

**Departmental/Program Major Courses (120 credits)**

**Required Major Courses (44 credits)**

- \_\_\_\_\_ (3) MET 10200 – Production Specifications
- \_\_\_\_\_ (3) MET 11100 – Applied Statics
- \_\_\_\_\_ (1) MET 11300 -- Mechanics Applications
- \_\_\_\_\_ (3) MET 14300 – Materials and Processes I
- \_\_\_\_\_ (3) MET 14400 – Materials and Processes II (MET Gateway Course)
- \_\_\_\_\_ (1) MET 16200 – Computational Analysis Tools
- \_\_\_\_\_ (3) MET 23000 -- Fluid Power
- \_\_\_\_\_ (3) MET 24500 – Manufacturing Systems
- \_\_\_\_\_ (3) MET 28400 – Introduction to Industrial Controls
- \_\_\_\_\_ (3) MET 38200 – Controls and Instrumentation for Automation
- \_\_\_\_\_ (3) MFET 34400 – Automated Manufacturing Processes
- \_\_\_\_\_ (3) MFET 34800 – Industrial Robots and Motion Control
- \_\_\_\_\_ (3) MFET 37400 – Manufacturing Integration
- \_\_\_\_\_ (3) MFET 44600 – Advanced Manufacturing Operations
- \_\_\_\_\_ (3) MFET 48000 – Project Planning for Integration
- \_\_\_\_\_ (3) MFET 48100 – Integration of Manufacturing Systems

**MFET Selectives - (13 credits)**

- \_\_\_\_\_ (3) Manufacturing Graphics Selective (CGT 22600)
- \_\_\_\_\_ (3) Manufacturing Selective
- \_\_\_\_\_ (3) Technical Elective
- \_\_\_\_\_ (4) Free Elective

**Other Departmental/Program Course Requirements (63 credits)**

- \_\_\_\_\_ (3) COM 11400 - Fundamentals of Speech Communication (*satisfies Oral Communication for core*)
- \_\_\_\_\_ (3) ENGL/COM Selective
- \_\_\_\_\_ (3) ENGL 42100 – Technical Writing
- \_\_\_\_\_ (3) IET 45100 or TLI 33400 – Engineering Economics
- \_\_\_\_\_ (3) MA 15800 – Precalculus – Functions and Trigonometry
- \_\_\_\_\_ (3) MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning for core*)
- \_\_\_\_\_ (3) MA 16021 - Applied Calculus II and Differential Equations
- \_\_\_\_\_ (3) ECET 22400 – Electronic Systems
- \_\_\_\_\_ (3) ECET 38001 --- Global/Professional Issues
- \_\_\_\_\_ (3) CNIT 17500 – Visual Basic Programming
- \_\_\_\_\_ (3) CHM 11100 – General Chemistry
- \_\_\_\_\_ (4) PHYS Selective (choose from PHYS 218, PHYS 220, PHYS 172) (*satisfies Science for core*)
- \_\_\_\_\_ (3) TECH 12000 - Design Thinking in Technology (*satisfies Information Literacy and Science, Technology & Society for core*)
- \_\_\_\_\_ (3) Science Selective
- \_\_\_\_\_ (3) CNIT or CS Selective (CNIT 10500, CS 15800 or CS 15900)
- \_\_\_\_\_ (3) English Composition Selective (*satisfies Written Communication for core*)
- \_\_\_\_\_ (3) General Education Human Cultures: Humanities Selective (*satisfies Human Cultures Humanities for core*)
- \_\_\_\_\_ (3) General Education Human Cultures: Behavior/Social Sciences *satisfies Human Cultures: Behavioral Sciences for core*)
- \_\_\_\_\_ (3) Humanities/Social Science Elective
- \_\_\_\_\_ (2) CGT Selective (choose from CGT 11000 or CGT 16300)
- \_\_\_\_\_ (3) Statistics/Quality Selective (choose between STAT 301 or IT 342)

**University Core Requirements**

Human Cultures: Behavioral/Social Sciences	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	_____
Human Cultures: Humanities	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	_____
Information Literacy	<input type="checkbox"/>	_____	Science, Technology & Society	<input type="checkbox"/>	_____
Oral Communication	<input type="checkbox"/>	_____	Written Communication	<input type="checkbox"/>	_____
Quantitative Reasoning	<input type="checkbox"/>	_____			

