

# Table of Curriculum(Undergraduate) 2022.3.1.

Classification	Subject No.	Subject Code	Subject Name	Lecture:Lab.: Credit (Homework)	Semester	Remark	
Elective Basic	AE100	B8.100	Sky and Space	3:0:3(6)	Fall		
Mandatory major courses	AE210	B8.210	Aerospace Thermodynamics	3:0:3(6)	Spring		
	AE220	B8.220	Aerodynamics I	3:0:3(6)	Fall		
	AE300	B8.230	Flight Mechanics Project	3:1:3(6)	Spring		
	AE208	B8.208	Aerospace Engineering Laboratory I	2:3:3(3)	Fall		
	AE307	B8.309	Aerospace Engineering Laboratory II	1:6:3(3)	Fall		
	AE330	B8.330	Aerospace Structures I	3:0:3(6)	Spring		
	AE400	B8.400	Aerospace System Design I	2:3:3(6)	Spring		
Elective major courses	AE200	B8.200	Introductory Space Projects	2:3:3(6)	Fall		
	AE201	B8.201	Introductory Aeronautical Projects	2:3:3	Spring		
	AE230	B8.230	Mechanics of Aerospace Materials	3:0:3(6)	Spring		
	AE250	B8.250	Aerospace Dynamics	3:0:3(6)	Fall		
	AE280	B8.280	Software Application in Aerospace Engineering	2:3:3(6)	Spring		
	AE310	B8.310	Propulsion System	3:0:3(6)	Fall		
	AE311	B8.311	Aerospace Heat Transfer	3:0:3(6)	Spring		
	AE320	B8.320	Aerodynamics II	3:0:3(6)	Spring		
	AE350	B8.350	Aerospace Control Engineering	3:1:3(6)	Fall		
	AE370	B8.370	Numerical Methods	3:0:3(6)	Spring		
	Advanced Major	AE321	B8.321	Compressible Aerodynamics	3:0:3(6)	Fall	
		AE331	B8.331	Aerospace Structures II	3:0:3(6)	Fall	
		AE401	B8.401	Aerospace System Design II	2:3:3(6)	Fall	◎
		AE405	B8.405	Satellite Systems	3:0:3(6)	Fall	◎
		AE409	B8.409	Applied Mathematics for Aerospace Engineering	3:0:3	Spring	
		AE410	B8.410	Combustion Engineering	3:0:3(6)	Spring	◎
		AE420	B8.420	Viscous Aerodynamics	3:0:3(6)	Fall	◎
		AE435	B8.435	Vibration & Basic Aeroelasticity	3:0:3(6)	Spring	◎
		AE450	B8.450	Flight Dynamics and Control	3:0:3(6)	Fall	◎
AE455		B8.455	Global Positioning System	3:0:3(6)	Fall	◎	
AE480		B8.480	Aerospace Applied Electronics	2:3:3(6)	Spring	◎	
AE492		B8.492	Special Lectures in Aerospace Engineering	3:0:3(6)	Spring and Fall	◎	
AE493		B8.493	Special Lectures in Aerospace Engineering II	2:0:2(3)	Fall	◎	
AE494	B8.494	Special Lectures in Aerospace Engineering III	1:0:1	Spring and Fall	◎		
Research	AE490	B8.490	Thesis Study	0:6:3	Fall		
	AE495	B8.495	Individual Study	0:6:1	Fall		
	AE496	B8.496	Seminar	1:0:1	Spring and Fall		

## Substitute Course List 2022.3.1.

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Under-graduate	AE100	Sky and Space	MAE107	Sky and Space	Abolition
Under-graduate	AE200	Introductory Space Projects	MAE291	Introductory Space Projects	Abolition
Under-graduate	AE208	Aerospace Engineering Laboratory I	MAE308	Aerospace Engineering Laboratory I	Abolition
			AE308	Aerospace Engineering Laboratory I	Abolition
Under-graduate	AE210	Aerospace Thermodynamics	MAE210	Thermodynamics	Abolition
Under-graduate	AE220	Aerodynamics I	MAE220	Fluid Mechanics	Abolition
Under-graduate	AE230	Mechanics of Aerospace Materials	MAE230	Solid Mechanics	Abolition
Under-graduate	AE250	Aerospace Dynamics	MAE250	Dynamics	Abolition
Under-graduate	AE280	Software Application in Aerospace Engineering	MAE285	Software Application in Aerospace Engineering	Abolition
Under-graduate	AE300	Flight Mechanics Project	MAE292	Introductory Aeronautical Projects	Abolition
			MAE365	Flight Mechanics	Abolition
Under-graduate	AE307	Aerospace Engineering Laboratory II	MAE309	Aerospace Engineering Laboratory II	Abolition
			AE309	Aerospace Engineering Laboratory II	Abolition
Under-graduate	AE310	Propulsion System	MAE315	Propulsion System	Abolition
Under-graduate	AE311	Aerospace Heat Transfer	MAE311	Heat Transfer	Abolition
Under-graduate	AE320	Aerodynamics II	MAE325	Aerodynamics	Abolition
Under-graduate	AE321	Compressible Aerodynamics	MAE326	Compressible Aerodynamics	Abolition
Under-graduate	AE330	Aerospace Structures I	MAE335	Aerospace Structures	Abolition
Under-graduate	AE331	Aerospace Structures II	MAE435	Computational Methods in Aerospace Engineering	Abolition
Under-graduate	AE350	Aerospace Control Engineering	MAE464	Fundamentals of Control Theory and Practice	Abolition
Under-graduate	AE370	Numerical Methods	MAE301	Numerical Methods	Abolition
Under-graduate	AE400	Aerospace System Design I	MAE405	Aerospace System Design I	Abolition
Under-graduate	AE401	Aerospace System Design II	MAE406	Aerospace System Design II	Abolition
Under-graduate	AE405	Satellite Systems	MAE466	Satellite Systems	Abolition
Under-graduate	AE410	Combustion Engineering	MAE415	Combustion Engineering	Abolition
Under-graduate	AE420	Viscous Aerodynamics	MAE425	Viscous Aerodynamics	Abolition
Under-graduate	AE450	Flight Dynamics and Control	MAE465	Flight Dynamics and Control	Abolition
Under-	AE455	Global Positioning System	MAE463	Synthetic Design of	Abolition

