

## **MECHANICAL ENGINEERING**

**PROGRAM OF STUDY** 

2020-2022 UNDERGRADUATE CATALOG

Fall (Semester I)			Spring (Semester II)		
AIS 1203	Academic Inquiry and Scholarship (core)	3	MAT 1224	Calculus II	4
CHE 1103	General Chemistry I	3	PHY 1943	Physics for Sci and Engineers I (core and major)	3
MAT 1214	Calculus I (core and major)	4	PHY 1951	Physics for Sci and Engineers I Lab	1
ME 1403	Engineering Practice and Graphics	3	POL 1013	Intro to American Politics (core)	3
WRC 1013	Freshman Composition I (core)	3		Freshman Composition II (core)	3
			American History core		3
Semester Credit Hours		16	Semester Credit Hours		17
Fall (Semester III)			Spring (Semester IV)		
EGR 2103	Statics	3	EE 2213	Electric Circuits and Electronics	3
EGR 2323	Applied Engineering Analysis I	3	EGR 2513	Dynamics	3
PHY 1963	Physics for Sci and Engineers II (core and major)	3	EGR 3323	Applied Engineering Analysis II	3
PHY 1971	Physics for Sci and Engineers II Lab	1	ME 3241	Materials Engineering Lab	1
EGR 1403	Technical Communication (or other core option)		ME 3243	Materials Engineering	3
Math/Science	Elective	3	ME 3293	Thermodynamics I	3
	Semester Credit Hours	16		Semester Credit Hours	16
Fall (Semester V)			Spring (Semester VI)		
ME 2173	Numerical Methods	3	ME 3263	Manufacturing Engineering	3
ME 3113	Measurements and Instrumentation	3	ME 3541	Dynamics and Controls Lab	1
ME 3663	Fluid Mechanics		ME 3543	Dynamic Systems and Control	3
ME 3813	Mechanics of Solids	_	ME 3823	Machine Element Design I	3
	Thermodynamics II	3	ME 4313	Heat Transfer	3
ME 4293			Creative Arts core		
	ilosophy & Culture core		Creative Art		3
				s core Semester Credit Hours	3 16
Language, Ph	ilosophy & Culture core Semester Credit Hours	3		Semester Credit Hours	3
	ilosophy & Culture core Semester Credit Hours	3 18	Spring (Ser	Semester Credit Hours	3 16
Language, Ph Fall (Semeste ME 4312	ilosophy & Culture core Semester Credit Hours	3 18 2	Spring (Ser ME 4813	Semester Credit Hours nester VIII) Senior Design II	3 16
Language, Ph Fall (Semeste	Semester Credit Hours For VII) Thermal and Fluids Lab Mechatronics	3 18 2 3	Spring (Ser ME 4813 ME Technic	Semester Credit Hours nester VIII) Senior Design II al elective	3 16 3 3
Language, Ph Fall (Semeste ME 4312	Semester Credit Hours     Semester Credit Hours     Thermal and Fluids Lab     Mechatronics     Manufacturing Practices Lab	3 18 2 3 1	Spring (Ser ME 4813 ME Technic ME Technic	Semester Credit Hours mester VIII) Senior Design II al elective al elective	3 16 3 3
Language, Ph Fall (Semeste ME 4312 ME 4543 ME 4801 ME 4812	Semester Credit Hours     Semester Credit Hours     Thermal and Fluids Lab     Mechatronics     Manufacturing Practices Lab     Senior Design I	3 18 2 3 1 2	Spring (Ser ME 4813 ME Technic ME Technic American H	Semester Credit Hours mester VIII) Senior Design II al elective al elective istory core	3 16 3 3 3 3 3 3
Language, Ph Fall (Semeste ME 4312 ME 4543 ME 4801	Semester Credit Hours     Semester Credit Hours     Thermal and Fluids Lab     Mechatronics     Manufacturing Practices Lab     Senior Design I     Texas Politics and Society (core)	3 18 2 3 1 2	Spring (Ser ME 4813 ME Technic ME Technic American H	Semester Credit Hours mester VIII) Senior Design II al elective al elective	3 16 3 3
Language, Ph Fall (Semeste ME 4312 ME 4543 ME 4801 ME 4812 POL 1133 or POL 1213	Semester Credit Hours     Semester Credit Hours     Thermal and Fluids Lab     Mechatronics     Manufacturing Practices Lab     Senior Design I     Texas Politics and Society (core)     or Civil Rights in Texas and America	3 18 2 3 1 2 3	Spring (Ser ME 4813 ME Technic ME Technic American H Social and B	Semester Credit Hours mester VIII) Senior Design II al elective al elective istory core	3 16 3 3 3 3 3 3
Language, Ph Fall (Semeste ME 4312 ME 4543 ME 4801 ME 4812 POL 1133	Semester Credit Hours     Semester Credit Hours     Thermal and Fluids Lab     Mechatronics     Manufacturing Practices Lab     Senior Design I     Texas Politics and Society (core)     or Civil Rights in Texas and America	3 18 2 3 1 2	Spring (Ser ME 4813 ME Technic ME Technic American H Social and E	Semester Credit Hours mester VIII) Senior Design II al elective al elective istory core	3 16 3 3 3 3 3 3

Approved Math/Science Electives						
BIO 1233. Contemporary Biology I	CHE 2603. Organic Chemistry I	PHY 2103 Modern Physics				
BIO 1243. Contemporary Biology II	ES 2013. Intro to Environmental Sci. I	PHY 3203. Classical Mechanics I.				
BIO 1404. Biosciences I.	GEO 1123. Life Through Time	STA 2303 Appl. Prob.& Statist for Engrs.				
BIO 2003. Biology of Human Reproduction	MAT 3013. Foundations of Mathematics	STA 3003. Applied Statistics				
CH 1113 General Chemistry II	MAT 3103. Data Anal. & Interpretation					