\*\*\*\*\*

**The student is ultimately responsible for knowing and completing all degree requirements.**  
**Degree Works is the knowledge source for specific requirements and completion.**

Fall 1 <sup>st</sup> Year	CR	GR	Sem	Fulfilled by	Spring 1 <sup>st</sup> Year	CR	GR	Sem	Fulfilled by
MET 14400 Materials and Processes II	3				CHM 11100 General Chemistry	3			
Freshman Composition Selective	3				Humanities Selective*	3			
Free Elective	1				COM 11400 Fund of Speech Communication*	3			
MA 15800 Precalculus (Prereq: ALEKS score of 60%)	3				MA 16010 Applied Calculus I* (Prereq: ALEKS Score of 75%)	3			
TECH 12000 Design Thinking in Tech.*	3				MET 14300 Materials and Processes I	3			
					MET 16200 Computational Analysis Tools	1			
<b>TOTAL CREDIT HOURS</b>	<b>13</b>				<b>TOTAL CREDIT HOURS</b>	<b>16</b>			

Fall 2 <sup>nd</sup> Year	CR	GR	Sem	Fulfilled by	Spring 2 <sup>nd</sup> Year	CR	GR	Sem	Fulfilled by
MA 16021 Applied Calculus II/Diff Eqns (Prereq: MA 16010 with grade of C- or better)	3				MET 10200 Production Specifications (Prereqs: CGT Selective and MET 16200)	3			
MET 11100 Applied Statics (Prereqs: MA 15800 and MET 16200)	3				MET 11300 Mechanics Applications (Prereq: MET 11100)	1			
ECET 22400 Electronic Systems (Prereq: MA 15300 or MA 16010)	3				MET 24500 Manufacturing Systems (Prereqs: (CGT 11000 or CGT 16300) and (MET 14300 or MET 14400))	3			
Behavioral/Social Science Selective*	3				MET 28400 Intro to Industrial Controls (Prereq: ECET 22400)	3			
Computer Graphics Selective	2				Physics Selective	4			
					CNIT 17500 Visual Basic Programming	3			
<b>TOTAL CREDIT HOURS</b>	<b>14</b>				<b>TOTAL CREDIT HOURS</b>	<b>17</b>			

Fall 3 <sup>rd</sup> Year	CR	GR	Sem	Fulfilled by	Spring 3 <sup>rd</sup> Year	CR	GR	Sem	Fulfilled by
MET 23000 Fluid Power (Prereqs: (MET 11100 or PHYS 22000) and MA 16010)	3				MET 38200 Cntrls/Instr for Automation (Prereq: MET 28400)	3			
MFET 34400 Automated Mfg Processes (Prereq: MET 24500)	3				ENGL 42100 Technical Writing (Prereq: ENGL 10600)	3			
MFET 37400 Mfg Integration I (Prereq: MET 28400)	3				CNIT or CS Selective	3			
Manufacturing Graphics Selective	3				Manufacturing Selective	3			
Science Selective	3				Statistics or Quality Selective	3			
<b>TOTAL CREDIT HOURS</b>	<b>15</b>				<b>TOTAL CREDIT HOURS</b>	<b>15</b>			

Fall 4 <sup>th</sup> Year	CR	GR	Sem	Fulfilled by	Spring 4 <sup>th</sup> Year	CR	GR	Sem	Fulfilled by
MFET 34800 Ind Robots/Motion Ctrl (Prereq: MET 28400)	3				MFET 48100 Integration of Mfg Systems (Prereq: MFET 48000)	3			
MFET 44600 Advanced Mfg Operations	3				English/Communication Selective	3			
MFET 48000 Proj Plan for Integration (Prereq: MFET 37400)	3				Humanities/Social Science Selective	3			
IET 45100 or TLI 33400 Monetary Analysis for Industrial Decisions	3				Technical Selective	3			
ECET 38001 Global Professional Issues	3				Free Elective	3			
<b>TOTAL CREDIT HOURS</b>	<b>15</b>				<b>TOTAL CREDIT HOURS</b>	<b>15</b>			

Refer to \_\_\_\_\_ for a complete list of requirements, options for selectives and pre-requisites.

\*Fulfills University core.

- 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.

\*\*\*\*\*

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

**Degree Works is knowledge source for specific requirements and completion.**

\*\*\*\*\* Updated 5/27/2014