



Mech Engr Tech BS

IU Indianapolis School of Engr & Tech (TECH)

[Career Options](#) | [Financial Aid Options](#)

Student's Catalog Year: Fall 2017–Summer 2018

Total Degree Map Credits: 120

Description: Mechanical Engineering Technology is a hands-on program that teaches the generation, transmission, and utilization of mechanical and fluid energy, as well as the design and production of tools, machines, and their products. Graduates of the MET program are qualified for positions as Production, Design, Project, or Quality engineers.

C Critical Courses: Courses that students should complete by specific points during their degree or certificate program.

M Milestones: Conditions or activities that students should complete by specific points during their degree or certificate program.

Completing a critical course or milestone by the associated term is considered crucial to on-time graduation.

Year One (30 credits)

Fall Term	Minimum Grade	Credits	Spring Term	Minimum Grade	Credits
Reading, Writing, and Inquiry I Course Details: Also meets Gen Ed Core Communication - Writing Competency Required Semester of Completion: Year 4, Spring		3	Elementary Chemistry I C Critical Course Course Details: Also meets Gen Ed Core Life & Physical Sciences Competency Required Semester of Completion: Year 3, Fall		3
Pre-Calculus C Critical Course Course Details: Also meets Gen Ed Analytical Reasoning (Math) P: MATH 11100 with a C or better or appropriate placement on the ALEKS placement test. Required Semester of Completion: Year 1, Spring	C	5	Applied Statics C Critical Course Course Details: P: TECH 10500 AND C: MATH 15400 or 15900 Required Semester of Completion: Year 1, Spring		3
Discovering Technology Required Semester of Completion: Year 1, Fall		1	Introduction to Design C Critical Course Course Details: P: MET 10400 AND TECH 10500 Required Semester of Completion: Year 4, Spring		3
Technical Graphics Communication C Critical Course Course Details: C: MATH 15300 OR MATH 15900 Required Semester of Completion: Year 1, Fall		3	Industrial Organization C Critical Course Required Semester of Completion: Year 4, Spring		3
Introduction to Engr Tech C		3	Fundamentals of Speech Communication		3

Critical Course

Course Details: P or C: MATH 11100 and ENG-W 131

Required Semester of Completion: Year 1, Fall

Total 15

Course Details: Also meets Gen Ed Core

Communication - Speaking & Listening Competency

Required Semester of Completion: Year 4, Spring

Total 15

**Year Two
(30 credits)**

Fall Term	Minimum Grade	Credits	
Calculus for Technology I c	C	3	
<p>Critical Course Course Details: Also meets Gen Ed Analytical Reasoning (Math) P: MATH 15900 with a grade of C or better OR P: MATH 15300 AND MATH 15400, both with grades of C or better Required Semester of Completion: Year 2, Fall</p>			
Applied Strength for Materials c		4	
<p>Critical Course Course Details: C: Students must take this course with TCM 218 P: MET 11100 AND C: MATH 22100 with a grade of C or better Required Semester of Completion: Year 2, Fall</p>			
Introduction to Engineering Technical Reports c		1	
<p>Critical Course Course Details: C: Students must take this course with MET 21100 P: ENG-W 131 Required Semester of Completion: Year 2, Fall</p>			
Dynamics		3	
<p>Course Details: P: MET 11100 AND C: MATH 22100 with a grade of C or better Required Semester of Completion: Year 4, Spring</p>			
General Physics I c	C	4	
<p>Critical Course Course Details: Also meets Gen Ed Core Life & Physical Sciences Competency P: MATH 15300 AND MATH 15400 with a grade of C or better OR P: MATH 15900 with a grade of C or better Required Semester of Completion: Year 2, Fall</p>			
		Total	15

Spring Term	Minimum Grade	Credits	
Calculus for Technology II c	C	3	
<p>Critical Course Course Details: Also meets Gen Ed Analytical Reasoning (Math) P: MATH 22100 with a grade of C or better Required Semester of Completion: Year 4, Spring</p>			
Machine Elements c		3	
<p>Critical Course Course Details: P: PHYS 21800 with a grade of C or better AND MET 21100 Required Semester of Completion: Year 3, Spring</p>			
Fluid Power		3	
<p>Course Details: P: PHYS 21800 with a grade of C or better AND MET 21100 Required Semester of Completion: Year 4, Spring</p>			
Heat and Power c		3	
<p>Critical Course Course Details: P: PHYS 21800 with a grade of C or better AND MATH 22100 with a grade of C or better Required Semester of Completion: Year 2, Spring</p>			
General Education Arts & Humanities Competency		3	
<p>Course Details: Students can take any course from the Gen Ed Core list for Arts & Humanities Required Semester of Completion: Year 4, Spring</p>			
		Total	15

