### MAJOR REQUIREMENTS FOR A BS DEGREE IN APPLIED ENGINEERING & TECHNOLOGY MANAGEMENT

Total credit hours required: 120.0 minimum

**DEGREE:** BS  
**MAJOR:** AETM  
**OPTION:** Advanced Manufacturing Technology

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**Note to the student:** This form is provided as a guide. It is your responsibility to consult regularly with your advisor to be aware of changes and curriculum details which are not incorporated on this form.

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### REQUIREMENTS AND POLICIES FOR THE BS APPLIED ENGINEERING & TECHNOLOGY MANAGEMENT MAJOR

#### A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Applied Engineering & Technology Management major by the Office of Admissions upon admission to the University.
2. Admission into the Applied Engineering & Technology Management major from other departments is upon approval of the chairperson of the Applied Engineering, Safety & Technology Department.
3. Non-degree and continuing education students must be admitted to the Applied Engineering & Technology Management major by the Office of Admissions.

#### B. Policies for Retention in the Major

1. University requirements for retention.

#### C. Policies for Completion of the Major

1. Completion of all University curricular requirements.
2. English 312, 316, 318, or 319 satisfies the upper-level writing course requirement under the General Education Curriculum.
## MAJOR SEQUENCE AND DEGREE REQUIREMENTS

**Major:** BS APPLIED ENGINEERING & TECH MGMT  
**Option:** Advanced Manufacturing Technology  
**Major Field Requirements:** 60.0 credits  
**Other Requirements:** 22.0 - 24.0 credits

When applicable, up to six of the REQUIRED RELATED courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

### DEPARTMENTAL REQUIREMENTS (60.0 credits)

#### Technical Option (36.0 credits)
- ITEC 120 Energy & Power Systems 3.0
- ITEC 130 Production Materials & Processes 3.0
- ITEC 241 Drafting Communications 3.0
- ITEC 271 Processing Nonmetallic Materials 3.0
- ITEC 281 Metallic Materials & Prod. Methods 3.0
- ITEC 325 Power Conversion & Control 3.0
- ITEC 342 Computer-Aided Engineering Drawing 3.0
- ITEC 375 Polymer & Ceramic Technology 3.0
- ITEC 376 Wood Technology 3.0
- ITEC 382 Automated Manufacturing 3.0
- ITEC 425 Industrial Robotic Systems 3.0
- ITEC 448 Machine Tool Design 3.0

#### Technology Management Core (15.0 credits)
- OSEH 120 Safety, Health & Environ. Issues 3.0
- ITEC 492 Technical Entrepreneurship Total 3.0
- ITEC 494 Quality Management 3.0
- BUAD 251 Principles of Management 3.0
- BUAD 452 Production & Operation Mgmt 3.0

#### Elective Courses in Technology Management (9.0 credits)
Select three courses from the following:
- ITEC 300 Internship* 3.0
- ITEC 400 Internship* 3.0
- ITEC 392 Intro. to Industrial Training 3.0
- OSEH 221 Industrial Fire Prevention 3.0
- OSEH 320 Safety Engineering Principles 3.0
- OSEH 323 Human Factors in OSEH 3.0
- OSEH 333 Intro to System Safety 3.0
- BUAD 161 Intro to Financial Accounting 3.0
- BUAD 352 Human Resource Management 3.0
- BUAD 353 Labor-Management Relations 3.0
- BUAD 357 International Management 3.0
- PSYC 329 Industrial/Organization Psychology 3.0
- SOCY 318 Sociology Complex Organizations 3.0

**NOTE:** *Maximum of 6 credits internship may be counted toward degree*

**NOTE:** Many courses have prerequisites. Please consult University Catalog or advisor.

### REQUIRED RELATED (22.0 - 24.0 credits)

#### Science (6.0 - 8.0 credits)
Select **two** science courses from the following list:
- CHEM 101 Chem! Better Things/Better Living 3.0
- CHEM 103 General, Organic & Biochem I 3.0
- CHEM 104 General, Organic & Biochem II 3.0
- CHEM 205 Molecular Basis of Color & Form 4.0
- PHYS 103 Elements of Physics* 4.0
- PHYS 104 Applied Physics* 4.0
- PHYS 131 Physics I with Algebra 4.0
- PHYS 132 Physics II with Algebra 4.0

**NOTE:** *Can receive credit for either PHYS 103 or 104, but not both.*

#### Economics (6.0 credits)
- ECON 101 Principles of Macroeconomics 3.0
- ECON 102 Principles of Microeconomics 3.0

#### Mathematics (7.0 credits)
- MATH 130 Elements of Statistics 3.0

**AND select one of the following:**
- MATH 151 Calculus for Mgmt, Life and SS 4.0
- MATH 160 Precalculus 4.0
- MATH 161 Calculus I 4.0

#### English - Advanced Writing (3.0 credits)
Choose one of the following:
- ENGL 312 Technical Writing 3.0
- ENGL 316 Business Writing 3.0
- ENGL 318 Web Writing 3.0
- ENGL 316 Science Writing 3.0

#### General Electives (as necessary)

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