



# Mech Engr Tech BS

IU Indianapolis School of Engr & Tech (TECH)

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

**Student's Catalog Year:** Fall 2015–Summer 2016

**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 <b>Course Details:</b> Also meets Gen Ed Core Communication - Writing Competency <b>Required Semester of Completion:</b> Year 4, Spring		3	Elementary Chemistry I <b>C</b> <b>Critical Course</b> <b>Course Details:</b> Also meets Gen Ed Core Life & Physical Sciences Competency <b>Required Semester of Completion:</b> Year 3, Fall		3
Pre-Calculus <b>C</b> <b>Critical Course</b> <b>Course Details:</b> Also meets Gen Ed Analytical Reasoning (Math) <b>Required Semester of Completion:</b> Year 1, Spring	C-	5	Applied Statics <b>C</b> <b>Critical Course</b> <b>Required Semester of Completion:</b> Year 1, Spring		3
Discovering Technology <b>Required Semester of Completion:</b> Year 1, Fall		1	Introduction to Design <b>C</b> <b>Critical Course</b> <b>Required Semester of Completion:</b> Year 4, Spring		3
Production Design and Specification <b>C</b> <b>Critical Course</b> <b>Required Semester of Completion:</b> Year 1, Fall		3	Industrial Organization <b>C</b> <b>Critical Course</b> <b>Required Semester of Completion:</b> Year 4, Spring		3
Introduction to Engr Tech <b>C</b>		3	Fundamentals of Speech Communication		3

<p><b>Critical Course</b>  <b>Required Semester of Completion:</b> Year 1, Fall</p>
<p><b>Total 15</b></p>

<p><b>Course Details:</b> Also meets Gen Ed Core Communication - Speaking &amp; Listening Competency  <b>Required Semester of Completion:</b> Year 4, Spring</p>
<p><b>Total 15</b></p>

### Year Two (30 credits)

Fall Term	Minimum Grade	Credits	⌵
<p>Calculus for Technology I <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Course Details:</b> Also meets Gen Ed Analytical Reasoning (Math)  <b>Required Semester of Completion:</b> Year 2, Fall</p>	C-	3	⌶
<p>Applied Strength for Materials <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Course Details:</b> Students must take this course with TCM 2xx  <b>Required Semester of Completion:</b> Year 2, Fall</p>		4	⌶
<p>Introduction to Report Writing <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Course Details:</b> Students must take this course with MET 21100  <b>Required Semester of Completion:</b> Year 2, Fall</p>		1	⌶
<p>Dynamics</p> <p><b>Required Semester of Completion:</b> Year 4, Spring</p>		3	⌶
<p>General Physics I <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Course Details:</b> Also meets Gen Ed Core Life &amp; Physical Sciences Competency  <b>Required Semester of Completion:</b> Year 2, Fall</p>		4	⌶
		<b>Total</b>	<b>15</b>

Spring Term	Minimum Grade	Credits	⌵
<p>Calculus for Technology II <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Course Details:</b> Also meets Gen Ed Analytical Reasoning (Math)  <b>Required Semester of Completion:</b> Year 4, Spring</p>		3	⌶
<p>Machine Elements <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Required Semester of Completion:</b> Year 3, Spring</p>		3	⌶
<p>Fluid Power</p> <p><b>Required Semester of Completion:</b> Year 4, Spring</p>		3	⌶
<p>Heat and Power <span style="background-color: #800000; color: white; padding: 2px;">C</span></p> <p><b>Critical Course</b>  <b>Required Semester of Completion:</b> Year 2, Spring</p>		3	⌶
<p>General Education Arts &amp; Humanities Competency</p> <p><b>Course Details:</b> Students can take any course from the Gen Ed Core list for Arts &amp; Humanities  <b>Required Semester of Completion:</b> Year 4, Spring</p>		3	⌶
		<b>Total</b>	<b>15</b>

### Year Three (31 credits)

Fall Term	Minimum Grade	Credits	⌵
Applied Thermodynamics <b>Course Details:</b> Students must take this course with TCM 39900 <b>Required Semester of Completion:</b> Year 4, Spring		3	⌶
Technical Analysis and Development <b>Course Details:</b> Students must take this course with MET 32000 <b>Required Semester of Completion:</b> Year 4, Spring		1	⌶
Quantitative Methods for Tech <b>Required Semester of Completion:</b> Year 4, Spring		3	⌶
Manufacturing Processes <b>Required Semester of Completion:</b> Year 4, Spring		4	⌶
Engineering Materials <b>Required Semester of Completion:</b> Year 4, Fall		4	⌶
<b>Total</b>		<b>15</b>	

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

### Year Four (29 credits)

Fall Term	Minimum Grade	Credits	⌵
Instrumentation and Controls <b>Required Semester of Completion:</b> Year 4, Spring		3	⌶
CAD/CAM for Mechanical Design <b>Required Semester of Completion:</b> Year 4, Spring		3	⌶
Sustainability List <b>Course Details:</b> Students can pick from a list of Technical Sustainability courses <b>Required Semester of Completion:</b> Year 4, Spring		3	⌶

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

General Ed Social Sciences Competency	3	^
<b>Course Details:</b> Students can take any course from the Gen Ed Core list for Social Science <b>Required Semester of Completion:</b> Year 4, Spring		
Technical Selective	3	^
<b>Course Details:</b> Students can take any course from the Technical Selective list <b>Required Semester of Completion:</b> Year 4, Spring		
Notify School of Intent to Graduate <span style="background-color: #000080; color: white; padding: 2px;">M</span>		^
<b>Milestone Details:</b> Please contact your school to determine appropriate steps necessary to apply for graduation. <b>Required Semester of Completion:</b> Year 4, Fall		
<b>Total</b>		<b>15</b>

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

**Degree Map Link:**

<https://sisjee.iu.edu/sisigps-prd/web/igps/dm/public/maps/view?mapId=6fb74599-b3c5-11e4-8143-9463e9cd9b35>

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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.](#)