DEPARTMENT OF HIGHER EDUCATION & WORKFORCE DEVELOPMENT

New Program Report

Date Submitted:
08/30/2022

Institution
Mineral Area College

Site Information

Implementation Date:
01/01/2023 12:00:00 AM

Added Site(s):

Selected Site(s):

Mineral Area College, 5270 Flat River Road, Park Hills, MO, 63601

CIP Information

CIP Code:
150613

CIP Description:
A program that prepares individuals to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. Includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

CIP Program Title:
Manufacturing Engineering Technology/Technician

Institution Program Title:
Manufacturing Technology

Degree Level/Type

Degree Level:
Associate Degree

Degree Type:
Associate in Applied Science

Options Added:

Collaborative Program:
N

Mode of Delivery

Current Mode of Delivery

Classroom

Hybrid

Student Preparation

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Special Admissions Procedure or Student Qualifications required:
None

Specific Population Characteristics to be served:
n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:
Bachelor of Science in Manufacturing or related field. Verifiable tested workplace skills and/or certifications.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:
100%

Expectations for professional activities, special student contact, teaching/learning innovation:
The faculty will be expected to use various technologies in the classroom and lab environments. These include; personal computers, WIFI, Student Learning Management Systems, and stay current in the Manufacturing Technology Field and certification requirements of the industry.

Student Enrollment Projections Year One-Five

Year 1	**Full Time:** 12	**Part Time:** 6	
Year 2	**Full Time:** 12	**Part Time:** 6	
Year 3	**Full Time:** 12	**Part Time:** 6	**Number of Graduates:** 24
Year 4	**Full Time:** 12	**Part Time:** 6	
Year 5	**Full Time:** 12	**Part Time:** 6	**Number of Graduates:** 12

Percentage Statement:
75.00

Program Accreditation

Institutional Plans for Accreditation:
Upon approval of the Associate of Applied Science Degree from MDHEWD, the College will seek accreditation for the program from the Higher Learning Commission.

Students will also be eligible for certification opportunities through the following;
Manufacturing Skills Standards Council (MSSC) Safety Credential
Manufacturing Skills Standards Council (MSSC) Quality Control Credential
Manufacturing Skills Standards Council (MSSC) Processes and Production Credential
OSHA 30 General Industry Credential

Program Structure

Total Credits:
63

Residency Requirements:
15 credit hours to be earning from Mineral Area College.

General Education Total Credits:
20

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Major Requirements Total Credits:
46

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
EEE1970	3	Programmable Logic Controllers
TEC1560	3	Mfg. Process & Estimating
TEC1630	3	Principles of Engineering
TEC1580	3	Quality Control and Testing
TEC1790	3	Basic Numerical Control
TEC1920	3	Teamwork/Workplace Communication
TEC2050	3	Engineering Design and Development
TEC1610	3	Intro to Engineering Design
EEE1550	3	Electrical Systems
TEC1425	3	Elements of Automation
TEC040	3	Technical Writing
TEC1780	3	Blueprint Reading
TEC1930	3	General Industry Safety
TEC1710	3	Computer Integrated Mfg.
TEC1300	3	Computer Aided Design/Drafting
PAW1060	1	Preparation for Employment

Free Elective Credits:
0

Internship or other Capstone Experience:
None

Assurances

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

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I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

First and Last Name: ROGER MCMILLIAN

Email: rmcmillian@mineralrea.edu

Phone: 573-518-2157

ID#: _____ Student: _____

Communications-Oral – 1 course
ENG1440 Public Speaking + (3)
ENG1670 Interpersonal Communications I (3)

Computer Literacy – 1 Course
Any CIS course (1-3)

History/Political Science – 1 course
HIS1230 American History I (3)
HIS1240 American History II (3)
POS1180 American Political Systems + (3)

Mathematics – 2 courses
TEC1900 Technical Math I ^ (3)
TEC1910 Technical Math II ^ * (3)
MAT1180 Fundamentals of Algebra* (5)
MAT1185 Fundamentals of Algebra* (4)
MAT1205 Applications of College Math* (3)
MAT1240 Quantitative Reasoning* (3)
MAT1260 Elementary Statistics* (3)
MAT1270 Pre-Calc: Algebraic Reasoning* (3)
MAT1370 Pre-Calc: Trig & Geometric Reasoning* (3)
MAT1600 Calculus for Business/Soc Sciences (3)
MAT1650 Analytical Geometry & Calculus I (5)

Physical Science – 1 course
Any Science or Bio course (3-5)

^ Recommended for students not planning to transfer.
\+ Recommended for transfer students.
* Course has prerequisite. See MAC Catalog.

Gen Ed Cr. Hrs..... 17-25
Major Cr. Hrs..... 46
Total Cr. Hrs..... 63-68

MINERAL AREA COLLEGE

ASSOCIATE OF APPLIED SCIENCE
Manufacturing Technology
(Major Code: EG AP) CIP15.0613

Sem/Yr				Grade
_____	EEE1550	Electrical Systems	3	_____
_____	EEE1970	Programmable Logic Controllers	3	_____
_____	PAW1060	Prep for Employment	1	_____
_____	TEC1040	Technical Writing*^ OR		
	ENG1330	English Composition I +	3	_____
_____	TEC1300	Computer Aided Design/Drafting	3	_____
_____	TEC1425	Elements of Automation	3	_____
_____	TEC1560	Mfg. Process & Estimating	3	_____
_____	TEC1580	Quality Control & Testing	3	_____
_____	TEC1610	Introduction to Engineering Design	3	_____
_____	TEC1630	Principles of Engineering*	3	_____
_____	TEC1710	Computer Integrated Mfg*	3	_____
_____	TEC1780	Blueprint Reading	3	_____
_____	TEC1790	Basic Numerical Control	3	_____
_____	TEC1920	Teamwork/Workplace Communication	3	_____
_____	TEC1930	General Industry Safety	3	_____
_____	TEC2050	Engineering Design & Devel.*	3	_____
	Communications-Oral: (1 Course)			
_____	_____		3	_____
	Computer Literacy: (1 Course)			
_____	_____		1-3	_____
	History/Political Science: (1 Course)			
_____	_____		3	_____
	Mathematics: (2 Courses)			
_____	_____		3-5	_____
_____	_____		3-5	_____
	Science: (1 Course)			
_____	_____		3-5	_____
_____	**GUI1010**	**First Year Seminar**	1	_____
_____	**HIS0000**	**MO Higher Education Civics Exam**	0	_____
		Total Credit Hours	**63-68**	

GPA: _____

Advisor: _____ _____

NOTE: See graduation policies on back.

GRADUATION POLICIES: (Diplomas and Certificates)

1. An Application for Graduation form must be filed with the Registrar's Office by the end of the second week of the fall and spring terms and by the end of the first week of the summer term. Contact advisor for assistance.
2. All degree applicants are required to complete an Exit Exam and a Technical Skills Assessment.
3. All applicants are required to complete a graduation interview with the Career Placement Office.
4. A minimum institutional and cumulative career GPA of 2.0 is required for graduation.
5. Fifteen (15) hours of Mineral Area College credit must be included in the degree.

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Signature Required
Acknowledgement of Graduation Policies

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Date