

<b>BS degree in Mechanical Engineering</b>				
<b>Idaho State University, 2006</b>				
<b>Semester 1 (Fall)</b>				
Course	Title	Credits	Pre-Req	Co-Req
MATH 170	Calculus 1	4	MATH 147 or Equiv	
CHEM 111	General Chemistry I	5	MATH 147 or Equiv	
ENGR 120	Intro to Engineering	2		Math 147 or Equiv
ENGL 102	Critical Reading and Writing	3	ENGL 101 or Equiv	
		<b>14</b>		
<b>Semester 2 (Spring)</b>				
Course	Title	Credits	Pre-Req	Co-Req
MATH 175	Calculus II	4	MATH 170	
MATH 230	Intro to Linear Algebra	2	MATH 147 or Equiv	
ENGR 165	Structured Programming	2	MATH 170	Math 230
ENGR 166	Symbolic Programming	1	ENGR 165	
ME 105	Intro to Solid Modeling	2	MATH 147 or Equiv	
PHYS 211	Engineering Physics	4		MATH 175
		<b>15</b>		
<b>Semester 3 (Fall)</b>				
Course	Title	Credits	Pre-Req	Co-Req
MATH 275	Calculus III	4	MATH 175	
PHYS 212	Engineering Physics	4	PHYS 211	
ENGR 210	Engineering Statics	3	ENGR 120	PHYS 211, MATH 175, ME 105
ENGR 240	Intro to Electrical Circuits	3	MATH 175	PHYS 212
ENGR 223	Materials & Measurements	3	ENGL 101, CHEM 111	ENGR 120, 224, MATH 170
ENGR 224	Materials & Measurements Lab	1	ENGL 101, CHEM 111	ENGR 120, 223, MATH 170
		<b>18</b>		
<b>Semester 4 (Spring)</b>				
Course	Title	Credits	Pre-Req	Co-Req
MATH 360	Differential Equations	3	MATH 230 and 275	
ENGR 340	Fund. of Electrical Devices	3	ENGR 240, PHYS 212	ENGR 342
ENGR 342	Fund. of Electrical Devices Lab	1	ENGR 240, PHYS 212	ENGR 340
ENGR 220	Engineering Dynamics	3	ENGR 210, MATH 175, PHYS 211	
ENGR 350	Mechanics of Materials	3	ENGR 210, 223, 224, MATH 175	
Gen Ed	Goals 6, 7, and 8	3		
		<b>16</b>		
<b>Semester 5 (Fall)</b>				
Course	Title	Credits	Pre-Req	Co-Req
ENGR 307	Thermodynamics	3	CHEM 111, ENGR 220, PHYS 212, MATH 175	
ME 320	Kinematics	3	ENGR 220, Math 230	
COMM 101	Principles of Speech	3		
Gen Ed	Goals 6, 7, and 8	3		
Gen Ed	Goals 9, 10a or 10b, 11, and 12	3		
	Free Elective	1		
		<b>16</b>		
<b>Semester 6 (Spring)</b>				
Course	Title	Credits	Pre-Req	Co-Req
ME 341	Fluid Mechanics	3	ENGR 307, MATH 360	
ME 323	Machine Design	3	ENGR 350, ME 320	
ENGR 360	Engineering Economics	2		
NE 419	Energy Systems and Resources	3	ENGR 307, MATH 360	ENGR 340,342
Gen Ed	Goals 9, 10a or 10b, 11, and 12	3		
	Free Elective	3		
		<b>17</b>		

<b>Semester 7 (Fall)</b>				
Course	Title	Credits	Pre-Req	Co-Req
ENGR 496A	Project Design I	3	Approval of application	
ME 416	Thermal Power Cycles	3	ME 341	
ME 476	Heat Transfer	3	ME 341	
ME 405	Measurement Systems Design	3	ENGR 340 and 342, MATH 360	ME 406
ME 406	Measurement Systems Laboratory	1		ME 405
ME Elect		3		
		<b>16</b>		
<b>Semester 8 (Spring)</b>				
Course	Title	Credits	Pre-Req	Co-Req
ENGR 496B	Project Design II	3	ENGR 496A	
ME 440	Vibration Analysis	3	ENGR 220 and 350, MATH 360	ME 323
ME 443	Thermal Fluids Laboratory	1	ME 341 and 476	
Gen Ed	Goals 9, 10a or 10b, 11, and 12	3		
ME Elect		3		
ME Elect		3		
		<b>16</b>		
<b>Total Credits</b>		<b>128</b>	(note: 128 credits required for BS degree)	