SPRING 2026 MAE												
FAMU	FSU	Subject Code	CLASS	Class Section	Course Title	Course Description	Primary Instructor Last Name	Room Capacity	DAYS	Meeting Start Time	Meeting End Time	Room Name
6491	11868	EGN	3454	1	Numerical Methods for Engineers	This course teaches programming and numerical methods to solve engineering/scientific problems in an effective and efficient manner to meet the needs of industry, government, and academia. The course leverages the use of MATLAB which is widely used for scientific computing. Students develop practical programming skills. The course relies heavily on in-class programming to provide feedback to students.	Nair	27	MW	12:30PM	1:45PM	A305
6571	11878	EGM	5330	1	Random Data Measurement & Analysis	this course explores random data, mean values, mean-square values, probability density and distribution functions, moments and characteristic functions, spectral and correlation analysis; bias and random error estimates in data measurements; input-output system models; measurement examples.	Berger	33	MW	11:00AM	12:15PM	A235
6492	11879	EGM	5810	1	Viscous Fluid Flow	This course presents the basic fundamentals underlying the mechanics of gas, air, and fluid flows. Discussion of the possible methods of estimating and predicting the characteristics and parameters governing those flows.	Shoele	33	MW	3:30PM	4:45PM	A235
3373	8827	EMA	4225	1	Mechanical Metallurgy	This course focuses on tensile instability, crystallography, theory of dislocations, plasticity, hardening mechanisms, creep and fracture, electron microscopy, composite materials.	Kalu	33	MW	8:00AM	9:15AM	A223
3375	8828	EMA	5226	1	Mechanical Metallurgy	This course focuses on tensile instability, crystallography, theory of dislocations, plasticity, hardening mechanisms, creep and fracture, electron microscopy, composite materials.	Kalu	33	MW	8:00AM	9:15AM	A223
1689	2851	EML	3002L	1	Mechanical Engineering Tools Lab	This course covers computer aided design and drafting, programming, machining, and a basic introduction to the mechanical engineering profession and ethics. Course includes building and testing a simple Stirling engine.	Larson	48	MW	5:00PM	6:15PM	A337
							Larson	60	F	1:45PM	4:45PM	B114
2950	2872			2	Mechanical Engineering Tools Lab		Larson	60	MW	2:00PM	3:15PM	B114
									F	10:30AM	1:30PM	
6489	11336			3	Mechanical Engineering Tools Lab		Larson	60	TR	11:00AM	12:15PM	B114
							Larson	48	M	10:30AM	1:30PM	A337
1690	2782		3004	1	Engineering Statics	This course covers engineering statics, and a basic introduction to engineering design and analysis. It equips student with the fundamental knowledge and tools required for their subsequent courses in the broad area of engineering mechanics.	Hruda	102	MW	8:00 AM	9:15 AM	B221
							Hruda	102	R	5:00PM	7:00PM	B221
3476	2894		3004	2	Engineering Statics		Krick	102	TR	9:30AM	10:45AM	B221
							Krick	66	R	5:00PM	7:00PM	B136
3057	2783		3011	1	Mechanics of Materials	This course is the first part of a two-part sequence integrating concepts of strength of materials and principles of materials. It provides students with an introduction to the analysis of the behavior of machine components and structures under various types of loading.	Balachandran	110	MW	2:00 PM	3:15 PM	B135
3058	2845		3012	1	Intermediate Mechanics and Materials	This course is the second part of a two-part sequence, integrating principles of mechanics and materials science. Special emphasis is placed on measurement techniques and experimental methods in solid mechanics and materials science, including analysis and reporting of experimental data and results.	Campbell	110	TR	9:30 AM	10:45 AM	B135
6490	11390		3012	2	Intermediate Mechanics and Materials		Campbell	60	TR	2:00 PM	3:15 PM	A105
