

Solid Mechanics, Design and Manufacturing (SMDM) Four Year Graduate Course Projection
Latest Revision 11/28/2017

Course No.	Course Title	M	2018			2019			2020			2021		
			S	SS	F									
Core Courses – Offered on EDGE														
EML 5526	Finite Element Analysis	2			♦			♦			♦			♦
EML 5533	Applied Elasticity and Adv Solid Mech	2			♦			♦			♦			♦
EGM 6611	Continuum Mechanics	2	♦			♦			♦			♦		
EML 6324	Fundamentals of Production Engineering	2			♦			♦			♦			♦
EML 6934	Failure of Materials in Mechanical Design	2	♦			♦			♦			♦		
Elective Courses														
EML 5045	Comp Meth for Design and Manufacturing	4						●						●
EGM 5111L	Experimental Stress Analysis	4			●						●			
EML 5318	Computer Control of Machines and Processes	4			♦						♦			
EGM 5584	Biomechanics of Soft Tissue	4						●						●
EAS 6939	Aerospace Structural Composites (+UG)	2	●			●			●			●		
EAS 6242	Advanced Structural Composites	4						♦						♦
EML 6267	Advanced Manuf Processes	4				♦						♦		
EGM 6352	Advanced Finite Element Analysis	4	●			●			●			●		
EML 6934	Tribology	4						●						●
EGM 6570	Fracture Mechanics	4	♦								♦			
EGM 6671	Inelastic Materials		♦				♦					♦		
EGM 6934	Nanomechanics Sim and Exp Methods	4												
EML 6323	Nontraditional Manufacturing	4	♦								♦			
EML 6934	High Strain Rate Mech of Materials	4						♦						
EGM 6365	Structural Optimization	3			♦						♦			
EAS 6939	Approximation and Opt in Eng Des.	3			♦						♦			
EAS 6934	VVU&Q	3			♦						♦			
Computational Courses														
EGM 6341	Numerical Methods of Engineering Analysis I	2	♦			♦			♦			♦		
EGM 6321	Principles of Engineering Analysis 1	2			♦			♦			♦			♦
EGM 6322	Principles of Engineering Analysis 2	2	♦			♦			♦			♦		
Totals			9	8	8	8	8	8	9	6	8	8		8

M-Denotes number of semesters between course offerings.

♦-Denotes course also offered on EDGE.