

MECHANICAL ENGINEERING MAJOR, B.S.

Course	Title	Credits
General Requirements		
General Education (http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/)		26
Required Courses ¹		
MATH 2640	Calculus and Analytic Geometry I	4
MATH 2740	Calculus and Analytic Geometry II	4
MATH 2840	Calculus and Analytic Geometry III	4
MATH 3630	Differential Equations I	3
MATH 4030	Statistical Methods with Applications	3
CHEMSTRY 1450	Chemistry for Engineers	5
PHYSICS 2240	General Physics I	4
PHYSICS 2340	General Physics II	4
GENENG 1030	Introduction to Engineering Projects	1
GENENG 2030	Engineering Modeling and Design	3
GENENG 2820	Engineering Economy	2
GENENG 2130	Engineering Mechanics-Statics	3
GENENG 2230	Engineering Mechanics-Dynamics	3
GENENG 2340	Mechanics of Materials	4
GENENG 2930	Applications of Electrical Engineering	3
Professional Engineering Courses ^{1,2}		
MECHENG 2630	Thermodynamics	3
MECHENG 3030	Mechanical Vibrations	3
MECHENG 3040	Engineering Materials	3
MECHENG 3230	Manufacturing Processes	3
MECHENG 3300	Fluid Dynamics	3
MECHENG 3330	Design of Machine Elements	3
MECHENG 3430	Introduction to Computational Methods	3
MECHENG 3640	Heat Transfer	3
MECHENG 3720	Measurements and Instrumentation Laboratory	3
or BME 3230	Introduction to Medical Instrumentation	
MECHENG 3830	Mechanisms and Machines	3
MECHENG 4330	Automatic Controls	3
MECHENG 4720	Thermal Systems Laboratory	2
MECHENG 4730	Thermo-Fluid Systems Design	3
MECHENG 4930	Senior Design Project (o)	3
or GENENG 4930	Interdisciplinary Senior Design	
Technical Electives ¹		
Select 6 credits of the following:		6
ENERGY 4330	Wind and Solar Systems Design	
ENGRG 5000	Engineering Communications ³	
ENGRG 5030	Linear Algebra ³	
ENGRG 6050	Applied Statistics ³	
ENGRG 6230	Structural Steel Design with LRFD ³	
BME 4130	Biomechanics	
BME 4330	Biofluidics	
BME 4530	Biomaterials	
INDSTENG 3730	Engineering Management	
INDSTENG 4430	Quality Engineering	
INDSTENG 4830	Engineering Continuous Improvement	
MECHENG 4230	Design & Control of Manufacturing Systems	

MECHENG 4340	Noise Control
MECHENG 4430	Advanced Materials
MECHENG 4440	Failure of Materials
MECHENG 4450	Composite Materials
MECHENG 4500	Biomedical Engineering
MECHENG 4520	Power Plant Design
MECHENG 4550	Heat Transfer Applications
MECHENG 4560	Computational Fluid Dynamics
MECHENG 4600	Energy Systems Design
MECHENG 4630	Internal Combustion Engine Design
MECHENG 4640	Mechanical Design of Internal Combustion Engines
MECHENG 4650	Environmental Control Design
MECHENG 4740	Mechanical Systems Design
MECHENG 4750	Computational Methods in Engineering
MECHENG 4800	Finite Element Method
MECHENG 4820	Advanced Manufacturing Processes
MECHENG 4830	Mechatronics
MECHENG 4840	Advanced Vibrations
MECHENG 4850	Computer-Aided Engineering
MECHENG 4980	Current Topics in Engineering

Practical Experience

Select one additional course from the following or one additional Mechanical Engineering Technical Elective course listed above: 1

MECHENG 3950	Mechanical Engineering Cooperative Education
MECHENG 3970	Mechanical Engineering Internship
MECHENG 4940	Undergraduate Research
One credit of Technical Elective	

Total Credits**124**

- ¹ All courses required by the Mechanical Engineering B.S. offered by the College of EMS in the 1000, 2000, and 3000-level must be completed with a grade of "C-" or better
- ² (minimum 2.0 G.P.A. required)
- ³ This course is intended for Accelerated Bachelor's to Master's students only