3059	2854			1	Mechanics and Materials Lab	This lab course is designed to give students practical hands-on experience in measurement techniques and experimental methods in solid mechanics and materials science.	Campbell	16	M	1:00 PM	2:45 PM	B217
									F	12:30PM	1:45PM	B210
3065	2855			2	Mechanics and Materials Lab		Campbell	16	M	3:00 PM	4:45 PM	B217
									F	12:30PM	1:45PM	B210
3066	2856			3	Mechanics and Materials Lab		Campbell	16	W	1:00 PM	2:45 PM	B217

								F	12:30PM	1:45PM	B210
3067	2857		4	Mechanics and Materials Lab		Campbell	16	W	3:00 PM	4:45 PM	B217
								F	12:30PM	1:45PM	B210
6493	11398		5	Mechanics and Materials Lab		Campbell	16	R	10:00 AM	11:45 AM	B217
								F	12:30PM	1:45PM	B210
3060	2784	3013	1	Dynamics	This course is the first part of an integrated sequence in dynamics, vibrations and controls. Material in this first course includes the following: kinematics and kinetics of particles and rigid bodies, and energy and momentum methods. In addition, the course emphasizes on the utilization of computational tools to solve or simulate equations of motion of mechanical systems.	Higgins	96	TR	12:30 PM	1:45 PM	B210
3530	2814	3014C	1	System Dynamics and Vibrations	This course is the second part of an integrated sequence in dynamics, vibrations, and controls. Material in this second course includes the development of the equations of motion for translational and rotational mechanical systems, electrical systems, and electromechanical systems; system response using standard differential equation solution techniques and Laplace transforms; frequency response and impedances; linearization of nonlinear system models, and block diagrams and feedback control strategies.	Ordonez, C	96	MW	3:30 PM	4:20 PM	B210
						Ordonez, C		T	3:05 PM	5:50 PM	B114
1801	2897	3014C	2	System Dynamics and Vibrations		Ordonez, C	96	MW	3:30 PM	4:20 PM	B210
						Ordonez, C		M	12:30PM	3:15PM	A235
1849	2816	3015C	1	Thermal-Fluids I: Fluid Mechanics	This course introduces fluid mechanics which covers the following: dimensional analysis, hydrostatics, control volume analysis, basic equations in differential form, inviscid incompressible flow, viscous flows in pipes and ducts, estimation of head losses in fluid systems, and external flows.	Yaghoobian	110	F	3:30 PM	5:30 PM	B135
						Yaghoobian	96	MW	11:00 AM	12:15 PM	B210
3068	2785	3016	1	Thermal-Fluids II: Heat Transfer	This course introduces heat transfer, which covers the following: basic concepts of heat transfer; steady and time dependent conduction; natural and forced convection and radiation; and analysis of heat exchanger.	Ali	110	F	8:15 AM	10:45 AM	B135
								MW	9:30 AM	10:45 AM	
1825	2815	3017C	1	Mechanical Systems I	This course is the first in a sequence of two courses intended to provide the essential tools for the design and analysis of mechanical systems. Emphasis is on linkages; constraints and degrees of freedom; position, velocity,and acceleration analysis; cams, gears, and gear trains, static and dynamic analysis; computer simulations and models of components and systems; team class projects involving dissection of existing machines and design and manufacture of new mechanical systems.	Moore	60	R	4:00 PM	6:30 PM	B114
						Moore	60	R	4:00 PM	6:30 PM	A337
						Moore	96	F	11:00 AM	12:15 PM	B210
						Moore	96	TR	8:00 AM	9:15 AM	B210
1162	2786	3018C	1	Mechanical Systems II	This course is the second in a sequence of two courses intended to provide the essential tools for the design and analysis of mechanical systems. Emphasis is on materials; stress analysis; shaft design; bearings and lubrication; fasteners and connectors; joints; clutches, brakes, couplings and flywheels; flexible elements; shafts; computer simulations and models of components and systems; team class projects involving dissection of existing machines and design and manufacture of new mechanical systems.	Hollis	2858	M	11:00 AM	1:45 PM	B114
