

Bachelor of Science in Mechanical Engineering - Graduating Class of 2024

First Year

Fall			Course Unit
ECO	101	Principles of Microeconomics	1
ENG	142	Fundamentals of Engineering Design	1
Or CSC	215	Computer Science I for Science and Engineering	
ENG	095	Introduction to Engineering	0
ENG	091	Engineering Seminar I	0
FYW	102	Academic Writing (if needed)	(1)
FYS	16x	First Year Seminar (Social Sciences)*	1
MAT	127	Calculus A	1
PHY	201	General Physics I	1

Spring			Course Unit
ENG	142	Fundamentals of Engineering Design	1
Or CSC	215	Computer Science I for Science and Engineering	
ENG	092	Engineering Seminar II	0
MAT	128	Calculus B	1
PHY	202	General Physics II	1
CHE	201	General Chemistry I	1
FYS	16x	First Year Seminar (Social Sciences)* (If FYW 102 is needed)	

Sophomore Year

Fall			Course Unit
ENG	212	Circuits Analysis	1
ENG	214	Circuits Analysis Laboratory	0.5
ENG	222	Statics	1
ENG	232	Manufacturing Processes	1
ENG	272	Advanced Engineering Mathematics I	1
		Liberal learning elective*	1

Spring			Course Unit
ENG	152	Engineering Material Science	1
ENG	262	Dynamics	1
MAT	229	Multivariable Calculus	1
MEC	251	Strength of Materials	1
MEC	263	Mechanical Engineering Laboratory I	0.5
IDS	252	Society, Ethics, and Technology	1

Junior Year

Fall			Course Unit
ENG	093	Engineering Seminar III	0
ENG	322	Thermodynamics I	1
ENG	342	Advanced Engineering Mathematics II	1
MEC	311	Mechanical Design Analysis I	1
MEC	321	Numerical Analysis	1
		Liberal learning elective*	1

Spring			Course Unit
ENG	094	Engineering Seminar IV	0
ENG	372	Engineering Economy	1
MEC	361	Fluid Mechanics	1
MEC	371	Thermodynamics II	1
MEC	363	Mechanical Engineering Laboratory II	0.5
		Mechanical Engineering Elective*	1

Senior Year

Fall			Course Unit
ENG	099	Senior Professional Seminar	0
ENG	352	Control Systems	1
ENG	354	Control Systems Laboratory	0.5
MEC	411	Heat Transfer	1
MEC	433	Mechanical Engineering Laboratory III	0.5
MEC	460	Finite Elements in Mechanical Design	1
MEC	495	Senior Project I	0
		Mechanical Engineering Elective**	1

Spring			Course Unit
ENG	098	Fundamentals of Engineering Review	0
ENG	312	Digital Circuits & Microprocessors	1
MEC	463	Mechanical Engineering Laboratory IV	0.5
MEC	496	Senior Project II	1
		Mechanical Engineering Elective**	1
		Liberal learning elective*	1

Total course units: 39 course units

* By advisement only.

** Students must take at least one course from Group A and Group B.