments. Students that do not make the cut score for the program of their desired program are enrolled in the Manufacturing Discovery program. During the semester, student progress is closely monitored by MTED Navigators. The Navigators meet with students individually to discuss personalized academic plans while also communicating with the Manufacturing Discovery instructors to develop customized coursework to fit each students’ need. Academic remediation and test preparation is scheduled with our Adult Basic Education department during the semester. During these remediation classes, the student is assigned WorkKeys-related skills, math and English skills. Additionally, Career Ready 101 assignments are created by the Navigators and given to students for individualized, self-paced remediation that is used outside of the classroom. Career Ready 101 is a mandatory, monitored part of the program. Students that complete this semester will be eligible for entry-level operator jobs with local industries. Those who wish to continue on to a one or two-year CTE program should have a seamless transition given the semester’s coursework. The Manufacturing Discovery curriculum is located on p.97 in the EMCC Catalog and can be found by following the link:

<http://www.eastms.edu/students/Documents/catalog,2016-17v1-2,5-19-16.pdf>.

| Course Number | Course Name | Credentials | Technology | Notes |
|------------------------------------|---|---------------------|---|----------|
| IMM 1935 5 hours | Manufacturing Skills Basic | OSHA 10-Hour CPR | On-line technical training content provided by Amatrol*, Career Ready 101 | 1,2,3 &4 |
| IMM 1113 or CTE 1143 3 hours | Industrial Maintenance Core and Safety | NCCER* Core | NCCER* Connect | 1,2,3 &4 |

| | | | | |
|---|---|--|-------------------------------------|--|
| Academic | Various Academic courses customized to the individual's assessed needs to prepare for entry into 1 and 2 year Manufacturing programs. | | My Math Lab, Canvas, CareerReady101 | |
| Total 15-18 Hours Pre manufacturing program preparation | | | | |

*Amatrol – EMCC subscribes to the online Amatrol e-Learning system. Amatrol designs, develops and manufactures technical learning systems, highly interactive eLearning, hands-on simulators, and more to train tomorrow's global workforce for many diverse industries such as manufacturing, oil and gas, packaging, etc. The Manufacturing Skills Basic program relies on the Amatrol e-Learning system as an instructional tool that allows flexibility for the adult learner and supplementary material to enforce the topics.

*NCCER-The National Center for Construction Education and Research was developed with the support of more than 125 construction CEOs and various association and academic leaders who united to revolutionize training for the construction industry. Sharing the common goal of developing a safe and productive workforce, these companies created a standardized training and credentialing program for the industry. This progressive program has evolved into curricula for more than 70 craft areas and a complete series of more than 70 assessments offered in over 4,000 NCCER-accredited training and assessment locations across the United States. NCCER develops standardized construction and maintenance curriculum and assessments with portable credentials. These credentials are tracked through NCCER's registry that allows organizations and companies to track the qualifications of their craft professionals and/or check the qualifications of possible new hires. NCCER's registry also assists craft professionals by maintaining their records in a secure database.

*Career Ready 101- an interactive, web-based learning system. Within CR101, KeyTrain® is the complete interactive training system for the WorkKeys® assessment which provides a comprehensive learning system for common skills required by all jobs, based on the WorkKeys® assessment system.

Note 1 - Contextualized Safety: Instructors contextualized safety in IMM/CTE classes by relating OSHA safety to the Industrial workplace.

Note 2 - Contextualized Measurement: Instructors contextualized measurement in IMM/CTE classes by relating pressure/vacuum measurement, electrical measurement, and part measurement to the industrial workplace.

Note 3 - Contextualized Print Reading: Instructors contextualized print reading in IMM/CTE classes by relating part tolerances, electrical measurement tolerances, and use of prints for troubleshooting to the industrial workplace.

Note 4- Contextualized Lean Concepts: Instructors contextualized lean concepts in IMM/CTE classes by relating organization, maintaining of tools, maintaining work place and maintaining materials/supplies/waste products to the industrial workplace.