SWOSU
Southwestern Oklahoma State University

Request for Approval of Modification(s) to Program

First Name

Brett

Last Name

Chase

Person ID

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Email

brett.chase@swosu.edu

Department

Engineering Technology

Program Information

Official Degree Designation and Program Title

e.g. Associate in Science in Cybersecurity, Bachelor of Fine Arts in Music Performance, Master of Science in Accounting

Bachelor of Science in Applied Engineering Technology

Program Code

Please list the 3-digit OSRHE program code.

026

This program has approved options

Yes

Approved Program Options

Please list all current options within the program. Use a separate line for each option.

Computer Electronics Technology Option
Manufacturing Technology Option

Is this program part of a cooperative agreement?

No

Does this change impact an embedded certificate?

No

Does the CIP Code for this program need to be updated?

No

Type of Request(s)

Program Suspension?

No

Electronic Delivery of Existing Program

NOTE: Electronic delivery is recognized at the program level. If the existing program has options that are offered via electronic delivery and the program meets State Regents' policy for electronic delivery, the program MUST be

approved for electronic delivery.

[Yes ▾]

IPEDS has expanded the required reporting information regarding distance education in regards to degree programs and now requires information on three aspects of degree programs based on CIP code and degree level groupings. For more information regarding IPEDS reporting, go to the following website: https://nces.ed.gov/ipeds/use-the-data/distance-education-in-ipeds.

Distance Education Availability

○ **ALL of the courses in the program can be completed entirely online**

● **SOME of the courses in the program can be completed entirely online**

○ **NONE of the courses in the program can be completed entirely online**

For the program, including general education courses, please select the appropriate response to each of the following statements. For the purposes of these questions, a mandatory onsite component refers to a course requirement or activity in which a student MUST be physically on campus, such as orientation, laboratory requirements, meeting with faculty and is a part of the student's overall class performance and grade. For the purposes of these questions, onsite refers to the physical campus and NOT off-campus locations for internships, practica, clinicals, etc.

This program has a mandatory onsite component

[No ▾]

This program has a non-madatory onsite component*

[No ▾]

Option Additions?

[Yes ▾]

Option(s) to be added & credit hours required
List each new option on a separate line.

> Engineering Leadership with 39 credit hours.

Justification for option addiditon
Please provide a brief summary of the reason for the addition(s).

> An online option offers the flexibility for full-time professionals to advance their education while maintaining their work commitments.

Option Deletion?

[No ▾]

Option Name Change?

[No ▾]

Program Requirement Change(s)?

[Yes ▾]

Explanation of changes
Please provide a brief summary of changes being made.

12 hours of courses will be added to the required program core requirements, and 13 hours of applied courses will be removed from the core requirements. 12 hours of management electives will be removed. 15 hours of required courses will be added to the computer electronics technology option, 18 hours of required courses will be added to the manufacturing technology option, and three hours will be removed.

Total Credit Hour Change?

No

Justification for program requirement changes*

Please provide a brief summary of the reason for the program requirement changes.

The core requirement change will ensure that all courses offer both face-to-face and online options. Currently, the management electives include only two management courses. This modification will add the content depth required to maintain ATMAE accreditation and align all courses more closely with the principles of engineering management, providing greater flexibility and a more comprehensive educational experience

Program Reinstatement?

No

Program Name Change?

Yes

Current Program Name

Applied Engineering Management

New Program Name

Engineering Management

Justification for program name change

Please provide a brief summary of changes being made.

Engineering Management encompasses all options, whereas not all options are fully applied.

Degree Designation Change?

Changes formerly classified as substantive and non-substantive will now be combined as program requirement changes. (e.g. course credit hour changes, changes in courses required for graduation, changing credit hours required for electives, course prefix changes, course title changes, removing courses from list of electives)

No

Documents

If applicable, submit any documentation related to the requested action.

CURRENT

COURSE WORK REQUIREMENTS

Core Requirements		
CHEM	1004	General Chemistry
MATH	3413	Statistical Methods or
ECONO	2463	Business Statistics
ECONO	2363	Intro to Microeconomics
MFET	4020	Professional Certification
TECH	1101	Introduction to Technology
TECH	1713	Basic Electrical Science
TECH	2213	2D CAD
TECH	2413	Non-Metal Material
TECH	2513	Fabrication Processes 1
TECH	3133	Industrial Safety
TECH	3463	Manufacturing Operation 1
TECH	3613	Power Systems
TECH	4123	Industrial Supervision
TECH	4264	3D CAD
TECH	4433	Quality Control
TECH	4493	Manufacturing Operations 2
Management Elective		
ACCTG	2213	Principles of Financial Accounting
ACCTG	2313	Principles of Managerial Accounting
COMSC	1033	Computer Science 1
ECONO	2263	Into to Macroeconomics
ENTRP	1123	Into to Business
ENTRP	3123	Legal Environment of Business
MATH	1613	College Trigonometry
MATH	2823	Applied Calculus
MFET	4443	Material Handling/Facility Planning
MNGMT	3233	Management
MNGMT	3333	Human Resource Management
MRKT	3143	Principles of Marketing
TECH	4900	Orientation to Internship
TECH	4916	Industrial Internship
Computer Electronics Technology Option		
COMSC	1033	Computer Science 1
COMSC	1103	Intro to Information Systems
COMSC	2603	Network Security
COMSC	4043	Geographic Information Systems
MFET	3433	Automation and Control Systems
TECH	2713	Fundamental Electronics
TECH	3123	Excel for Engineers and Technologists
TECH	4853	Programmable Logic Controls
Manufacturing Technology Option		
TECH	3123	Excel for Engineers & Technologists
TECH	3173	Environmental Regulations
TECH	3413	Production Process
TECH	3513	Material Test & Analysis
TECH	3523	Fabrication Processes 2
TECH	4454	Computer Aided Manufacturing
TECH	4514	Machine Tool Process
TECH	4853	Programmable Logic Controls

