

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) ECON 21000 Economic Principles
- _____ (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

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|----------------------------|----------------------------|----------------------------|----------------------------|
| _____ (3) <u>MET 30200</u> | _____ (3) <u>MET 34900</u> | _____ (3) <u>MET 42100</u> | _____ (3) <u>MET 44301</u> |
| _____ (3) <u>MET 31100</u> | _____ (3) <u>MET 38200</u> | _____ (3) <u>MET 42600</u> | _____ (3) <u>MET 45100</u> |
| _____ (3) <u>MET 31700</u> | _____ (3) <u>MET 40000</u> | _____ (3) <u>MET 43200</u> | _____ (3) <u>MET 48600</u> |
| _____ (3) <u>MET 33400</u> | _____ (3) <u>MET 41100</u> | _____ (3) <u>MET 43600</u> | _____ (3) <u>MET 49000</u> |

University Core Requirements

Human Cultures Humanities



Science, Technology & Society Selective



Human Cultures Behavioral/Social Science _____
 Information Literacy _____
 Science Selective _____
 Science Selective _____

Written Communication _____
 Oral Communication _____
 Quantitative Reasoning _____

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

Degree Works is knowledge source for specific requirements and completion

Revised 5/2013 (effective Fall 2013)

Mechanical Engineering Technology

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
3	MA 15800 Precalc: Func&Trig	NA	3	MA 22100 Calc for Tech I	MA 15800/ALEKS
2	CGT Selective	NA	3	MET 11100 Applied Statics	MA 15800/MET 16200
1	MET 16200 Comp Anal Tools	NA	3	MET 14300 Matls & Proc I	NA
3	MET 14400 Matls&Proc II	NA	4	PHYS 22000 Genl Physics	NA
3	TECH 12000 DesThink inTech	NA	3	Freshman Composition	NA
3	COM 11400 Speed	NA			
15			16		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	MET 10200 Prod Des & Specs	CGT sel/MET 16200	3	MET 21400 Machine Elements	MET 21100/MET 21300
4	MET 21100 Strength of Matls	MET 11100/MA 221 conc	3	MET 23000 Fluid Power	MET 11100 or PHYS 22000
3	MET 21300 Dynamics	MET 11100/MA 22100	3	MET 24500 Mfg Systems	MET 14300 or 14400; CGT selective
4	PHYS 22100 General Phys	PHYS 22000	3	MET 28400 Intro to Ind Contrls	ECET 22400
3	ECET 22400 Electronics Sys	MA 15800	3	Humanities Found Out. Selective	NA
17			15		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	MA 22200 Calc for Tech II	MA 22100	3	MET 32000 Thermodynamics	MET 22000
3	CHM 11100 General Chem	NA	3	MET 34600 Adv. Matls in Mfg	CHM 11100/MET 24500
3	CNIT 17500 Visual Basic Prog	NA	3	STAT 30100 Stat. Methods	
3	MET 22000 Heat/Power	MA 22100/PHYS 22000	3	ECON 21000 Econ. Principles	
3	TECH 32000 Tech & Org	TECH 12000	3	TECH 33000 Tech & Global Soc.	TECH 12000
15			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4 th Year	Prerequisite
3	MET Elective		3	MET Elective	
3	Technical Selective		3	MET Capstone Selective	
3	MET 31300 Fluid Mechanics	MA 22100, MET 23000	3	ENGL 42100 Technical Writing	Freshman Comp
3	COM 32000 Small Group Disc	COM 11400	3	Social Science Found. Outcome	NA
3	IET 45100 Monetary Anal		3		
15			12		

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 Intro 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 Engineering Environmental Sustainability

CNIT 10500 C Language Programming

ENTM 21800 Introduction to Forensic Sciences

FNR 30100 Wood Products/Wood Processes

FNR 31100 Wood Structure, Identification and Properties

FNR 41800 Properties of Wood Related to Manufacturing

FNR 42500 Secondary Wood Products Manufacturing

FS 22200 Safety of Foods

HSCI 31200 Radiation Science Fundamentals

IE 47700 Work Methods and Measurement

IE 57700 Human Factors in Engineering

IT 10400 Industrial Organization

IT 33000 Industrial Sales and Sales Management

IT 34500 Automatic Identification and Data Capture

IT 35100 Occupational Safety and Health

IT 43400 Global Transportation and Logistics Management

MA 26100 Multivariate Calculus

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 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)

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 43600 Pneumatic Motion Control Systems (Fall only)

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