

**Course Prerequisites  
Aerospace and Ocean Engineering**

Semester	Course	Pre(Co)requisite	Pre(Co)requisite For
1 <sup>st</sup> Yr Fall			
	CHEM 1035 Gen Chemistry I		AOE 3094, Co: CHEM 1045
	CHEM 1045 Chemistry Lab I	Co: CHEM 1035	
	ENGE 1215 Engineering Exploration	Co: MATH 1225	ENGE 1215
	ENGL 1105 English I		ENGL 1106
	MATH 1225 Calculus I		MATH 1226, 1224, PHYS 2305, Co: ENGE 1215
1 <sup>st</sup> Yr Spring			
	ENGE 1216 Explor of Engr Design	ENGE 1215	AOE 2074, 2104, 2204
	ENGL 1106 English II	ENGL 1105	
	MATH 1226 Calculus II	MATH 1225	MATH 2204, PHYS 2306
	MATH 1224 Vector Geometry	MATH 1225, CO: MATH 2114, 1226	Co: MATH 1224, PHYS 2305 MATH 2204
	PHYS 2305 Physics I	MATH 1225, Co: MATH 1226	AOE 2104, 2204, PHYS 2306, Co: AOE 3094
2 <sup>nd</sup> Yr Fall			
	AOE/ESM 2074 Comp Methods	ENGE 2114, Co: MATH 2204	AOE 3104, 3204
	AOE 2104 Intro to Aerospace Engr	ENGE 2114, PHYS 2305	AOE 3104, 3204
(AE)	AOE 2204 Intro to Ocean Engr	ENGE 2114, PHYS 2305	AOE 3104, 3204
(OE)	ESM 2104 Statics	MATH 2114, Co: MATH 2204	AOE 3024, 3104, 3204
	MATH 2204 Multivariable Calculus	MATH 1226, MATH 1224	AOE 3204, ESM 2204, ESM 2304, STAT 4705, Co: AOE 2074, ESM 2104
	PHYS 2306 Physics II	MATH 1226, PHYS 2305	
	MATH 2114 Linear Algebra		ESM 2104, Co: MATH 1224
2 <sup>nd</sup> Yr Spring			
	AOE 3094 AOE Materials	CHEM 1035, Co: ESM 2204, PHYS 2305	
(AE)	AOE 3104 Aircraft Performance	AOE 2104 or 2204; 2074; ESM 2104, Co: ESM 2304	All 3000 & higher level AOE courses
(OE)	AOE 3204 Naval Architecture	AOE 2104 or 2204; 2074; ESM 2104, MATH 2204, Co: ESM 2304	All 3000 & higher level AOE courses
	ESM 2204 Mech of Def Bodies	ESM 2104, MATH 2204	AOE 3024, Co: AOE 3094
	ESM 2304 Dynamics	ESM 2104, MATH 2204, Co: MATH 2214	AOE 3014, 3034, 4134, Co: AOE 3104, 3204
	MATH 2214 Differential Equations	MATH 2114, 1226	AOE 3034, MATH 4564, ME 3134, Co: ESM 2304

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**Course Prerequisites (continued)**  
**Aerospace and Ocean Engineering**

Semester	Course	Pre(Co)requisite	Pre(Co)requisite For
3 <sup>rd</sup> Yr Fall			
	AOE 3014 Aero/Hydrodynamics	AOE 3104 or 3204, ESM 2304	AOE 3054, 3044, 3114, 3264, 4214, 4334
	AOE 3024 Thin-Wall Structures	ESM 2104, ESM 2204	AOE 3054, 3124, 3224
	AOE 3034 Vibration & Control	ESM 2304, Math 2214	AOE 3054, 3134, 4140, 4334
(AE)	AOE 4134 Astromechanics	ESM 2304	AOE 4140
	MATH 4564 Oper Methods for Engr	Math 2214	AOE 3044, 4214, 4334
	ME 3134 Thermodynamics	Math 2214	AOE 3044, 3114, 4234, 4244
3 <sup>rd</sup> Yr Spring			
	AOE 3054 Exp. Methods	AOE 3014, 3024, 3034	AOE 4154, 4254, 4x65
(AE)	AOE 3114 Compressible Aerodyn	AOE 3014, ME 3134	AOE 4154, 4234, 4065, 4165
(AE)	AOE 3124 A/C Structures	AOE 3024	AOE 4154, 4065, 4165
(AE)	AOE 3134 Stability & Control	AOE 3034	AOE 4154, 4065
(OE)	AOE 3224 Ocean Structures	AOE 3024	AOE 4265
(OE)	AOE 3264 Resist & Propulsion	AOE 3014, 3204	AOE 4254, 4265
(AE)	AOE 4140 Spacecraft Dynamics & Control	AOE 3034, 4134	AOE 4165, 4154
(OE)	AOE 4214 Ocean Wave Mechanics	AOE 3014, MATH 4564	AOE 4334, 4265
(OE)	AOE 4244 Marine Engineering	AOE 3204, ME 3124 or 3134	AOE 4265
(OE)	STAT 4705 Prob & Statistics For Engr	MATH 2204	
4 <sup>th</sup> Yr Fall			
	AOE 3044 Boundary Layer & Heat Transfer	AOE 3014, MATH 4564, ME 3134	
(AE)	AOE 4065 Aircraft Design I	AOE 3054, 3114, 3124, 3134	AOE 4066
(AE)	AOE 4165 Spacecraft Design I	AOE 3054, 3114, 3124, 4140	AOE 4166
(OE)	AOE 4265 Ship Design I	AOE 3054, 3224, 3264, 4214, 4244; Co: AOE 4334	AOE 4266
(AE)	AOE 4134 Astromechanics	ESM 2304	AOE 4140
(AE)	AOE 4154 Aerospace Engineering Lab	AOE 3054, 3114, 3124, 3134 or 4140	
(AE)	AOE 4234 Aerospace Propulsion	AOE 3114, ME 3134	
(OE)	AOE 4254 OE Lab	AOE 3054, 3264	
(OE)	AOE 4334 Ship Dynamics	AOE 3014, 3034, 4214, MATH 4564	AOE 4265
4 <sup>th</sup> Yr Spring			
(AE)	AOE 4066 Aircraft Design II	AOE 4065	
(AE)	AOE 4166 Spacecraft Design II	AOE 4165	
(OE)	AOE 4266 Spacecraft Design II	AOE 4265	