

B.S. in Mechanical Engineering

Suggested Plan of Study

Students should be aware that several courses in each academic year may have prerequisites and/or corequisites. Please check the course descriptions at the back of this catalog before registering for classes to ensure requisite sequencing.

See the Common Year One outline in the Engineering Fundamentals Program Introduction.

Year One

	Credits
See the Common Year One outline in the College of Engineering introduction.	33
Credits Subtotal	33.0

Year Two

COM 221	Technical Report Writing	3
ES 201	Statics	3
ES 202	Solid Mechanics	3
ES 204	Dynamics	3
ME 208	Manufacturing Laboratory	1
MA 243	Calculus and Analytical Geometry III	4
MA 345	Differential Equations and Matrix Methods	4
PS 160	Physics for Engineers II	3
PS 250	Physics for Engineers III	3
PS 253	Physics Laboratory for Engineers	1
	Humanities or Social Science Lower Level Elective	3
Credits Subtotal		31.0

Year Three

EE 327	Electrical Engineering Fundamentals	3
ES 305	Thermodynamics	3
ES 309	Fluid Dynamics	3
ES 320	Engineering Materials Science	2
ES 321	Engineering Materials Science Laboratory	1
ES 403	Heat Transfer	3
ME 304	Introduction to Machine Design	3
ME 313	Instrumentation and Data Acquisition	2
ME 314	Instrumentation and Data Acquisition Laboratory	1
ME 325	Modeling and Simulation of Complex Engineering Problems	2
ME 326	Modeling and Simulation of Complex Engineering Problems Lab	1
	Professional Development Requirement *	3
	Track Course	3
	Track Course	3
Credits Subtotal		33.0

Year Four

EC 225	Engineering Economics	3
ME 436	Advanced Machine Design	3
ME 400	Mechanical Vibrations	3
ME 438	Model-Based Control System Design	2
ME 438L	Model-Based Control System Design Laboratory	1
	Upper-Level Humanities or Social Science Elective	3

Technical Elective AE/CEC/CIV/CS/EE/EGR/EP/MA 4XX/ME/SE/SYS or Track specific electives	6
Track Course	3
Preliminary Design Course (ME 413 or ME 407 or ME 414 or ME 448)	4
Senior Design Course (ME 433 or ME 437 or ME 434 or ME 458)	4
Credits Subtotal	32.0
Credits Total:	129.0

* CEME 396 or AF 402 / MSL 402 / NSC 402 or ME 540 will satisfy this requirement.

** AF/NSC/MSL UL may fulfill 3 credits of technical electives. There are a number of 300-500 level courses from other departments that are equivalent to existing required courses in BSME curriculum and therefore cannot be used as Technical Electives. Please consult with the BSME Program Coordinator or Academic Advisor before enrolling in any Technical Elective course to make sure it will apply to your BSME program of study.