

Mechanical Engineering

1 st YEAR	Session	Course	Mechanical Engineering	SH	Pre-Requisite or /Co-Requisite
1 st Semester	All	22M:031	Engineering Math I – Single Variable Calculus	4	P: H.S. Algebra & Trigonometry
	F	059:005	Engineering Problem Solving I	3	
	All	004:011	Principles of Chemistry I	4	
	All	010:003	Accelerated Rhetoric (or 10:001 & 10:002)	4	
	F	059:090	First-year Engineering Seminar	1	
Total				16	
2 nd Semester	All	22M:032	Engineering Math II – Multivariable Calculus	4	P: 22M:031
	S	059:006	Engineering Problem Solving II	3	C: 22M:031
	F/S	029:081	Introductory Physics I	4	C: 22M:031
	All	22M:033	Engineering Math III – Matrix Algebra	2	P: 22M:031; C:22M:032
	All		General Education Component #1	3	
Total				16	
1 st Semester	All	22M:034	Engineering Math IV – Differential Equations	3	P: 22M:033, 22M:032
	F/S	029:082	Introductory Physics II (without lab)	3	P: 029:081; C:22M:032
	All	059:007	Engineering Fundamentals I – Statics	2	P: 22M:031, C:22M:032; 029:081
	F/S	059:008	Engineering Fundamentals II – Electrical Circuits	3	C: 22M:034
	All	059:009	Engineering Fundamentals III – Thermodynamics	3	P: 004:011, 029:081; C: 22M:032
	All		General Education Component #2	3	
	F	058:020	Sophomore Seminar: Mechanical Engineering	0	Sophomore Status
Total				17	
2 nd Semester	F/S	057:015	Materials Science	3	P: 004:011; C: 22M:031
	All	057:019	Mechanics of Deformable Bodies	3	P: 059:007; C: 22M:034
	F/S	058:032	\$ Design for Manufacturing	3	C: 057:015
	All	057:010	Dynamics	3	P: 059:007, 22M:031
	All		Elective Focus Area #1	3	
Total				15	
1 st Semester	F/S	22M:037	Engineering Math V – Vector Calculus	3	P: 22M:034
	F/S	057:020	Fluid Mechanics	4	P: 22M:034, 057:010; C: 059:009
	F/S	22S:039	Probability & Statistics for Engineers	3	P: 22M:032
	All	057:018	Principles of Electronic Instrumentation	4	P: 059:008, 029:082
	F/S	058:091	\$ Professional Seminar: Mechanical Engineering	0	Junior Status
	All		Elective Focus Area #2	3	
Total				17	
2 nd Semester	S	058:040	Thermodynamics II	3	P: 059:009
	S	058:045	Heat Transfer	3	P: 057:020, 22M:037
	S	058:052	Mechanical Systems	3	P: 057:019; C:058:032, 057:015, 22S:039
	All		Elective Focus Area #3	3	
	All		General Education Component #3	3	
Total				15	
1 st Semester	F	058:048	Energy Systems Design	4	P: 058:045, 058:040
	F	058:055	Mechanical Systems Design	4	P: 058:052
	All		Elective Focus Area #4	3	
	All		Elective Focus Area #5	3	
	All		General Education Component #4	3	
	F/S	058:091	\$ Professional Seminar: Mechanical Engineering	0	Junior status
Total				17	
2 nd Semester	F/S	058:086	\$ Mechanical Engineering Design Project	3	C: 058:048 or 058:055
	F/S	058:080	\$ Experimental Engineering	4	P: 057:018; C: 058:052, 058:045
	All		Elective Focus Area #6	3	
	All		Elective Focus Area #7	3	
	All		General Education Component #5	3	
Total				16	

\$ 058:032/058:080/058:086/058: 091 may be taken either Fall or Spring semester of the Senior year.