

# MAE Course Offerings 2014-15 by focus area

Dept	Number	Cr.	Area	Official Course Title	Term
MAE	5070	3	AERO	Dynamics of Flight Vehicles	Spring
MAE	5160	3	AERO	<a href="#">Spacecraft Technology and Systems Architecture</a>	Spring
MAE	5790	3	APPLIED MATH	Nonlinear Dynamics and Chaos	Spring
MAE	4660	3	BIO	Biomedical Engineering Analysis of Metabolic and Structural Systems	Fall
MAE	6640*	3	BIO	Mechanics of Bone	Fall
MAE	4530	3	BIO	Computer-Aided Engineering: Applications to Biomedical Processes	Spring
MAE	5690	3	BIO	Clinical Biomechanics of Musculoskeletal Tissues	Spring
MAE	6650*	3	BIO	Principles of Tissue Engineering	Spring
MAE	5650	4	BIO	Biofluid Mechanics	Spring
MAE	4340	3	DES., SYS. & MAN.	Innovative Product Design via Digital Manufacturing	Fall
MAE	5200	2	DES., SYS. & MAN.	Dimensional Tolerancing in Mechanical Design (7 week course)	Spring
MAE	3780	4	DSC	Mechatronics	Fall
MAE	4320	4	DSC	MicroElectro Mechanical Systems	Fall
MAE	5730	3	DSC	Intermediate Dynamics and Vibrations	Fall
MAE	5780	4	DSC	Feedback Control Systems	Fall
MAE	5910	4	DSC	Model Based Systems Engineering	Fall
MAE	5930	3	DSC	Systems Engineering and Six Sigma for the Design and Operation of Reliable Systems	Fall
MAE	5180	3	DSC	Autonomous Mobile Robots	Spring
MAE	5920	3	DSC	Systems Architecture, Behavior, and Optimization	Spring
MAE	6700*	3	DSC	Advanced Dynamics	Spring
MAE	4580	3	ENERG	Introduction to Nuclear Science and Engineering	Fall
MAE	5020	3	ENERG	Wind Power	Fall
MAE	5459	1	ENERG	Energy Seminar I	Fall
MAE	6480*	3	ENERG	Air Quality and Atmospheric Chemistry	Fall
MAE	4590	3	ENERG	Introduction to Controlled Fusion: Principles and Technology	Spring
MAE	5010	3	ENERG	Future Energy Systems	Spring
MAE	5469	1	ENERG	Energy Seminar II	Spring
MAE	6950		ENERG	Atmospher Boundary-Layer Flows	Spring
MAE	5860	3	GEN	Automotive Engineering	Spring
MAE	6910	1-4	GEN	M.Eng. Independent Study	Both
MAE	6680*	3	MICRO	Cancer for Engineers and Physicists	Spring
MAE	6620*		MICRO	Technologies for Mobile and Global Health	Spring
MAE	5949	1	SEMIN	Enterprise Engineering Colloquium	Both
MAE	7999	1	SEMIN	Mechanical and Aerospace Engineering Colloquium	Both
MAE	4140	3	SOLIDS	Mechanics of Lightweight Vehicles	Fall

MAE	6110	4	SOLIDS	Foundations of Solid Mechanics I	Fall
MAE	6140	4	SOLIDS	State Variable Modeling	Fall
MAE	5130	3	SOLIDS	Mechanical Properties of Thin Films	Spring
MAE	5700	4	SOLIDS	Finite Element Analysis for Mechanical and Aerospace Design	Spring
MAE	6120*	4	SOLIDS	Foundations of Solid Mechanics II	Spring
MAE	6160*	4	SOLIDS	Advanced Composite Materials	Spring
MAE	5430	3	THERMO/FLUIDS	Combustion Processes	Fall
MAE	6010	4	THERMO/FLUIDS	Foundations of Fluid Mechanics I	Fall
MAE	6230	4	THERMO/FLUIDS	Computational Fluid Dynamics	Fall
MAE	6510	4	THERMO/FLUIDS	Advanced Heat Transfer	Fall
MAE	5230	4	THERMO/FLUIDS	Intermediate Fluid Dynamics	Spring
MAE	5510		THERMO/FLUIDS	Power and Propulsion	Spring

- Please consult with your advisor before enrolling in \* courses