						Hollis	102	TR	12:30 PM	1:45 PM	B135
1305	2787		2	Mechanical Systems II		Hollis	60	W	11:00 AM	1:45 PM	B114
						Hollis	102	TR	12:30 PM	1:45 PM	B135
1121	2788	3100	1	Thermodynamics	This course discusses the fundamentals of thermodynamics. System description, common properties. Properties of pure substances. Mathematical foundations. First and Second Laws of Thermodynamics, closed and open systems. Equations of state and general thermodynamic relations. For non-mechanical engineering majors.	Hruda	60	TR	8:00 AM	9:15 AM	A105
2271	2831		2	Thermodynamics		Hruda	96	TR	11:00 AM	12:15 PM	B210
1688	2781	3102	1	Engineering Thermodynamics	This course introduces basic concepts in engineering thermodynamics; thermodynamic properties of solids, liquids, and gases; and the first and second laws of thermodynamics.	TBD	96	TR	3:30 PM	4:45 PM	B210
1024	2846	3234	1	Materials Science and Engineering	This course includes concepts of materials science and their relevance to engineering design. Recent advances in engineering materials science.	Gibson	110	TR	11:00 AM	12:15 PM	B135
						Gibson	96	F	9:30 AM	10:45 AM	B210
6569	11717	3234	2	Materials Science and Engineering		Kiani	110	TR	11:00 AM	12:15 PM	B135
						Kiani	96	F	9:30 AM	10:45 AM	B210
6508	2789	3811	1	Introduction to Mechatronics	This course offers an introduction to basic electronics, embedded controllers and their programming. It covers interfacing of micro controllers with sensors and actuators of interest to the mechanical engineer.	Ordonez, C	102	F	11:00 AM	11:50 AM	B221
3062	2841	3811L	1	Mechatronics Lab	This course offers a hands-on introduction to basic electronics, embedded controllers and their programming. It covers interfacing of microcontrollers with sensors and actuators of interest to the mechanical engineer.	Ordonez	102	F	12:00 PM	12:50 PM	B221
						Ordonez	20	M	8:00 AM	10:45 AM	B356
3069	2842		2	Mechatronics Lab		Ordonez	102	F	12:00 PM	12:50 PM	B221
						Ordonez	20	W	12:30 PM	3:15 PM	B356

3070	2843			3	Mechatronics Lab		Ordonez	102	F	12:00 PM	12:50 PM	B221
							Ordonez	20	T	9:30 AM	12:15 PM	B356
3071	2844			4	Mechatronics Lab		Ordonez	102	F	12:00 PM	12:50 PM	B221
							Ordonez	20	R	2:00 PM	4:45 PM	B356
6533	11624	4042	1	Modeling & Simulation of Mechanical Systems	This course is an introduction to various concepts of modeling and simulation of mechanical systems, including models of systems, numerical solutions of ODEs, software tools for modeling and simulation of complex mechanical systems.	Hollis	60	MW	8:00 AM	9:15 AM	B114
3063	2861	4161	1	Cryogenics/TBD	This course focuses on the fundamental aspects of cryogenic system engineering: properties of materials and fluids at low temperatures; cryogenic heat transfer and fluid dynamics; low temperature refrigeration and system engineering.	Zhou	33	MW	3:30 PM	4:45 PM	A223
3061	2858	4304	1	Experiments in Thermal and Fluid Sciences	This course covers the theory required in engineering experimentation and includes the following topics: concepts of design of experiments; measurement devices and their performance characteristics; error analysis; measurement techniques; measurements of fluid and thermal properties; pressure; velocity; temperature; and calibration procedures.	Ali	96	TR	9:30 AM	10:45 AM	B210
1179	2790		1	Experiments in Thermal and Fluid Sciences - Lab		Ali	20	T	2:00 PM	3:45 PM	A209
2741	2791		2	Experiments in Thermal and Fluid Sciences - Lab		Ali	20	W	2:00 PM	3:45 PM	A209
2742	2859		3	Experiments in Thermal and Fluid Sciences - Lab		Ali	20	W	4:00 PM	5:45 PM	A209
