

Engineering Mechanics Sample Schedule

Title	Course	Units
First Term		
General Chemistry for Engineering 1	CHEM 0960	3
Introduction to Engineering Analysis	ENGR 0011	3
Analytical Geometry & Calculus 1	MATH 0220	4
Physics for Science & Engineering 1	PHYS 0174	4
<i>Humanities/Social Sciences Elective*</i>	<i>H/SS Elective 1</i>	3
Freshman Seminar	ENGR 0081	0
Term Units		17
Second Term		
General Chemistry for Engineering 2	CHEM 0970	3
Engineering Computing	ENGR 0012	3
Analytical Geometry & Calculus 2	MATH 0230	4
Physics for Science & Engineering 2	PHYS 0175	4
<i>Humanities/Social Sciences Elective*</i>	<i>H/SS Elective 2</i>	3
Freshman Seminar	ENGR 0082	0
Term Units		17
Third Term		
Statics & Mechanics of Materials 1	ENGR 0135	3
Matrices & Linear Algebra	MATH 0280	3
Introduction to Design	MEMS 0024	3
Linear Circuits & Systems 1	MEMS 0031	3
Principles of Modern Physics 1	PHYS 0477	4
Engineering Science Seminar	ENGSCI 1085	0

Term Units		16
Fourth Term		
Materials Structures & Properties	ENGR 0022	3
Statics & Mechanics of Materials 2	ENGR 0145	3
Analytical Geometry & Calculus 3	MATH 0240	4
Differential Equations	MATH 0290	3
Introduction Thermodynamics	MEMS 0051	3
Engineering Science Seminar	ENGSCI 1085	0
Term Units		16
Fifth Term		
Vector Analysis & Applications	MATH 1550	3
Introduction to Fluid Mechanics	MEMS 0071	3
Experimental Methods in MSE	MEMS 1010	3
Rigid Body Dynamics	MEMS 1015	3
Structures of Crystals	MEMS 1053	3
Engineering Science Seminar	ENGSCI 1085	0
Term Units		15
Sixth Term		
Dynamic Systems	MEMS 1014	3
Vibrations	MEMS 1020	3
Mechanical Design 1	MEMS 1028	3
Applied Statistical Methods	STAT 1000	4
<i>Humanities/Social Sciences Elective*</i>	<i>H/SS Elective 3</i>	3
Engineering Science Seminar	ENGSCI 1085	0
Term Units		16
Seventh Term		

Mechanical Measurements 1	MEMS 1041	3
Finite Element Analysis	MEMS 1047	3
<i>Program Elective 1</i>		3
<i>Senior Design 1</i>		3
<i>Social Sciences Elective*</i>	<i>H/SS Elective 4</i>	3
Engineering Science Seminar	ENGSCI 1085	0
Term Units		15
Eighth Term		
<i>Humanities/Social Sciences Elective * ‡</i>	<i>H/SS Elective 5</i>	3
<i>Humanities Elective*</i>	<i>H/SS Elective 6</i>	3
<i>Physics Elective</i>	<i>PHYS</i>	3
<i>Program Elective 2</i>		3
<i>Senior Design 2</i>		3
Engineering Science Seminar	ENGSCI 1085	0
Term Units		15
Total Units		127
63 Minimum Engineering Units, 48 Minimum Math/Science Units		

Upper-Level Physics: Physics courses with course numbers > 1000

⁺ A senior design course offered by one of the other SSOE engineering programs is required. Alternatively, may be ENGR 1050 Product Realization, or with preapproval, a senior design project arranged with a faculty mentor and taken as ENGSCI 1801.

⁺⁺ A semester-long research experience under the supervision of a faculty advisor at Pitt, not necessarily within the Swanson School of Engineering. Note that this requirement may also be fulfilled by participation in an undergraduate research program like the MCSI URP or the SURI during the summer semester.

[‡]A University designated writing intensive course

*All Humanities and Social Science electives must be from the SSOE approved list. Two courses need to be in single area (see SSOE guidelines).