Table of Curriculum

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Mandatory General Courses	CC 010	11.010	Special Lecture on Leadership	1:0:0(0)	Spring·Fall	
	CC 020	11.020	Ethics and Safety I	1:0:0	Spring·Fall	
	CC 500	11.500	Scientific Writing	3:0:3(4)	Spring·Fall	
	CC 510	11.510	Introduction to Computer Application	2:3:3(10)	Spring·Fall	
	CC 511	11.511	Probability and Statistics	2:3:3(6)	Spring·Fall	
	CC 512	11.512	Introduction to Materials and Engineering	3:0:3(3)	Spring·Fall	
	CC 513	11.513	Engineering Economy and Cost Analysis	3:0:3(6)	Fall	
	CC 522	11.522	Introduction to Instruments	2:3:3(8)	Fall	
	CC 530	11.530	Entrepreneurship and Business Strategies	3:0:3(6)	Fall	
	CC 532	11.532	Space Mission and Orbit Analysis	3:0:3(6)	Spring	
Mandatory Major Courses	SPE510	84.510	Introduction to Spacecraft Engineering	3:0:3(6)	Spring	
	SPE520	84.520	Spacecraft Mechanical Systems	3:0:3(3)	Fall	
Elective Courses (Essential)	SPE530	84.530	Spacecraft Thermal Control	3:0:3(6)	Spring	planning to open
	SPE532	84.543	Spacecraft Power System Design	3:0:3(6)	Fall	"
	SPE536	84.536	Spacecraft Onboard Computer System	3:0:3(6)	Spring	"
	SPE538	84.538	Spacecraft Communication System	3:0:3(6)	Fall	"
	SPE540	84.540	Spacecraft Control System	3:0:3(6)	Spring	"
	SPE542	84.542	Spacecraft Propulsion System	3:0:3(6)	Fall	"
	SPE546	84.546	Space Observation Payloads and Applications I	3:1:3(6)	Spring	"
	SPE560	84.560	Space Observation Payloads and Applications II	3:0:3(6)	Fall	"
	SPE562	84.562	Spacecraft Optical Systems	3:0:3(6)	Spring	"
	SPE564	84.564	Space Remote Sensing I	3:0:3(6)	Spring	"
	SPE566	84.566	Space Remote Sensing II	3:1:3(6)	Fall	"
	SPE568	84.568	Operating System	3:0:3(6)	Spring·Fall	
Elective Courses (Elective)	CS530	36.530	Networking Design and Programming	3:1:3(6)	Spring	**
	EE413	35.413	Wireless Communication Systems	3:0:3(6)	Spring	**
	EE421	35.421	Digital Signal Processing	3:0:3(6)	Fall	**
	EE432	35.432	Electronics design Lab.	1:6:3(6)	Spring	
	EE505	35.505	Engineering Random Processes	3:0:3(6)	Spring.Fall	
	EE528	35.528	Microwave Engineering	3:1:3(6)	Fall	
	EE535	35.535	Photovoltaic Power Generation	3:0:3(6)	Spring	
	EE542	35.542	Advanced Electronic Circuits	3:0:3(6)	Fall	
	EE567	35.567	Linear Systems	3:0:3(6)	Spring	
	EE571	35.571	Power Electronics Systems	3:0:3(6)	Fall	
	EE581	35.581	Applied Detection and Estimation	3:0:3(6)	Spring	
	EE594	35.594	Nonlinear Control	3:0:3(6)	Fall	
	EE625	35.625	Project Management	3:1:3(4)	Spring	
	EE681	35.681	Simulation and System Modeling	3:1:3(6)	Spring	
	EE827	35.827	Convex Optimization	3:1:3(6)	Fall	
	IE525	31.525	Stochastic Modeling I	3:1:3(5)	Fall	
	IE532	31.532	Reliability and Maintenance Engineering	3:0:3(3)	Spring	◎
	IE539	31.539	Satellite Systems	3:0:3(6)	Fall	◎

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	IE632	31.632	Global Positioning System	2:3:3(6)	Fall	
	IE634	31.634	Multidisciplinary Design Optimization for Aerospace Systems	3:0:3(6)	Spring	
	AE405	B8.405	Appraisal of Engineering Projects under Uncertainty	3:0:3(6)	Spring	◎
	AE455	B8.455	Rocket System Engineering	3:0:3(6)	Fall	◎
	AE501	B8.501	Mechanics of Composite Materials	3:0:3(6)	Fall	◎
	AE505	B8.505	Spacecraft Attitude Dynamics and Control	3:0:3(6)	Spring	◎
	AE516	B8.516	Introduction to Optimal Control	3:0:3(6)	Spring	
	AE532	B8.532	Spacecraft Trajectory Guidance and Control	3:0:3(6)	Spring	
	AE550	B8.550	Hypersonics Aerodynamics	3:0:3(6)	Spring	
	AE551	B8.551	Navigation and Guidance	3:0:3(6)	Spring	
	AE555	B8.555	Special Topics in Propulsion and Combustion	3:0:3(6)	Fall	
	AE621	B8.621	Special Topics in Aerospace Engineering	3:0:3(6)	Spring Fall	
	AE650	B8.650	Introduction to Electromagnetism & Optics	3:1:3(6)	Spring	
	AE810	B8.810	Mathematical Methods in Mechanical Engineering	3:0:3(6)	Spring	
	AE890	B8.890	Introduction to Finite Element Method	3:0:3(6)	Spring	
	ME481	B7.481	Measurement Instrumentation	3:0:3(6)	Fall	
	ME500	B7.500	Introduction to Finite Element Method	3:0:3(6)	Spring	
	ME502	B7.502	Measurement Instrumentation	3:0:3(6)	Fall	
	ME505	B7.505	Linear Vibration	3:0:3(6)	Spring	
	ME512	B7.512	Robot Dynamics	3:0:3(6)	Spring, Fall	
	ME550	B7.550	Linear System Control	3:0:3(6)	Spring	
	ME551	B7.551	Nonlinear System Control	3:0:3(6)	Spring	
	ME553	B7.553	Special Topics in Mechanical Engineering	3:0:3(6)	Spring, Fall	
	ME561	B7.561	Applied Matrix Computation	3:0:3(6)		
	ME761	B7.761	Laser Optics	3:0:3(4.5)	spring/fall	**
	ME800	B7.800	Astrophysics	3:0:3(4.5)	Fall	**
	MAS504	25.504	Introduction to Plasma Physics	3:0:3(4.5)	Fall	**
	PH402	20.402	Quantum Mechanics I	3:0:3(4.5)	spring	**
	PH481	20.481	Advanced Electrodynamics I	3:0:3(4.5)	fall	**
	PH441	20.441	Applied Physics Laboratory I	0:9:3(4.5)	spring	
	PH503	20.503	Geometrical Optics	3:0:3(4.5)	Spring·Fall	
	PH507	20.507	Quantum Optics	3:0:3(4.5)	spring/fall	
	PH601	20.601	Thesis (Master Student)			
	PH622	20.622	Thesis (Ph.D. Student)			planning to open
	PH624	20.624	Seminar (Master Student)	1:0:1		
Research	SPE960	84.960	Thesis (Master Student)			
	SPE980	84.980	Thesis (Ph.D. Student)			planning to open
	SPE966	84.966	Seminar (Master Student)	1:0:1		"
	SPE986	84.986	Seminar (Ph.D. Student)	1:0:1		"

※Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.