

# Mechanical Engineering Curriculum (Option A: last Name begins with A-K)

SEMESTER 1			SEMESTER 2		
Course		Credits	Course		Credits
FYS	First Year Seminar	1	CHEM 112	Chemical Principles II	3
ENGL 015	Rhetoric and Composition	3	ECON 102/104	Micro or Macro Economics (GS)	3
EDSGN 100	Introduction to Engineering Design	3	Math 141	<b><i>Calc with Analytic Geometry II</i></b>	4
AHS course	(GA, GH, or GS)	3	AHS course	(GA, GH, or GS)	3
<b><i>MATH 140</i></b>	<b><i>Calculus with Analytic Geometry I</i></b>	4	<b><i>PHYS 211</i></b>	<b><i>Mechanics</i></b>	4
<b><i>CHEM 110</i></b>	<b><i>Chemical Principles</i></b>	3	<b><i>MATH 141</i></b>		3
<b>Total Semester Credits</b>		<b>17</b>	<b>Total Semester Credits</b>		<b>17</b>
SEMESTER 3			SEMESTER 4		
Course		Credits	Course		Credits
CMPSC 200	MATLAB	3	<b>E MCH 212</b>	<b>Dynamics</b>	3
CAS 100A/B	Effective Speech	3	<b>E MCH 213</b>	<b>Strength of Materials</b>	3
<b>E MCH 211</b>	<b>Statics</b>	3	PHYS 214	Wave Motion and Quantum Physics	1.5
<b>MATH 251</b>	<b>Ordinary and Partial Differential Eq.</b>	4	<b>M E 300</b>	<b>Engineering Thermodynamics I</b>	3
<b>PHYS 212</b>	<b>Electricity and Magnetism</b>	4	MATH 231	Calculus of Several Variables	2
			MATH 220	Matrices	2
			GHA	Health/Physical Activity	2
<b>Total Semester Credits</b>		<b>17</b>	<b>Total Semester Credits</b>		<b>16.5</b>
SEMESTER 5			SEMESTER 6		
Course		Credits	Course		Credits
E E 212	Intro to Electronic Measuring Systems	3	ETE	Engineering Technical Elective	3
I E 312	Product Design & Mfg Processes	3	E MCH 315	Mechanical Response of Engr. Mat'l.	2
MATSE 259	Properties & Processing of Engr. Mat'l.	3	<b>M E 340</b>	<b>Mech. Engr. Design Methodology</b>	3
<b>M E 370</b>	<b>Vibrations of Mechanical Systems</b>	3	<b>M E 360</b>	<b>Mechanical Design</b>	3
<b>M E 345</b>	<b>Inst. Measurements, and Statistics</b>	4	<b>M E 320</b>	<b>Fluid Flow</b>	3
			GHA	Health/Physical Activity	1.5
<b>Total Semester Credits</b>		<b>16</b>	<b>Total Semester Credits</b>		<b>15.5</b>
SEMESTER 7			SEMESTER 8		
Course		Credits	Course		Credits
ETE	Engineering Technical Elective	3	ENGL 202C	Technical Writing	3
AHS course	(GA, GH, or GS)	3	AHS course	(GA, GH, or GS)	3
<b>M E 410</b>	<b>Heat Transfer</b>	3	AHS course	(GA, GH, or GS)	3
<b>M E 450</b>	<b>Modeling of Dynamic Systems</b>	3	GTE	General Technical Elective	3
METE	M E Technical Elective	3	M E Lab	Choose ME 315, 325, 355 or 375	1
M E Lab	Choose ME 315, 325, 355, 375	1	M E 440	Senior Capstone Project	3
<b>Total Semester Credits</b>		<b>16</b>	<b>Total Semester Credits</b>		<b>16</b>

- Courses listed in ***boldface italic type*** require a C or better for entrance to major.
- Students may substitute BIOL 141 for CHEM 112.
- Courses listed in ***boldface type*** require a C or better for graduation in this major.
- An Engineering Technical Elective is any three credit, 400-level engineering course NOT required for the major.
- To graduate, two of the following lab courses must be taken: ME 315, 325, 355 or 375 and EMCH 316.
- A Mechanical Engineering Technical Elective (METE) is any three-credit, 400-level ME or NUC E course that is not required for the major. ME 494 or ME 496 may not be used.
- Three credits of co-op may also be used for the GTE after completion of three co-op rotations, internships, or a combination of both
- Students must take 3 credits of United State Cultures (US) and 3 credits of International Cultures (IL)