### Departmental/Program Major Courses (58 credits)

**Required Major Courses (44 credits)**

- (3) MET 10200 Production Design & Specifications
- (3) MET 11100 Applied Statics
- (3) MET 14300 Materials and Processes I
- (3) MET 14400 Materials and Processes II
- (1) MET 16200 Computational Analysis Tools for MET
- (4) MET 21100 Applied Strength of Materials
- (3) MET 21300 Dynamics
- (3) MET 21400 Machine Elements
- (3) MET 22000 Heat/Power
- (3) MET 23000 Fluid Power
- (3) MET 24500 Manufacturing Systems
- (3) MET 28400 Introduction to Industrial Controls
- (3) MET 31300 Fluid Mechanics
- (3) MET 32000 Thermodynamics
- (3) MET 34600 Advanced Materials in Manufacturing

**Major Selectives* - Select 5 of the following courses by category (14 credits)**

- (2) CGT Selective (CGT 11000 or CGT 16300)
- (3) Technical Selective
- (6) MET electives (see Electives section)
- (3) MET Capstone Selective (limited portion of Electives section listing)

### Other Departmental/Program Course Requirements (62 credits)

- (3) Humanities Foundational Outcome Selective (*satisfies Human Cultures Humanities for core*)
- (3) Social Science Foundation Outcome Selective (*satisfies Human Culture Behavioral/Social Science for core*)
- (3) IET 45100 Monetary Analysis
- (3) TECH 12000 Design Thinking in Technology (*satisfies Information Literacy Selective for core*)
- (na) TECH 12000 (*satisfies Science, Technology & Society Selective for core*)
- (3) TECH 32000 Technology & the Organization
- (3) TECH 33000 Technology & the Global Society
- (4) PHYS 22000 General Physics (*satisfies Science Selective for core*)
- (4) PHYS 22100 General Physics (*satisfies Science Selective for core*)
- (3) CHM 11100 General Chemistry
- (3) Freshman Composition (*satisfies Written Communication for core*)
- (3) ENGL 42100 Technical Writing
- (3) COM 11400 Fundamentals of Speech Communications (*satisfies Oral Communication for core*)
- (3) COM 32000 Small Group Discussion
- (3) MA 15800 Precalculus; Functions and Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- (3) MA 22100 Calculus for Technology I
- (3) MA 22200 Calculus for Technology II
- (3) STAT 30100 Statistical Methods
- (3) CNIT 17500 Visual Basic Programming
- (3) ECET 22400 Electronics Systems

### Electives

- (3) MET 30200
- (3) MET 34900
- (3) MET 42100
- (3) MET 44301
- (3) MET 31100
- (3) MET 38200
- (3) MET 42600
- (3) MET 45100
- (3) MET 31700
- (3) MET 40000
- (3) MET 43200
- (3) MET 48600
- (3) MET 33400
- (3) MET 41100
- (3) MET 43600
- (3) MET 49000

### University Core Requirements

- Human Cultures Humanities
- Science, Technology & Society Selective
# Mechanical Engineering Technology

## Suggested Arrangement of Courses:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 1st Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 1st Year</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>3</td>
<td>MA 15800 Precalc: Func&amp;Trig</td>
<td>NA</td>
<td>3</td>
<td>MA 22100 Calc for Tech I</td>
<td>MA 15800/ALEKS</td>
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<tr>
<td>2</td>
<td>CGT Selective</td>
<td>NA</td>
<td>3</td>
<td>MET 11100 Applied Statics</td>
<td>MA 15800/MET 16200</td>
</tr>
<tr>
<td>1</td>
<td>MET 16200 Comp Anal Tools</td>
<td>NA</td>
<td>3</td>
<td>MET 14300 Matls &amp; Proc I</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>MET 14400 Matls&amp;Proc II</td>
<td>NA</td>
<td>4</td>
<td>PHYS 22000 Geni Physics</td>
<td>NA</td>
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<tr>
<td>3</td>
<td>TECH 12000 DesThink inTech</td>
<td>NA</td>
<td>3</td>
<td>Freshman Composition</td>
<td>NA</td>
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<tr>
<td>3</td>
<td>COM 11400 Speed</td>
<td>NA</td>
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<tr>
<th>Credits</th>
<th>Fall 2nd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 2nd Year</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>3</td>
<td>MET 10200 Prod Des &amp; Specs</td>
<td>CGT sel/MET 16200</td>
<td>3</td>
<td>MET 21400 Machine Elements</td>
<td>MET 21100/MET 21300</td>
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<tr>
<td>4</td>
<td>MET 21100 Strength of Matls</td>
<td>MET 11100/MA 22100 conc</td>
<td>3</td>
<td>MET 23000 Fluid Power</td>
<td>MET 11100 or PHYS 22000</td>
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<tr>
<td>3</td>
<td>MET 21300 Dynamics</td>
<td>MET 11100/MA 22100</td>
<td>3</td>
<td>MET 24500 Mfg Systems</td>
<td>MET 14300 or 14400; CGT selective</td>
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<tr>
<td>4</td>
<td>PHYS 22100 General Phys</td>
<td>PHYS 22000</td>
<td>3</td>
<td>MET 28400 Intro to Ind Contrls</td>
<td>ECET 22400</td>
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<tr>
<td>3</td>
<td>ECET 22400 Electronics Sys</td>
<td>MA 15800</td>
<td>3</td>
<td>Humanities Found Out. Selective</td>
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<tr>
<th>Credits</th>
<th>Fall 3rd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 3rd Year</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>3</td>
<td>MA 22200 Calc for Tech II</td>
<td>MA 22100</td>
<td>3</td>
<td>MET 32000 Thermodynamics</td>
<td>MET 22000</td>
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<tr>
<td>3</td>
<td>CHM 11100 General Chem</td>
<td>NA</td>
<td>3</td>
<td>MET 34600 Adv. Matls in Mfg</td>
<td>CHM 11100/MET 24500</td>
</tr>
<tr>
<td>3</td>
<td>CNIT 17500 Visual Basic Prog</td>
<td>NA</td>
<td>3</td>
<td>STAT 30100 Stat. Methods</td>
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<tr>
<td>3</td>
<td>MET 22000 Heat/Power</td>
<td>MA 22100/PHYS 22000</td>
<td>3</td>
<td>ECON 21000 Econ. Principles</td>
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<tr>
<td>3</td>
<td>TECH 32000 Tech &amp; Org</td>
<td>TECH 12000</td>
<td>3</td>
<td>TECH 33000 Tech &amp; Global Soc.</td>
<td>TECH 12000</td>
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<tr>
<th>Credits</th>
<th>Fall 4th Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 4&quot; Year</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>3</td>
<td>MET Elective</td>
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<td>MET Elective</td>
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<tr>
<td>3</td>
<td>Technical Selective</td>
<td>MA 22100, MET 23000</td>
<td>3</td>
<td>ENGL 42100 Technical Writing</td>
<td>Freshman Comp</td>
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<tr>
<td>3</td>
<td>MET 31300 Fluid Mechanics</td>
<td>MA 22100, MET 23000</td>
<td>3</td>
<td>Social Science Found. Outcome</td>
<td>NA</td>
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<tr>
<td>3</td>
<td>COM 32000 Small Group Disc</td>
<td>COM 11400</td>
<td>3</td>
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<tr>
<td>3</td>
<td>IET 45100 Monetary Anal</td>
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</table>

