

## Mechanical Engineering - MA 113 & MA 123 14-15 EIGHT SEMESTER PLAN

### YEAR 1

FRESHMAN FALL		STATUS	PREREQ	NOTES
ENG 103	English Composition 1	3	ACT/SAT	
GE 101	Introduction to Engineering	1		
ECO 213	Microeconomics	3		
EGR 143	Engineering Graphics	3		
MA 113	College Algebra	3	ACT/SAT	
MA 123	Trigonometry	3	ACT/SAT	
<b>Total</b>		<b>16</b>		

FRESHMAN SPRING		STATUS	PREREQ	NOTES
ENG 133	Technical Communication	3	ENG 103	
MA 134	Calculus I	4	MA 113/123	
CH 104	General Chemistry I & Lab	4	MA 113	
	Humanities/SS Elective (3)	3		
	Humanities/SS Elective (3)	3		
<b>Total</b>		<b>17</b>		

### YEAR 2

SOPHOMORE FALL		STATUS	PREREQ	NOTES
ES 213	Statics	3	co PH 224, co MA 164	
ES 233	Engineering Materials	3	CH 104, co PH 224	
PH 224	Physics I	4	MA 134	
MA 164	Calculus II	4	MA 134	
MAE 203	Mech Engineering Analysis	3	MA 134, co EGR 143	
<b>Total</b>		<b>17</b>		

SOPHOMORE SPRING		STATUS	PREREQ	NOTES
ES 223	Dynamics	3	ES 213/MA 164/PH 224	
ES 243	Solid Mechanics	3	ES 213	
MAE 243	MFG Processes and Equip	3	ES 233, co ES 243	
ES 313	Thermodynamics	3	MA 164/PH 224/ES 213	
SP 203	Effective Speaking	3	ENG 133	
MA 213	Calculus III	3	MA 164	
<b>Total</b>		<b>18</b>		

### YEAR 3

JUNIOR FALL		STATUS	PREREQ	NOTES
MA 313	Linear Algebra	3	MA 213	
MAE 323	Thermodynamics II	3	ES 313	
MAE 303	Mech Machinery	3	ES 223	
MA 393	Prob & Stat	3	MA 213	
MA 233	Diff Equations	3	MA 213	
MAE 353	Mach Comp Design	3	ES 233/243, co MA 313	
<b>Total</b>		<b>18</b>		

JUNIOR SPRING		STATUS	PREREQ	NOTES
ES 253	Electrical Science	3	MA 134/PH 224	
MAE 3033	Fluid Dynamics	3	ES 223/313/MA 233	
ES 382	Engineering Economics	2	Jr Standing	
MA 453/4023	Mech Vibs/Sys Dyn & Control	3	MA 233/MAE 303	
MA 373	Camd	3	ES 243/EGR 143 co MA 313	
PH 234	Physics II + Lab	4	MA 164/PH 224	
<b>Total</b>		<b>18</b>		

### YEAR 4

SENIOR FALL		STATUS	PREREQ	NOTES
MAE 4053	Mech Design I	3	MAE 303/353/373, ES 313	
ES 343	Heat Transfer	3	MA 233/ES313/MAE3033	
MAE 463	Measurement Laboratory	3	ES 253/MA 393/MAE 353	
	MAE elective*** (3)	3		
	Humanities/SS Elective (3)	3		
<b>Total</b>		<b>15</b>		

SENIOR SPRING		STATUS	PREREQ	NOTES
MAE 4063	Mech Design II	3	MAE 4053	
MAE 413	T/F Comp Design	3	ES 343/MAE 333/3033	
GE 401	Professional Practice	1	Jr Standing	
	MAE elective*** (3)	3	ES 253/MA 393/MAE 353	
	MAE elective*** (3)	3		
<b>Total</b>		<b>13</b>		

\*\*\* May be an engineering course outside MAE department to fulfill engineering minor