

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING COURSE PLAN BY SEMESTER

Catalog Year
2014—2016

**TOTAL
CREDITS:
122**

For questions about program requirements, please contact your advisor. Boise State recommends that you meet with an advisor annually to ensure that problems are identified and resolved quickly.

FIRST YEAR					
Fall Semester			Spring Semester		
CHEM 111	College Chemistry (DLN)	3	CS 117†	Introduction to C++	3
CHEM 111L	College Chemistry Lab (DLN)	1	ENGL 102	English Composition	3
ENGL 101	English Composition	3	MATH 175	Calculus II	4
ENGR 120	Introduction to Engineering	3	PHYS 211	Mechanics, Waves & Heat (DLN)	4
UF 100	Intellectual Foundations	3	PHYS 211L	Mechanics, Waves & Heat Lab (DLN)	1
MATH 170	Calculus 1 (DLM)	4			
TOTAL CREDITS		17	TOTAL CREDITS		15

SECOND YEAR					
Fall Semester			Spring Semester		
PHYS 212	Electricity, Magnetism & Optics	4	MATH 275	Multiple Variable & Vector Calculus	4
PHYS 212L	Electricity, Magnetism & Optics Lab	1	ENGR 220	Engineering Dynamics	3
MATH 333	Differential Equations and Matrix Theory	4	ENGR 245	Introduction to Materials Science & Engineering	3
ENGR 210	Engineering Statics	3	ENGR 245L	Introduction to Materials Science & Engineering Lab	1
UF 200	Civic and Ethical Foundations	3	ME 302 or ENGR 320	Thermodynamics I	3
ME 271†	Introduction to Computation for Engineers	1	ME 105	Mechanical Engineering Graphics	3
TOTAL CREDITS		16	TOTAL CREDITS		17

THIRD YEAR					
Fall Semester			Spring Semester		
MATH 360 or MATH 361*	Engineering Statistics or Probability and Statistics*	3	ME 380†	Kinematics & Machine Dynamics	3
ME, CE, or ENGR 330	Fluid Mechanics	3	ME 320	Heat Transfer	3
ME, CE, or ENGR 331	Fluid Mechanics Lab	1	ME 310	Experimental Methods Lab (CID)	2
ME, CE, or ENGR 350	Engineering Mechanics of Materials	3	ME 352	Machine Design I	3
ENGR 240	Introduction to Circuits	3	DLV	Visual and Performing Arts Elective	3
ENGL 202	Technical Communication (DLS)	3			
TOTAL CREDITS		16	TOTAL CREDITS		14

FOURTH YEAR					
Fall Semester			Spring Semester		
ME 481	Senior Design Project I (FF)	3	ME 483	Senior Design Project II	3
ME 424	Thermal & Fluids Systems Design	3	ME	ME Program Elective	3
ME 462	Machine Design II	3	Tech Elective	Upper-Division Technical Elective	3
ME	ME Program Elective	3	DLS	Social Science Second Field Elective	3
DLL	Literature and Humanities Elective	3			
TOTAL CREDITS		15	TOTAL CREDITS		12

† This programming sequence is the only approved way to complete the structured programming requirement for the ME degree.
* In this instance, either course meets the requirement.

Mechanical Engineering Curriculum Flowchart

(rev. 3/15)

