

**FIVE YEAR PLAN TO COMPLETE THE BS IN MECHANICAL ENGINEERING (MAE\_BS01)**

135 UNITS REQUIRED

DEPARTMENT OF MECHANICAL &amp; AEROSPACE ENGINEERING

**Semester 1**

Course	Units
University 100	1
MAE 172 Engineering Graphics	3
MATH 122 (GE B2)	4
Composition or Oral Communication	3
GE class	3
<b>TOTAL UNITS</b>	<b>14</b>

**Semester 2**

Course	Units
PHYS 151 Mech & Heat (GE B1b)	4
MATH 123 Calculus II (GE B2)	4
ENGR 101 Intro to Engineering	1
GE class	3
Oral Communication or Composition	3
<b>TOTAL UNITS</b>	<b>15</b>

**Semester 3**

Course	Units
CE 205 Anal Mech I (Statics)	3
CHEM 111A General Chemistry (GE B1b)	5
PHYS 152 Elec & Magnetism (GE B1)	4
Critical Thinking	3
<b>TOTAL UNITS</b>	<b>15</b>

**Semester 4**

Course	Units
MAE 205 Computer Methods in ME	2
MAE 272 Intro to Manufact Process	2
EE 211 Electric Circuits I	3
EE 211L Electric Circuits Lab	1
MATH 224 Anal Geom & Calc III	4
GE class	3
<b>TOTAL UNITS</b>	<b>15</b>

**Semester 5**

Course	Units
MAE 300 Engr Instrumen & Meas	2
MAE 322 Engr Matls & Matls Proc	3
MAE 330 Engr Thermodynamics I	3
MATH 370A Applied Mathematics	3
GE class	3
<b>TOTAL UNITS</b>	<b>14</b>

**Semester 6**

Course	Units
MAE 305 Numerical Methods in ME	3
MAE 336 Power Plant Design	3
MAE 371 Anal Mech II (Dynamics)	3
ECON 300 Fund Econ (GE D2)	3
<b>TOTAL UNITS</b>	<b>12</b>

**Semester 7**

Course	Units
MAE 337 Thermal Engr Lab	2
MAE 373 Mech Deformable Bodies	3
CE 335 Fluid Mechanics	3
CE 336 Fluid Mechanics Lab	1
GE Capstone course	3
<b>TOTAL UNITS</b>	<b>12</b>

**Semester 8**

Course	Units
MAE 361 Matls & Properties Lab	1
MAE 375 Kinematics & Dynamics	3
MAE 376 Modeling & Anal Dyn Sys	3
GE Capstone course	3
GE class	3
<b>TOTAL UNITS</b>	<b>13</b>

**Semester 9**

Course	Units
MAE 409 Mod Comp Aspects in ME	3
MAE 459 Professional Practice Sem	1
MAE 431 Heat Transfer Systems Des	3
MAE 471 Anal Desn Mech Comp	3
GE Capstone course	3
<b>TOTAL UNITS</b>	<b>13</b>

**Semester 10**

Course	Units
MAE 472 Design of ME Systems	3
MAE 476 Mech Control Systems I	3
MAE 490 Special Topics in MAE	3
CE 406 Engineering Economics	3
<b>TOTAL UNITS</b>	<b>12</b>

Engineering majors may waive 6 units of General Education (Categories D.2 and B.1.a or C3 or E.)