

B.S. in Mechanical Engineering

Energy Option

Freshman Year

Fall		Credits
CHM 113	General Chemistry for Engineering	3
COM 122	English Composition	3
EGR 101	Introduction to Engineering	2
EGR 201	Computer Aided Design of Mechanical Systems	3
MA 241	Calculus and Analytical Geometry I	4
ME 200	Machine Shop Laboratory	1
UNIV 101	College Success	(1)
Credits Subtotal		16.0

Spring

EC 225	Engineering Economics	3
	Humanities or Social Science Lower-Level or Upper-Level Elective	3
EGR 115	Introduction to Computing for Engineers	3
MA 242	Calculus and Analytical Geometry II	4
PS 161	Physics I & II for Engineers	4
Credits Subtotal		17.0

Sophomore Year

Fall		Credits
COM 221	Technical Report Writing (Must Earn a C or better to pass COM 221)	3
ES 201	Statics	3
ES 208	Thermodynamics	3
MA 243	Calculus and Analytical Geometry III	4
PS 250	Physics for Engineers III	3
PS 253	Physics Laboratory for Engineers	1
Credits Subtotal		17.0

Spring

EE 335	Electrical Engineering I	2
EE 336	Electrical Engineering I Laboratory	1
ES 202	Solid Mechanics	3
ES 206	Fluid Mechanics	3
	Humanities Lower- Level Elective	3
MA 345	Differential Equations and Matrix Methods	4
Credits Subtotal		16.0

Junior Year

Fall		Credits
EE 334	Electrical Engineering for Mechanical Engineers	3
ES 204	Dynamics	3
ES 324	Measurements and Instrumentation	2
ES 325	Measurements and Instrumentation Lab	1
ES 403	Heat Transfer	3
ME 403	Thermal Power Systems	3
Credits Subtotal		15.0

Spring

AE 430	Control System Analysis and Design	3
	Energy Elective	3
ME 312	Alternative Energy I	3
ME 446	Thermal-Fluid Science and Energy Measurement	1

ME 446L	Thermal-Fluid Science and Energy Measurement Laboratory	1
ES 320	Engineering Materials Science	2
ES 321	Engineering Materials Science Laboratory	1
	Math or Natural Science Upper-Level Elective	3
Credits Subtotal		17.0

Senior Year

Fall		Credits
COM 420	Advanced Technical Communication I	1
	Energy Elective	3
ME 304	Introduction to Machine Design	3
ME 305	Machine Design Laboratory	1
	Preliminary Design	4
	Technical Electives	3
Credits Subtotal		15.0

Spring

COM 430	Advanced Technical Communication II	2
	Detail Design	4
HU 330	Values and Ethics (or HU/SS Upper-Level Study Abroad)	3
or HU 335	Technology and Modern Civilization	3
ME 400	Mechanical Vibrations	3
	Technical Electives	3
Credits Subtotal		15.0
Credits Total:		128.0