New Program Report

Date Submitted:
06/03/2019

Institution
Missouri State University-West Plains

Site Information

Implementation Date:
8/1/2019 12:00:00 AM

Added Site(s):

Selected Site(s):

Missouri State University-West Plains, 128 Garfield, West Plains, MO, 65775

CIP Information

CIP Code:
150699

CIP Description:
Any instructional program in industrial production technologies not listed above.

CIP Program Title:
Industrial Production Technologies/Technicians, Other

Institution Program Title:
Technology

Degree Level/Type

Degree Level:
Associate Degree

Degree Type:
Associate of Science

Options Added:

Advanced Industrial Maintenance

Advanced Manufacturing Technology

Alternative Energy

Computer Graphics & Programming

General Technology

Technology Management

Collaborative Program:
N

Mode of Delivery

Current Mode of Delivery

Classroom

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Hybrid

Online

Student Preparation

Special Admissions Procedure or Student Qualifications required:
NA

Specific Population Characteristics to be served:
n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:
Full-time and part-time faculty are required to have completed a minimum of a masters degree or have substantial, specialized practical experience in order to teach the courses required for this degree program.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:
Approximately 28% of the courses for this program may be taught by full-time faculty and 72% may be taught by per course faculty.

Expectations for professional activities, special student contact, teaching/learning innovation:
Full-time faculty are strongly encouraged to pursue continuing education opportunities in their respective fields and to participate in professional organizations; professional development funds are provided by the university. All full-time faculty serve as student advisors.

Student Enrollment Projections Year One-Five

Year 1	**Full Time:** 6	**Part Time:** 6	
Year 2	**Full Time:** 7	**Part Time:** 7	
Year 3	**Full Time:** 8	**Part Time:** 8	**Number of Graduates:** 10
Year 4	**Full Time:** 9	**Part Time:** 9	
Year 5	**Full Time:** 10	**Part Time:** 10	**Number of Graduates:** 15

Percentage Statement:
n/a

Program Accreditation

Institutional Plans for Accreditation:
NA

Program Structure

Total Credits:
60

Residency Requirements:
Completion of last 15 credits in residence on the West Plains Campus or its extended campuses

General Education Total Credits:
27

Missouri Department of Higher Education

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Major Requirements Total Credits:
33

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
MGT 286	3	Business Communications
AGR 112	3	Intro. To Agricultural Business
TEC 165	3	Manufacturing Technology
AGR 115	3	Sustainable Agriculture and the Environment
CGP 110	3	Game Development I
CGP 160	3	Intro to 3D Modeling & Animation
CGP 250	3	3D Character Modeling \ Animation
TEC 100	3	Survey of Electronics
TEC 260	3	Alternative Energy: Biofuels
TEC 123	3	Employment in Mfg. Occ.
CGP 150	3	Intro to Digital Graphics
CGP 260	3	Advanced 3D Modeling Animation
TEC 111	3	Mfg. Materials & Processes
AGR 103	3	Plant Science
CGP 200	3	Mobile Game Development
TEC 112	3	Introduction To Supply Chain Mgt.
CGP 115	3	Game Art Drawing I
TEC 225	3	Logistics, Transportation & Distribution
CGP 270	3	Virtual Media Entrepreneurship
TEC 130	3	Introduction to Industry 4.0
TEC 232	3	Quality Management
TEC 240	3	PLCs and Sensors
CGP 220	3	Game Development II
TEC 299	3	Technology Internship
TEC 110	3	Print Reading and Basic Computer-Aided Drafting
TEC 299	3	Technology Internship
CGP 297	2	CGP Capstone
TEC 175	3	Welding Technology
TEC 250	3	Safety Management
TEC 275	3	Automated Manufacturing

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TEC 255	3	Project Management
AGR 143	3	Introductory Forestry
TEC 265	3	Alternative Energy: Solar
TEC 270	3	Alternative Energy: Wind
ECO 155	3	Principles of Macroeconomics
TEC 245	3	Mech. Sys. & Fluid Power
TEC 200	3	Applied Electricity & Electronics
CGP 145	3	Intro to Computer Programming
CGP 255	3	Graphics Programming I
TEC 230	3	Industrial Controls and Troubleshooting
CGP 265	3	Graphics Programming II
ACC 201	3	Introduction to Financial Accounting

Free Elective Credits:
0

Internship or other Capstone Experience:
A 2 hour capstone is required for all graduates.

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, CBHE-approved service region or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program within the geographically applicable area.

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.

