



## GADOMSKI SCHOOL OF ENGINEERING

# B.S. IN MECHANICAL ENGINEERING

This **sample paradigm** shows a normal 4-year progression towards a degree in mechanical engineering. Some of the courses should be taken in this order due to prerequisite structures; others may be switched.

### FRESHMAN YEAR

Semester I		Credits	Semester II		Credits
ENG 123	Writing and Critical Literacy	3	ME 110	Introduction to Mechanical Engineering	2
CHEM 115 & 115L	General Chemistry & Lab	4	ME 201	Manufacturing Processes	2
MATH 131	Calculus I	3	ENG 130	Writing & Critical Research	3
ME 121	Solids Modeling	3	MATH 132	Calculus II	3
CBU 101	Orientation	0	PHYS 150 & 150L	Physics I & Lab	4
–	General Education	3	–	General Education	3
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>17</b>

### SOPHOMORE YEAR

Semester I		Credits	Semester II		Credits
CE 201	Statics	3	ECE 221	Electric Circuits I	3
MATH 231	Differential Equations	3	MATH 232	Calculus III	3
ME 112	Scientific Programming	3	ME 202	Dynamics	3
PHYS 251 & 251L	Physics II & Lab	4	ME 305	Thermodynamics I	3
–	General Education	3	ME/CE	210 Mechanics of Materials	3
			–	General Education	3
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>18</b>

### JUNIOR YEAR

Semester I		Credits	Semester II		Credits
ME 301	Engineering Instrumentation Lab	2	ME 302	Energy Systems Lab	2
ME 313	Fluid Mechanics	3	ME 306	Heat Transfer	3
ME 316	Engineering Thermodynamics II	3	ME 318	Dynamics of Machines	3
ME 317	Kinematics	3	ME/ECE 322	Control Systems	3
PHYS 252	Physics III	3	–	MATH Elective	3
–	General Education	3	–	General Education	3
<b>Total</b>		<b>17</b>	<b>Total</b>		<b>17</b>

### SENIOR YEAR

Semester I		Credits	Semester II		Credits
ME/ECE 400	The Compleat Engineer	3	ME/CE 351	Engineering Economy	2
ME 401	Mechanical Systems Lab	2	ME 408	ME Project II	3
ME 407	ME Project I	3	–	ME Major Elective	3
ME 420	Machine Design	3	–	MATH Elective	3
ME 421	Thermal Systems Analysis & Design	3	–	Program Option	3
–	ME Major Elective	3			
<b>Total</b>		<b>17</b>	<b>Total</b>		<b>14</b>

**Total credits required for bachelor's degree completion: 132**