Curriculum

Classification	Subject No.	Subject Name	Lecture:Lab: Credit (Homework)	Semester	Remark
General Courses	CC 010	Special Lecture on Leadership	1:0:0(0)	Spring·Fall	
	CC 500	Scientific Writing	3:0:3(4)	Spring·Fall	
	CC 510	Introduction to Computer Application	2:3:3(10)	Spring·Fall	
	CC 511	Probability and Statistics	2:3:3(6)	Spring·Fall	
	CC 512	Introduction to Materials and Engineering	3:0:3(3)	Spring·Fall	
	CC 513	Engineering Economy and Cost Analysis	3:0:3(6)	Fall	
	CC 522	Introduction to Instruments	2:3:3(8)	Fall	
	CC 530	Entrepreneurship and Business Strategies	3:0:3(6)	Fall	
	CC 020	Ethics and Safety I	1:0:0	Spring·Fall	
Mandatory Major Courses	SPE510	Space Mission and Orbit Analysis	3:0:3(6)	Spring	
	SPE520	Introduction to Spacecraft Engineering	3:0:3(6)	Fall	planning to open
Elective Major Courses (Essential)	SPE530	Spacecraft Mechanical Systems	3:0:3(3)	Fall	
	SPE532	Spacecraft Thermal Control	3:0:3(6)	Spring	
	SPE536	Spacecraft Power System Design	3:0:3(6)	Fall	
	SPE538	Spacecraft Onboard Computer System	3:0:3(6)	Spring	
	SPE540	Spacecraft Communication System	3:0:3(6)	Fall	
	SPE542	Spacecraft Control System	3:0:3(6)	Spring	
	SPE546	Spacecraft Propulsion System	3:0:3(6)	Fall	planning to open
	SPE560	Space Observation Payloads and Applications I	3:1:3(6)	Spring	
	SPE562	Space Observation Payloads and Applications II	3:0:3(6)	Fall	
	SPE564	Spacecraft Optical Systems	3:0:3(6)	Spring	
	SPE566	Space Remote Sensing I	3:0:3(6)	Spring	
	SPE568	Space Remote Sensing II	3:1:3(6)	Fall	
Elective Major Courses (Elective)	CS530	Operating System	3:0:3(6)	Spring·Fall	
	EE413	Networking Design and Programming	3:1:3(6)	Spring	**
	EE421	Wireless Communication Systems	3:0:3(6)	Spring	**
	EE432	Digital Signal Processing	3:0:3(6)	Fall	**
	EE535	Digital Image Processing	3:0:3(6)	Spring	
	EE542	Microwave Engineering	3:1:3(6)	Fall	
	EE567	Photovoltaic Power Generation	3:0:3(6)	Spring	
	EE571	Advanced Electronic Circuits	3:0:3(6)	Fall	
	EE581	Linear Systems	3 : 0 : 3 (6)	Spring	
	EE594	Power Electronics Systems	3:0:3(6)	Fall	

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Elective Major Courses (Elective)	EE681	Nonlinear Control	3 : 0 : 3 (6)	Fall	
	IE525	Project Management	3:1:3(4)	Spring	
	IE634	Reliability and Maintenance Engineering	3:0:3(3)	Spring	
	MAE500	Mathematical Methods in Mechanical Engineering	3:0:3(6)	Spring	
	MAE502	Introduction to Finite Element Method	3:0:3(4)	Spring	
	MAE505	Measurement Instrumentation	3 : 1 : 3 (6)	Fall	
	MAE512	Advanced Heat Transfer	3:0:3(6)	Fall	
	MAE518	Rocket System Engineering	3:0:3(6)	Fall	
	MAE542	Mechanics of Composite Materials	3:0:3(6)	Fall	
	MAE550	Advanced Dynamics	3 : 0 : 3 (6)	Fall	
	MAE551	Linear Vibration	3:0:3(6)	Spring	
	MAE553	Robot Dynamics	3:0:3(6)	Spring·Fall	
	MAE561	Linear System Control	3 : 0 : 3 (6)	Spring	
	MAE563	Microprocessor Application	2 : 3 : 3 (6)	Fall	
	MAE566	Spacecraft Trajectory Guidance and Control	3:0:3(6)	Spring	
	MAE595	Introduction to Optimal Flight Control	3 : 0 : 3 (6)	Spring	
	MAE597	Spacecraft Attitude Dynamics and Control	3:0:3(6)	Spring	
	MAE726	Equilibrium Hypersonic Aerothermodynamics	3 : 0 : 3 (6)	Spring	
	MAE728	Reentry Aerothermodynamics	3 : 0 : 3 (6)	Fall	
	MAE761	Nonlinear System Control	3 : 0 : 3 (6)	Spring	
	MAE860	Special Topics in Propulsion and Combustion	3 : 0 : 3 (6)	Fall	
	MAE890	Special Topics in Aerospace Engineering	3 : 0 : 3 (6)	Spring·Fall	
	PH481	Astrophysics	3:0:3(4.5)	Fall	**
	PH441	Introduction to Plasma Physics	3:0:3(4.5)	Fall	**
	PH622	Geometrical Optics	3:0:3(4.5)	Spring·Fall	
Research	SPE960	Thesis (Master Student)			
	SPE980	Thesis (Ph.D. Student)			planning to open
	SPE966	Seminar (Master Student)	1 : 0 : 1		
	SPE986	Seminar (Ph.D. Student)	1 : 0 : 1		

** : Undergraduate and Master's co-subject