2743	2860		4	Experiments in Thermal and Fluid Sciences - Lab		Ali	20	R	2:00 PM	3:45 PM	A209
2051	2822	4421	1	Fundamentals of Propulsion Systems	This course is an analysis of the performance of propulsion systems using fundamental principles of thermodynamics, heat transfer, and fluid mechanics. Systems studied include turbo jet, turbofan, ramjet engines, as well as piston type internal combustion (IC) engines.	Shih	64	TR	11:00 AM	12:15 PM	AME106
2131	2817	4452	1	Sustainable Power Generation	This course is a continuation of energy-conversion systems for sustainability and focuses on solar electricity, biopower, biofuels, and hydrogen as energy media. The course also explores whether hydrogen-based transportation is a practical option.	Ordonez, J	60	MW	11:00 AM	12:15 PM	A226
6534	11728	4536	1	Design Using FEM	This course explores the Finite Method - what it is; elementary FEM theory; structures and elements; trusses, beams, and frames; two-dimensional solids; three-dimensional solids; axisymmetric solids; thin-walled structures; static and dynamic problems; available hardware and software; basic steps in FEM analysis; pre/post processing; interpretation of results; advanced modeling techniques; design optimization; advanced materials using FEM.	Oates	60	MW	9:30AM	10:45AM	B114
1329	2792	4550	1	Engineering Design Methods	This is a formal lecture component of the mechanical engineering 'capstone' senior design course project. The course covers the product design cycle from problem identification and need assessment, to specification, concept generation and selection, preliminary design, materials selection, and final design. The design process is placed in context by presenting topics such as legal and ethical issues, product reliability and liability considerations, engineering economics, and optimal design.	McConomy	110	MW	5:00PM	6:15PM	B135
	11914	4551C	1	Senior Design Project I	This course is the first in a two-part course sequence presenting an integrated system design approach for engineering product realization. Course blends the perspectives of market research and planning, design cycle, project management and teamwork, and technical reporting. This is the 'capstone' course for mechanical engineering students. The course offers weekly sessions in which teams are coached during the different phases of the project, plus frequent and extensive design reviews. This course is structured to closely resemble 'on-the-job' engineering education.	McConomy	64	MW	3:30PM	4:45PM	B214
1278	2793	4552C	1	Senior Design Project II	This is the second in a two-part course sequence presenting an integrated system design approach for engineering product realization. The course blends the perspectives of market research and planning, design cycle, project management and teamwork, and technical reporting. The course structure closely resembles on-the-job engineering education. This is the capstone course for Mechanical Engineering students.	McConomy	110	TR	3:30 PM	7:45 PM	B135
2745	2819	4711	1	Introduction to Gas Dynamics	This course is a thorough one-dimensional treatment of compressible flows and applications to nozzle, diffuser, sound waves, tunnel, and shock tube flows.	Kumar/Tuna	60	MW	2:00 PM	3:15 PM	A226/AME106
3073	2903	4905		DIS								
2272	2794	4930	1	Applied Optimal Control		Hubicki	64	TR	9:30 AM	10:45 AM	AME106

2751	2833		4	Microstructure of Materials		Kametani	66	TR	2:00PM	3:15PM	B134
2584	2835		5	Thermodynamics for Materials Science		Hellstrom	27	TR	11:00AM	12:15PM	A305
2753	2840		6	Nanostructured Materials & Properties		Cai	33	MW	8:00AM	9:15AM	A235
6549	2889		7	Materials II		Hellstrom	27	TR	8:00AM	9:15AM	A305
6557	12181		9	Machine Learning: Introduction & Application		Hubicki	60	TR	12:30PM	1:45PM	AME106