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion.
MET SUPPLEMENTAL INFORMATION
All prerequisites must be met.

CGT SELECTIVE
CGT 11000 Technical Graphics Communications
CGT 16300 Graphical Communication and Spatial Analysis

TECHNICAL SELECTIVE
A 300-400 level ENGR, ECET, MFET, CS or elective IET course.
A CHM, MA, PHYS or STAT course beyond what is required.
Any MET elective course

ANSC 230 Physiology of Domestic Animals
AT 27200 Intro to Composite Technology
AT 27800 Nondestructive Testing
AT 47800 Advanced Nondestructive Testing
BCHM 22100 Analytical Biochemistry
BCM 23000 Mechanical/Electrical Systems
BCM 31500 Mechanical Construction Estimating
BCM 38000 Concrete Construction
BIOL 20300 Human Anatomy and Physiology
BIOL 22100 Introduction to Microbiology
CGT 226 Into to Constraint Based Modeling
CHM 11200/CHM 11600 General Chemistry II
CHM 22300 Principles of Biochemistry
CHM 48100 Environmental Chemistry
CE 35000 Environmental Engineering
CE 35500 Environmental Sustainability

MET ELECTIVE
MET 30200 CAD in the Enterprise (Spring Only)
MET 31100 Experimental Strength of Materials (Fall only)
MET 31700 Machine Diagnostics (Spring Only)
MET 33400 Advanced Fluid Power (Spring Only)
MET 34900 Stringed Instrument Design and Manufacture
MET 38200 Controls and instrumentation for Automation (Spring Only)
MET 40000 Mechanical Design
MET 41100 Introduction to the Finite Element Method (Spring Only)
MET 42100 Air Conditioning and Refrigeration (Fall only)

MET CAPSTONE SELECTIVE
MET 33400 Advanced Fluid Power (Spring Only)
MET 400 Mechanical Design
MET 42100 Air Conditional and Refrigeration (Fall only)
MET 43200 Hydraulic Motion Control Systems (Spring only)

MET 42600 Internal Combustion Engines (Fall only)
MET 43200 Hydraulic Motion Control Systems (Spring Only)
MET 43600 Pneumatic Motion Control Systems (Fall only)
MET 44301 Joining Processes
MET 45100 Manufacturing Quality Control (Fall only)
MET 48600 Fundamentals of Motorsports
MET 490 Green Manufacturing and Sustainability
MET 49000 Multidisciplinary Capstone I (Fall only)
MET 49000 Multidisciplinary Capstone II (Spring Only)

FRESHMAN COMPOSITION
ENGL 10600

HUMANITIES FOUNDATIONAL SELECTIVE: see http://www.purdue.edu/provost/initiatives/curriculum/course.html

BEHAVIORAL/SOCIAL SCIENCE FOUNDATIONAL SELECTIVE: see http://www.purdue.edu/provost/initiatives/curriculum/course.html

ECONOMICS/FINANCE SELECTIVE
CSR 3420 Personal Finance
ECON 2100 Principles of Economics
ECON 25100 Microeconomics
ECON 25200 Macroeconomics
MGMT 45500 Legal Background for Business I