B.S. in Mechanical Engineering

Mechanical Engineering

The Bachelor of Science degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, http:// www.abet.org (http://www.abet.org/)

Mechanical Engineering is a broad and versatile field. Concerned with the principles of force, energy and motion, mechanical engineers use their knowledge of design, manufacturing and operational processes to advance the world around us.

Mechanical engineers enhance our safety, safeguard our economic vitality, and foster enjoyment for all mankind.

Virtually every aspect of life is affected by mechanical engineering. Mechanical engineers are involved in designing and manufacturing items such as athletic equipment, medical devices, power plants, computers, automobiles and engines, aircraft and space shuttles.

Click on the course number to view course title and description.

Code Title	Semester Hours				
BS Mechanical Engineering Degree Plan (128 hours) ABE	BS Mechanical Engineering Degree Plan (128 hours) ABET Accredited				
Core Requirements (41 hours)					
First Year Seminar	3				
FYE 1301 First Year Seminar					
Freshmen Composition I	3				
EN 1311 Rhetoric and Composit	on				
EN 1313 for international students					
Literature	3				
Any EN 23XX literature course					
History	3				
Any 1000, 2000, or 3000-level HS course					
Social Science	6				
EG 1303 Engineering and Societ	<i>y</i>				
EG 2393 Engineering Economy					
Mathematics	4				
MT 2412 Calculus I					
Natural or Physical Sciences	4				
PY 1404 University Physics I					
Fine Arts	3				
EG 1341 Graphics and Design					
Philosophy - Self	3				
PL 1301 Introduction to Philosop	hy				
Philosophy - Ethics	3				
PL 2301 Foundations of Ethics					
Theology - God	3				
TH 1301 Introduction to Theolog	/				
Intermediate Theology	3				
Any TH 33xx course					
Mechanical Engineering Major Courses					
CH 1401 General Chemistry I	4				
PY 2404 University Physics II	4				
MT 2413 Calculus II	4				
MT 2332 Advanced Math for Eng	ineers I 3				
MT 2333 Adv Math for Engineers	II 3				
MT 2323 Discrete Math Structure	s 3				
MT 3303 Probability and Statistic	s for Engineers 3				

Engineering Core Courses

Total Semester Hours		128
Engineering Elective II *		3
Engineering Elective I		3
EG 4141	Measurements and Instrumentation Laboratory	1
EG 4391	Manufacturing Processes	3
EG 3346	Dynamics and Controls	3
EG 4342	Heat Transfer	3
EG 3142	Thermodynamics & Fluids Lab	1
EG 3141	Materials Laboratory	1
EG 3349	Computational Methods for Engineering	3
EG 3348	Mechanical Design II	3
EG 3347	Mechanical Design I	3
EG 3341	Materials Engineering	3
EG 3343	Fluid Mechanics	3
EG 3342	Engineering Thermodynamics I	3
EG 2346	Strength of Materials	3
EG 2344	Dynamics	3
EG 1241	Fundamentals of Mechanical Engineering	2
Mechanical Engineering Courses		
EG 4302	Senior Design Project II	3
EG 4301	Senior Design Project I	3
EG 4101	Eng. Design & Analysis Workshop III	1
EG 3102	Engineering Design & Analysis Workshop II	1
EG 3101	Engineering Design & Analysis Workshop I	1
EG 2343	Statics	3
EG 2123	Circuits and Systems Lab	1
EG 2323	Circuits and Systems	3
EG 1294	Python Programming for Eng	2
EG 1194	Python Programming for EG Lab	1

* Engineering Elective I & II: Choose at least six (6) credits of EG2000-level or above and not a duplication of a course already completed.

This is a recommended degree plan subject to changes. Please meet with your advisor on a regular basis.

Click on the course number to view course title and description.

First Year		
Fall	Semester Spring	Semester
	Hours	Hours
FYE 1301	3 EN 1311	3
MT 2412	4 MT 2413	4
PY 1404	4 PY 2404	4
EG 1303	3 EG 1194	1
EG 1341	3 EG 1241	2
	EG 1294	2
	17	16
Second Year		
Fall	Semester Spring	Semester
	Hours	Hours
CH 1401	4 PL 1301	3
MT 2332	3 MT 2333	3
EG 2323	3 MT 2323	3
EG 2123	1 EG 2346	3

EG 2343	3 EG 2344	3
History	3	
	17	15
Third Year		
Fall	Semester Spring	Semester
	Hours	Hours
EG 3101	1 EG 3102	1
EG 3141	1 EG 3348	3
EG 3341	3 EG 4342	3
EG 3342	3 EG 3142	1
EG 3343	3 EG 3346	3
EG 3347	3 PL 2301	3
EG 3349	3 TH 1301	3
	17	17
Fourth Year		
Fall	Semester Spring	Semester
	Hours	Hours
EG 4101	1 EG 4302	3
EG 4301	3 EG 2393	3
EG 4141	1 Engineering Elective II	3
EG 4391	3 Any TH33xx course	3
MT 3303	3 Literature	3
Engineering Elective I	3	
	14	15

Total Semester Hours 128