

MECHANICAL ENGINEERING suggested academic plan* (Option B: last name begins with L-Z)

Semester 1 17 credits	Semester 2 17 credits	Semester 3 17 credits	Semester 4 16-17 credits	Semester 5 16.5 credits	Semester 6 15.5 credits	Semester 7 15.5 credits	Semester 8 16.5 credits
CHEM 110 3 cr. <i>Chem Principles</i>	Science elective 3 cr. <i>CHEM 112, BIOL 141/161 or PHYS 214 and CHEM 111</i> P/C: Vary by selection	CMPSC 200 or 201 3 cr. <i>MATLAB or C++</i> P: MATH 140 P/C: MATH 141	ME 300 3 cr. <i>ENGR Thermodynamics</i> P: CHEM 110 P/C: MATH 141	ME 320 3 cr. <i>Fluid Flow</i> P: EMCH 212, MATH 251 ME 300, MATH 231	ME 370 3 cr. <i>Vibration of Mech Sys</i> P: EMCH 212, CMPSC 200/201, MATH 220, MATH 251	GTE 3 cr. <i>GTE Tech Elective</i> P/C: Vary by selection	ME 450 3 cr. <i>Modeling Dynamic System</i> P: ME 370 P/C: ME 348
MATH 140 # 4 cr. <i>Calc 1</i>	MATH 141 # 4 cr. <i>Calc 2</i> P: MATH 140	MATH 251 # 4 cr. <i>Diff Equations</i> P: MATH 141	MATH 231 # 2 cr. <i>Calc of Several Variables</i> P: MATH 141	ME 340 3 cr. <i>ME Design Methodology</i> P: EDGSN 100 P/C: ME 320, ME 360	ME 330 3 cr. <i>Computational Tools</i> P: EMCH 212 & 213, MATH 251, PHYS 212	ME 454 3 cr. <i>Mechatronics</i> P: ME 348	ME 410 3 cr. <i>Heat Transfer</i> P: ME 320, MATH 220 CMPSC 200/201
EDSGN 100 3 cr. <i>Intro to Engr Design</i>	PHYS 211 4 cr. <i>Mechanics</i> P/C: MATH 140	PHYS 212 4 cr. <i>Elect & Magnetism</i> P: PHYS 211, MATH 140 P/C: MATH 141	MATH 220 # 2/3 cr. <i>Matrices</i> P: MATH 140	ME 360 3 cr. <i>Mechanical Design</i> P: EMCH 213 P/C: CMPSC 200/201	ME 348 3 cr. <i>Circuit Analysis...</i> P: MATH 251, PHYS 212	ME 440W 3 cr. <i>Design Capstone</i> P: ME 340 P/C: IE 312, ENGL 202C	ME 435 3 cr. <i>ME Systems Lab</i> P: ME 348, ME 330, ME 320 P/C: ME 370
ENGL 15 3 cr. <i>Rhetoric and Compisition</i>	ECON 102 or 104 3 cr. <i>Micra or Macro economics</i> (GS - Single domain)	EMCH 211 # 3 cr. <i>Statics</i> P: MATH 140	EMCH 213 # 3 cr. <i>Strength of materials</i> P: EMCH 211	Gen ed ^ 3 cr.	IE 312 3 cr. <i>Product Design...</i> P: EMCH 213 P/C: MATSE 259	ETE 3 cr. <i>ENGR Tech Elective</i> P/C: Vary by selection	METE 3 cr. <i>ME Tech Elective</i> P/C: Vary by selection
Engr FYS 1 cr. <i>Students who did not take a 1cr CoE FYS should verify completion of this requirement with ME adviser</i>	Gen ed ^ 3 cr.	CAS 100 3 cr. <i>Effective Speech</i>	EMCH 212 # 3 cr. <i>Dynamics</i> P: EMCH 211, MATH 141	ENGL 202C 3 cr. <i>Technical Writing</i> P: ENGL 15	MATSE 259 3 cr. <i>Prop&Proc ENGR Materials</i> P: EMCH 213	Gen ed ^ 3 cr.	ETE 3 cr. <i>ENGR Tech Elective</i> P/C: Vary by selection
Gen ed ^ 3 cr.			Gen ed ^ 3 cr.	Gen ed ^ 1.5 cr. GHW	ME 390 0.5 cr. <i>Acad & Career Development</i>	ME 490 0.5 cr. <i>Professional Development</i> P: ME 390	Gen ed ^ 1.5 cr. GHW

Recommended: ME 410 before or concurrent w/ ME 435

*This flow chart is meant to be a guide for planning; use in conjunction with official degree audit. Please note that some courses require a C or better. For additional information on official degree requirements see www.bulletins.psu.edu.

P = prerequisite
C = concurrent

Courses applied toward major GPA calculation

ME Course Sequencing

- Thermal Sciences
- Imbeded Labs
- Dynamic Systems
- Design Concentration

Note:

Completion of EMCH and MATH courses before the 5th semester is important for future course sequencing. EMCH 210 or EMCH 210H is **not** a direct substitute for EMCH 211 & 213 requirements and should not be taken for ME_BS

^ Gen ed requirements:

3 credits each Single domain	6 total credits Interdomain ("N")	9 total credits Exploratory
<input checked="" type="checkbox"/> *3 cr. GS - ECON 102 or 104	<input type="checkbox"/> 3 cr. -	<input checked="" type="checkbox"/> * GN - PHYS 211
<input checked="" type="checkbox"/> *3 cr. GN - CHEM 110	<input type="checkbox"/> 3 cr. -	<input checked="" type="checkbox"/> * GN - PHYS 212
<input type="checkbox"/> 3 cr. GA -		<input type="checkbox"/> 3 cr. - any GA/GH/GS/GN/Id or 12 th cr. level language
<input type="checkbox"/> 3 cr. GH -		
<input type="checkbox"/> 3 total cr. GHW -		

*Gen eds satisfied through ME_BS required curriculum

Capture cultures requirements in above selections: 3 cr US & 3 cr IL
[Other University Requirements | Penn State \(psu.edu\)](http://Other University Requirements | Penn State (psu.edu))