

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING COURSE PLAN BY SEMESTER

Catalog Year  
**2016—2017**

**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.*

*Highlighted courses are core for upper-division consideration.*



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 or ENGR 130	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			15
<b>TOTAL CREDITS</b>		<b>17</b>	<b>TOTAL CREDITS</b>		<b>15</b>

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	MSE 245	Introduction to Materials Science & Engineering	3
ENGR 210	Engineering Statics	3	MSE 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
<b>TOTAL CREDITS</b>		<b>16</b>	<b>TOTAL CREDITS</b>		<b>17</b>

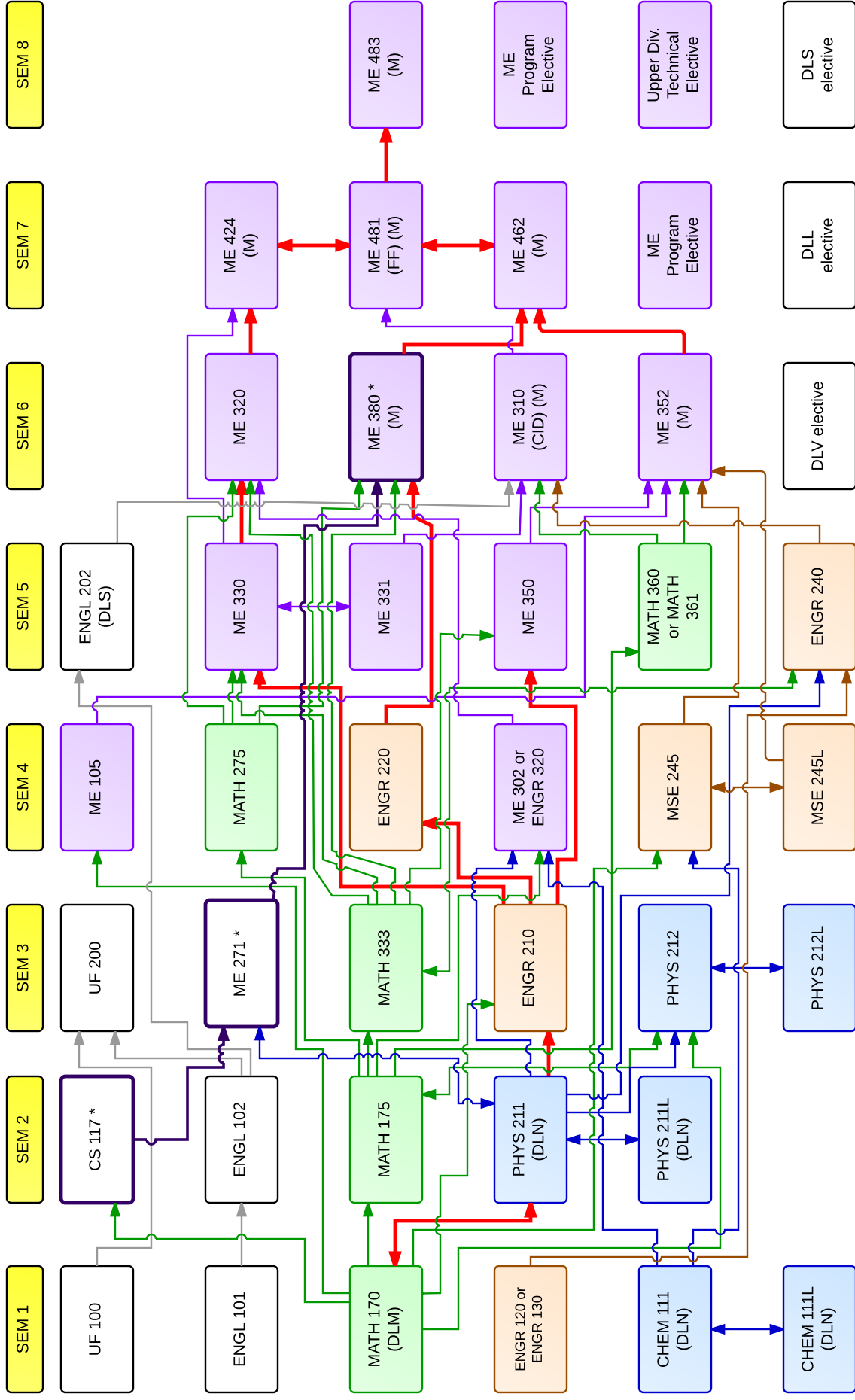
THIRD YEAR					
Fall Semester			Spring Semester		
MATH 360 or MATH 361*	Engineering Statistics or Probability and Statistics*	3	ME 380†	Kinematics & Machine Dynamics	3
ME 330	Fluid Mechanics	3	ME 320	Heat Transfer	3
ME 331	Fluid Mechanics Lab	1	ME 310	Experimental Methods Lab (CID)	2
ME 350	Engineering 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			14
<b>TOTAL CREDITS</b>		<b>16</b>	<b>TOTAL CREDITS</b>		<b>14</b>

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			12
<b>TOTAL CREDITS</b>		<b>15</b>	<b>TOTAL CREDITS</b>		<b>12</b>

† 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. 4/16)



KEY:



→ structured programming path  
→ Math  
→ Engineering Foundations  
→ Mechanical Engineering  
→ University Requirements  
→ Structured Programming  
→ indicates critical path  
→ indicates a pre-requisite  
↔ indicates a co-requisite

\* Note: The only approved combination to complete the ME structured programming requirement is CS117, ME 271, and ME 380.  
 (M) = ME major status required