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: MICHAEL ORF

Email: michaelorf@missouristate.edu

Phone: 417-255-7904

Associate of Science in Technology

Foundation Requirements	**Credit Hours**
Oral Communications	
COM 115 Fundamentals of Public Speaking	3
Written Communications and Information Literacy	
ENG 110 Writing I	3
Written Communications and Integrative and Applied Learning (choose one)	
ENG 221 Writing II: Writing for the Professions	
First-Year Seminar	
IDS 110 Student Success	2
Quantitative Literacy (choose one)	
MTH 135 Pre-Calculus I: Algebra or higher (except MTH 197 or MTH 297)	3

Natural World Requirements	**Credit Hours**
Physical Sciences	
PHY 100 Survey of Physics with Laboratory (4) (lab)	4
PHY 101 Physics by Inquiry for Educators (4) (lab)	

Human Culture Requirements	**Credit Hours**
Four different course codes from these areas	
Social and Behavioral Science	
ECO 155 Principles of Macroeconomics	6
PSY 121 Introductory Psychology	

Public Affairs Requirements	
US and MO Constitutions and American History	**Credit Hours**
PLS 101 American Democracy and Citizenship	3
Public Issues (choose one)	
CIS 200 Critical and Creative Thinking using Information Technology	3
TEC 105 Technology's Impact on Society	

Other Institution Requirements	**Credit Hours**
CIS 101 Computers for Learning	3
CGP 297 Computer Graphics and Programming Capstone or TEC 297 Technology Capstone	2

Computer Graphics and Programming Option	
Select 28 credit hours from the following:	**Credit Hours**
CGP 145 Intro to Computer Programming	
CGP 150 Intro to Digital Graphics	28
CGP 200 Mobile Game Development	

CGP 297 CGP Capstone
CGP 270 Virtual Media Entrepreneurship
CGP 110 Game Development I
CGP 115 Game Art Drawing I
CGP 160 Intro to 3D Modeling & Animation
CGP 220 Game Development II
CGP 250 3D Character Modeling \ Animation
CGP 255 Graphics Programming I
CGP 260 Advanced 3D Modeling Animation
CGP 265 Graphics Programming II

Advanced Manufacturing Technology Option

Select 28 credit hours from the following:	**Credit Hours**
TEC 100 Survey of Electronics	
TEC 110 Print Reading and Basic Computer-Aided Drafting (CAD)	
TEC 111 Mfg. Materials & Processes	
TEC 112 Intro. To Supply Chain Mgt.	
TEC 123 Employment in Mfg. Occ.	
TEC 165 Manufacturing Technology	28
TEC 175 Welding Technology	
TEC 200 Applied Electricity & Electronics	
TEC 245 Mech. Sys. & Fluid Power	
TEC 275 Automated Manufacturing	
TEC 299 Technology Internship	

Alternative Energy Option

Select 28 credit hours from the following:	**Credit Hours**
AGR 103 Plant Science	
AGR 112 Intro. To Agricultural Business	
AGR 115 Sustainable Agriculture and the Environment	
AGR 143 Introductory Forestry	
TEC 100 Survey of Electronics	28
TEC 200 Applied Electricity & Electronics	
TEC 260 Alternative Energy: Biofuels	
TEC 265 Alternative Energy: Solar	
TEC 270 Alternative Energy: Wind	
TEC 299 Technology Internship	

General Technology Option

Select 28 credit hours from any combination from the following departments:	**Credit Hours**
Agriculture (AGR), Business (ACC, BUS, EPR, FIN, INS, LAW, MGT, QBA), Computer (CGP,CIS, CSC), Engineering (EGR), Fire Science (FST), Law	28

Enforcement (LWE), Mathematics (MTH), Science (AST, BIO, BMS, CHM, ENV, GLG, GRY, PHY), Technology (TEC) and Enology and Viticulture (VIN).

Technology Management Option

Select 28 credit hours from the following:	**Credit Hours**
ACC 201 Introduction to Financial Accounting	
ECO 155 Principles of Macroeconomics	
MGT 286 Business Communications	
TEC 100 Survey of Electronics	
TEC 112 Introduction to Supply Chain Mgt.	
TEC 225 Logistics, Transportation & Distribution	28
TEC 232 Quality Management	
TEC 250 Safety Management	
TEC 255 Project Management (MSU-WP Specific Topic Coverage)	
TEC 299 Technology Internship	

Degree Requirements	**60**

NOTE: For a complete list of general education courses available at MSU-WP, please refer to the Associate of Arts in General Studies degree.