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
graduate				Aerospace Systems	
Under-graduate	AE480	Aerospace Applied Electronics	MAE300	Multidisciplinary Design Optimization for Aerospace Systems	Abolition
			MAE467	Appraisal of Engineering Projects under Uncertainty	Abolition
Under-graduate	AE493	Special Lectures in Aerospace Engineering II	MAE499	Aerothermochemistry and Combustion	Abolition
Graduate	AE500	Synthetic Design of Aerospace Systems	MAE565	Radiation and Combustion Phenomena	Abolition
Graduate	AE501	Multidisciplinary Design Optimization for Aerospace Systems	MAE558	Advanced Space Propulsion Systems	Abolition
Graduate	AE505	Appraisal of Engineering Projects under Uncertainty	MAE557	Rocket System Engineering	Abolition
Graduate	AE510	Aerothermochemistry and Combustion	MAE593	Advanced Aerodynamics	Abolition
Graduate	AE511	Radiation and Combustion Phenomena	MAE594	Helicopter Aeromechanics	Abolition
Graduate	AE515	Advanced Space Propulsion Systems	MAE555	Computational Fluid Dynamics	Abolition
Graduate	AE516	Rocket System Engineering	MAE518	Aeroacoustics	Abolition
Graduate	AE520	Advanced Aerodynamics	MAE522	Experimental Aerodynamics	Abolition
Graduate	AE521	Helicopter Aeromechanics	MAE523	Flight Vehicle Structures	Abolition
Graduate	AE522	Computational Fluid Dynamics	MAE524	Structural Dynamics	Abolition
Graduate	AE523	Aeroacoustics	MAE528	Mechanics of Composite Materials	Abolition
Graduate	AE525	Experimental Aerodynamics	MAE527	Smart Composite Lab	Abolition
Graduate	AE530	Flight Vehicle Structures	MAE538	Spacecraft Attitude Dynamics and Control	Abolition
Graduate	AE531	Structural Dynamics	MAE540	Introduction to Optimal Control	Abolition
Graduate	AE532	Mechanics of Composite Materials	MAE542	Advanced Linear Stability and Control	Abolition
Graduate	AE535	Smart Composite Lab	MAE584	Spacecraft Trajectory Guidance and Control	Abolition
Graduate	AE550	Spacecraft Attitude Dynamics and Control	MAE597	GNSS Remote Sensing	Abolition
Graduate	AE551	Introduction to Optimal Control	MAE595	Advanced Gas Dynamics	Abolition
Graduate	AE552	Advanced Linear Stability and Control	MAE596	Advanced Linear Stability and Control	Abolition
Graduate	AE555	Spacecraft Trajectory Guidance and Control	MAE566	Spacecraft Trajectory Guidance and Control	Abolition
Graduate	AE580	GNSS Remote Sensing	MAE556	GNSS Remote Sensing	Abolition
Graduate	AE620	Advanced Gas Dynamics	MAE625	Advanced Gas Dynamics	Abolition

Substitute courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no.	Course title	Remark
Graduate	AE621	Hypersonics Aerodynamics	MAE626	Hypersonics Aerodynamics	Abolition
			MAE726	Equilibrium Hypersonic Aerothermodynamics	Abolition
			MAE727	Nonequilibrium Hypersonic Aerothermodynamics	Abolition
			MAE728	Reentry Aerothermodynamics	Abolition
Graduate	AE623	Unsteady Fluid Flows	MAE628	Unsteady Fluid Flows	Abolition
Graduate	AE630	Theory of Plates and Shells	MAE636	Theory of Plates and Shells	Abolition
Graduate	AE631	Aeroelasticity	MAE637	Aeroelasticity	Abolition
Graduate	AE650	Navigation and Guidance	MAE663	Navigation and Guidance	Abolition
Graduate	AE651	Advanced Navigation Systems and Applications	MAE665	Advanced Navigation Systems and Applications	Abolition
Graduate	AE655	Experiments in Flight Control	MAE663	Experiments in Flight Control	Abolition
Graduate	AE810	Special Topics in Propulsion and Combustion	MAE860	Special Topics in Propulsion and Combustion	Abolition
Graduate	AE820	Special Topics in Aerodynamics	MAE820	Special Topics in Aerodynamics	Abolition
Graduate	AE830	Special Topics in Flight Vehicle Structures	MAE840	Special Topics in Flight Vehicle Structures	Abolition
Graduate	AE850	Special Topics in Flight Mechanics and Control	MAE880	Special Topics in Flight Mechanics and Control	Abolition

Substitute courses in the department					
Category	Course offered by the department		Course offered by other departments		
	Course no.	Course title	Course no.	Course title	Remark
Under-graduate	AE210	Aerospace Thermodynamics	ME211	Thermodynamics	unidirectional
Under-graduate	AE230	Mechanics of Aerospace Materials	ME231	Solid Mechanics	unidirectional
Under-graduate	AE311	Aerospace Heat Transfer	ME311	Heat Transfer	unidirectional
Under-graduate	AE370	Numerical Methods	ME301	Numerical Methods	unidirectional