6558	12916		10	Materials in Nuclear Energy		Junliang Liu	60	MW	5:00PM	6:15PM	B214
6566	11679	5042	1	Modeling & Simulation of Mechanical Systems	This course is an introduction to various concepts of modeling and simulation of mechanical systems, including models of systems, numerical solutions of ODEs, software tools for modeling and simulation of complex mechanical systems.	Hollis	60	MW	8:0AM	9:15AM	B114
3399	2887	5061	1	Analysis in Mechanical Engineering Part II	This course familiarizes students with applications of vector calculus and partial differential equations in mechanical engineering.	Wu	64	MW	12:30PM	1:45PM	B214
(see 5930)	2885	5107 (FSU) 5930(5)(FAMU)	1	Thermodynamics for Materials Science	This course covers thermodynamic principles with an emphasis on condensed phases.	Hellstrom	27	TR	11:00AM	12:15 PM	A305
3064	2862	5162	1	Cryogenics/TBD	This course focuses on the fundamental aspects of cryogenics system and engineering properties of materials and fluids at low temperatures; cryogenic heat transfer and fluid dynamics, low temperature refrigeration and system engineering.	Zhou	33	MW	3:30 PM	4:45 PM	A223
2279	2823	5422	1	Fundamentals of Propulsions Systems	This course offers an analysis of the performance of propulsion systems using fundamental principles of thermodynamics, heat transfer, and fluid mechanics. Systems studied include turbojet, turbofan, ramjet engines, as well as piston-type internal combustion engines.	Shih	60	TR	11:00 AM	12:15 PM	AME106
3055		5422 ONLINE	1	Fundamentals of Propulsions Systems		Shih	60	TR	11:00 AM	12:15 PM	AME106
1330	2818	5453	1	Sustainable Power Generation	This course is a continuation of sustainability energy-conversion systems and focuses on solar electricity, biopower, biofuels, and hydrogen. The course also discusses the practicality of hydrogen-based transportation.	Ordonez	60	MW	11:00 AM	12:15 PM	A226
6535	11733	5537	1	Design Using FEM	This course discusses the Finite Element Method - what it is, elementary FEM theory, structures and elements, trusses, beams, and frames, two-dimensional solids, three-dimensional solids, axisymmetric solids, thin-walled structures, static and dynamic problems, available hardware and software, basicsteps in FEM analysis, pre/post processing, interpretation of results, advanced modeling techniques, design optimization, advanced materials using FEM.	Oates	60	MW	9:30AM	10:45AM	B114
2278	2820	5710	1	Introduction to Gas Dynamics	This course concentrates on the unique features of compressibility in fluid mechanics. It provides the student with knowledge and understanding of the fundamentals of compressible fluid flow and is basic to studies in high-speed aerodynamics, propulsion, and turbomachinery.	Kumar/Tuna	60	MW	2:00 PM	3:15 PM	A226/AME106
2340		5905	1	Directed Individual Study		-		-			-
2341			2	Directed Individual Study		-		-			-
2275	2797	5930	1	Applied Optimal Control		Hubicki	60	TR	9:30 AM	10:45 AM	AME106
6564	2848		4	Microstructure of Materials		Kametani	66	TR	2:00PM	3:15PM	B134
2276			FAMU: 5	Thermodynamics for Materials Science		Hellstrom	27	TR	11:00AM	12:15PM	A305

6565	2892			6	Nanostructured Materials & Properties		Cai	33	MW	8:00AM	9:15AM	A235
2277	2900			7	Materials II		Hellstrom	27	TR	8:00 AM	9:15AM	A305
3402	12183			9	Machine Learning: Introduction & Application		Hubicki	60	TR	12:30PM	1:45PM	AME106
3403	12845			10	Materials in Nuclear Energy		Junliang Liu	60	MW	5:00PM	6:15PM	B214
3587	14405			11	Continuum Mechanics		Oates		TR	3:30PM	4:45PM	A235
1038	2834		5935		ME SEMINARS		Berger/Balachandran	60	F	11:00AM	12:00PM	AME106
				0004	Dissertation Defense		-		-			-
				0005	Dissertation Defense		-		-			-
				0006	Dissertation Defense		-		-			-
				0007	Dissertation Defense		-		-			-