

BS IN MECHANICAL ENGINEERING PLAN OF STUDY

This is the suggested plan of study to graduate in four years with a Bachelor of Science in Mechanical Engineering. This plan assumes the student hasn't taken three years of foreign language in high school.

Please [consult the online course catalog](#) for course prerequisites and course descriptions.

YEAR ONE

Fall	Credit	Spring	Credit
†MATH 191 Calculus I*	4	†MATH 192 Calculus II*	4
†CHEM 103/4/5 General Chemistry	4	†ENGR 270 Materials Science	3
ENGR 106 Intro to Engineering Design and Analysis	2	ENGR 296 Manufacturing Process	2
ENGL 101 English Composition	3	Communication	3
IL 101 Information Literacy	1	Theology	3
NSS 101 New Student Seminar	1	ENGR 126 Makerspace Design Lab	1
ENGR 156 Computational Tools for Engineers	1		
Total Credits	16	Total Credits	16

YEAR TWO

Fall	Credit	Spring	Credit
†MATH 291 Calculus III Multi-Variable Calculus	4	†MATH 290 Linear Algebra	3
†MATH 300 Probability & Statistics	3	†PHYS 253 General Physics II	4
†PHYS 251 General Physics I	4	†ENGR 220 Statics &	3
†ENGR 251 Engineering Design Lab*	3	†ENGR 265 Engineering Economy	3
ENGR 201 Engineering Service	0	Social Science	3
Philosophy	3	KIN 149	1
Total Credits	17	Total Credits	17

YEAR THREE

Fall	Credit	Spring	Credit
† ENGR 303 Strength of Materials	3	†ENGR 302 Engineering Dynamics	3
†PHYS 306 Electronics	3	†ME 310 Measurement and Instrumentation	3
†MATH 320 Ordinary Differential Equations	3	†ME 312 Thermodynamics	3
Engineering Elective	3	†ME 350 Machine Design	3
Foreign Language 101	3	Foreign Language 102	3
KIN Activity	1	Creative Arts Course	3
Total Credits	16	Total Credits	18

YEAR FOUR

Fall	Credit	Spring	Credit
†ME 315 Fluid Mechanics	3	†ME 405 Control Theory	3
†ME 412 Adv. Thermodynamics	3	†ME 410 Heat and Mass Transfer	3
†ME 415 Mechatronics	3	†ME 490 Senior Design Seminar*	3
PHIL/THEO 300+	3	PHIL 207/305 Ethics	3
Humanities (Historical/Cultural)	3	Humanities (Literature/Film)	3
		ENGR 301 Participation	0
		ENGR 401 Exit Survey	0
Total Credits	15	Total Credits	15

#Must be taken at SAU to satisfy writing intensive

*Must receive a grade of C or better

†Check online course catalog for pre-requisite