Mechanical Engineering Curriculum
Start at any campus and end at Penn State Altoona

First Year - Fall		Credits
Course Details		**Credits**
FYS	First Year Seminar	1
ENGL 015*	Rhetoric and Composition	3
EDSGN 100	Introduction to Engineering Design	3
AHS Course	(GA, GH, or GS)	3
MATH 140*	Calculus with Analytic Geometry I	4
CHEM 110*	Chemical Principles	3
	Total Credits	**17**

First Year - Spring		Credits
Course Details		**Credits**
Sci Elective	Science Elective (See below)	3
ECON 102/104	Micro or Macro Economics (GS)	3
MATH 141*	Calc with Analytic Geometry II	4
AHS Course	(GA, GH, or GS)	3
PHYS 211*	Mechanics	4
	Total Credits	**17**

Second Year – Fall		Credits
CMPSC 200	MATLAB	3
CAS 100A/B*	Effective Speech	3
E MCH 211*	Statics	3
MATH 251*	Ordinary and Partial Differential Eq.	4
PHYS 212*	Electricity and Magnetism	4
	Total Credits	**17**

Second Year - Spring		Credits
E MCH 212*	Dynamics	3
E MCH 213*	Strength of Materials	3
M E 300*	Engineering Thermodynamics I	3
MATH 231	Calculus of Several Variables	2
MATH 220	Matrices	2
AHS Course	(GA, GH, or GS)	3
	Total Credits	**16**

Third Year – Fall		Credits
I E 312	Product Design & Mfg Processes	3
MATSE 259	Properties & Processing of Engr. Mat'l.	3
M E 330*	Computational Tools	3
M E 370*	Vibrations of Mechanical Systems	3
ME 348*	Circuit Analysis, Inst., and Stat.	3
ME 390	Academic & Career Dev for ME	0.5
	Total Credits	**15.5**

Third Year – Spring		Credits
M E 454*	Mechatronics	3
ENGL 202C*	Technical Writing	3
M E 340*	Mech. Engr. Design Methodology	3
M E 360*	Mechanical Design	3
M E 320*	Fluid Flow	3
GHW	General Health and Wellness	1.5
M E 490	Professional Dev for ME	0.5
	Total Credits	**17**

Fourth Year – Fall		Credits
ETE	Engineering Technical Elective	3
ME 410*	Heat Transfer	3
ME 450*	Modeling of Dynamic Systems	3
METE	ME Technical Elective	3
ME 435	Mechanical Engineering Systems Lab	3
GHW	General Health and Wellness	1.5
	Total Credits	**16.5**

Fourth Year – Spring		Credits
ME 440W	Senior Capstone Project	3
AHS course	(GA, GH, or GS)	3
AHS course	(GA, GH, or GS)	3
GTE	General Technical Elective	3
ETE	Engineering Technical Elective	3
	Total Credits	**15**

*C or higher required