PROPOSED

COURSE WORK REQUIREMENTS

Core Requirements		
CHEM	1004	General Chemistry
MATH	3413	Statistical Methods or
ECONO	2463	Business Statistics
ECONO	2363	Intro to Microeconomics
MFET	4020	Professional Certification
TECH	1101	Introduction to Technology
TECH	1713	Basic Electrical Science
TECH	2033	Engineering Ethics
TECH	2043	Engineering Project Management
TECH	2213	2D CAD
TECH	2413	Non-Metal Material
TECH	2513	Fabrication Processes 1
TECH	3113	Industrial Safety
TECH	3133	Risk Management and Analysis
TECH	3413	Production Process
TECH	3463	Manufacturing Operation 1
TECH	3613	Power Systems
TECH	4123	Industrial Supervision
TECH	4264	3D CAD
TECH	4433	Quality Control
TECH	4493	Manufacturing Operations 2
		Total Hours: 44
Management Elective		
ACCTG	2213	Principles of Financial Accounting
ACCTG	2313	Principles of Managerial Accounting
COMSC	1033	Computer Science 1
ECONO	2263	Into to Macroeconomics
ENTRP	1123	Into to Business
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MFET	4443	Material Handling/Facility Planning
MNGMT	3233	Management
MNGMT	3333	Human Resource Management
MRKT	3143	Principles of Marketing
TECH	4900	Orientation to Internship
TECH	4916	Industrial Internship
		Total Hours: 0
Computer Electronics Technology Option		
COMSC	1033	Computer Science 1
COMSC	1103	Intro to Information Systems
COMSC	2603	Network Security
COMSC	4043	Geographic Information Systems
MFET	3433	Automation and Control Systems
TECH	2233	Intro to UAS
TECH	2713	Fundamental Electronics
TECH	3123	Excel for Engineers and Technologists
TECH	3183	Lean Six Sigma Methodology
TECH	4143	Cross-Cultural Competencies
TECH	4283	Concurrent Engineering and Team Leadership
TECH	4373	Economic Decision Analysis
TECH	4853	Programmable Logic Controls
		Total Hours: 39 hours

Manufacturing Technology Option		
MFET	3433	Automation and Control Systems
MFET	4443	Material Handling/Facility Planning
TECH	2413	Non-Metallic Materials
TECH	2513	Fabrication Processes 1
~~TECH~~	~~3123~~	~~Excel for Engineers & Technologists~~
TECH	3153	Engineering Leadership & Management
TECH	3173	Environmental Regulations
TECH	3513	Materials Testing & Analysis
TECH	3523	Fabrication Processes 2
TECH	4373	Economic Decision Analysis
TECH	4454	Computer Aided Manufacturing
TECH	4514	Machine Tool Process
TECH	4853	Programmable Logic Controls
		Total Hours: 38
Engineering Leadership – New Option		
MNGMT	3233	Management
MRKTG	3143	Principles of Marketing
TECH	3123	Excel for Engineers and Technologists
TECH	3153	Engineering Leadership & Management
TECH	3173	Environmental Regulations
TECH	3183	Lean Six Sigma Methodology
TECH	3193	Human Factors and Ergonomics
TECH	4143	Cross-Cultural Competencies
TECH	4153	Supply Chain Management
TECH	4173	Concurrent Engineering and Team Leadership
TECH	4373	Economic Decision Analysis
TECH	4443	Material Handling & Facility Planning
TECH	4903	Manufacturing Enterprises
		Total Hours: 39

Package History

Date	User	Action	
9/9/2024 8:47:42 AM	**Chase, Brett**		**Added attachment 'Program%20Modification.pdf'**
9/9/2024 8:47:42 AM	**Chase, Brett**		**Added attachment 'Proposed%20Changes.docx'**
9/9/2024 8:47:42 AM	**Chase, Brett**		**Submitted 'Program Modification'**
9/9/2024 8:47:48 AM	**Wald, Trisha**		**Received**
9/9/2024 3:45:59 PM	**Wald, Trisha**		**Decision Approved on step 'FLOW-Deans'**
9/9/2024 3:46:02 PM	**FLOW-Provost's Executive Assistant**		**Received**