Year Three

(31 credits)

Fall Term	Minimum Grade	Credits	⌵
Applied Thermodynamics Course Details: C: Students must take this course with TCM 35800 P: MET 22000 Required Semester of Completion: Year 3, Fall		3	⌵
Technical Report Analysis and Development Course Details: C: Students must take this course with MET 32000 Required Semester of Completion: Year 3, Fall		1	⌵
Quantitative Methods for Tech Course Details: P: MATH 15300 AND MATH 15400 both with a C or better OR P: MATH 15900 with a C or better Required Semester of Completion: Year 3, Fall		3	⌵
Manufacturing Processes Course Details: P: MATH 15300 AND MATH 15400 both with a grade of C or better AND MET 10400 OR P: MATH 15900 with a grade of C or better AND MET 10400 Required Semester of Completion: Year 4, Spring		4	⌵
Engineering Materials Course Details: P: CHEM-C 101 Required Semester of Completion: Year 4, Fall		4	⌵
Total		15	

Spring Term	Minimum Grade	Credits	⌵
Electrical Circuits Required Semester of Completion: Year 3, Spring		3	⌵
Engineering Economics Required Semester of Completion: Year 4, Spring		3	⌵
Computer Aided Machine Design Course Details: Students must take this course with TCM 39900 Required Semester of Completion: Year 4, Spring		3	⌵
Data Reporting and Presentation Course Details: Students must take this course with MET 31000 Required Semester of Completion: Year 4, Spring		1	⌵
Applied Fluid Mechanics Required Semester of Completion: Year 4, Spring		3	⌵
Object Orientated Programming Required Semester of Completion: Year 3, Spring		3	⌵
Total		16	

**Year Four
(29 credits)**

Fall Term	Minimum Grade	Credits	⌵
Instrumentation and Controls Required Semester of Completion: Year 4, Spring		3	⌵
CAD/CAM for Mechanical Design Required Semester of Completion: Year 4, Spring		3	⌵
Sustainability List		3	⌵

Spring Term	Minimum Grade	Credits	⌵
Design of Mechanical Projects Course Details: Students are required to take this with MET 41400 Required Semester of Completion: Year 4, Spring		3	⌵
Technical Communication for the Mechanical Design Process Course Details: Students are required to take this with MET 41400 Required Semester of Completion: Year 4, Spring		1	⌵

<p>Course Details: Students can pick from a list of Technical Sustainability courses Required Semester of Completion: Year 4, Spring</p>	
General Ed Social Sciences Competency	3 ^
<p>Course Details: Students can take any course from the Gen Ed Core list for Social Science Required Semester of Completion: Year 4, Spring</p>	
Technical Selective	3 ^
<p>Course Details: Students can take any course from the Technical Selective list Required Semester of Completion: Year 4, Spring</p>	
Notify School of Intent to Graduate M	^
<p>Milestone Details: Please contact your school to determine appropriate steps necessary to apply for graduation. Required Semester of Completion: Year 4, Fall</p>	
Total 15	

General Ed Cultural Understanding Competency	3 ^
<p>Course Details: Students can take any course from the Gen Ed Core list for Cultural Understanding Required Semester of Completion: Year 4, Spring</p>	
General Ed A&H/SS Competency	3 ^
<p>Course Details: Students can take any course from the Gen Ed Core list for Arts and Humanities or Social Science Required Semester of Completion: Year 4, Spring</p>	
Technical Selective	3 ^
<p>Course Details: Students can take any course from the Technical Selective List Required Semester of Completion: Year 4, Spring</p>	
Ethics & Professionalism	1 ^
<p>Required Semester of Completion: Year 4, Spring</p>	
Total 14	

Degree Map Link:

https://sisjee.iu.edu/sisigps-prd/web/igps/dm/public/maps/view?mapId=acd6ca74-67f8-4bf5-bc96-14b2a6e17e81	Copy
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Achieving minimum grades for individual courses may not result in meeting cumulative GPA requirements for admission to programs or for graduation. Verify requirements with your academic advisor or your Academic Advisement Report (AAR).

Completing 30 credit hours each calendar year is required for full state financial aid eligibility. Be sure to complete your FAFSA before March 10 each year. If you follow your map and find a course unavailable, you may be eligible to take that course for free in a future semester.

[More information about the free course guarantee.](#)