University of Central Florida Mechanical and Aerospace Engineering Aerospace Engineering

GENERAL EDUCATION PROGRAM				ENGINEERING MAJOR			
A. COMMUNICATION FOUNDATIONS - 9 CrHs	CrHs	Grade	Trans Equiv	MAJOR COURSES - 74 CrHs	CrHs	Grade	Trans Equiv
A1. ♦ ENC 1101	•3			EGS 1006C Introduction to the Engeering Profession	1		
A2. ENC 1102	•3			EGN 1007C Engineering Concepts and Methods	1		
A3. Select 1: SPC 1608, SPC 1603, COM 1000	3			EGN 3310 Engineering Analysis - Statics	3*		
B. HISTORICAL & CULTURAL - 9 CrHs				EGN 3321 Engineering Analysis - Dynamics	3*		
B1. Select 1: AMH 2010, EUH 2000, EUH 2001, ♦ HUM 2020,	3			EGN 3343 Thermodynamics	3*		
HUM 2210, HUM 2230, WOH 2012, WHO 2022	3			EMA 3706 Structures and Properties of Aerospace Materials	3		
B2. Select 1: ARH 2050, ARH 2051, FIL 1000, FIL 2030, LIT 2110,				EGN 3373 Principles of Electrical Engineering	3		
LIT 2120, MUH 2017, MUH 2019, ♦ MUL 2010, MUH 2016,	3			STA 3032 Probability & Statistics for Engineers	•GEP		
MUL 2720, ♦ PHI 2010, REL 2300, ♦ THE 2000				EML 3034C Modeling Methods in MAE	3		
B3. Select 1 Additional Course from B1 or B2	3			EAS 3101 Fundamental of Aerodynamics Spring Only	3		
C. MATHEMATICAL FOUNDATIONS - 7 CrHs				EGM 3601 Solid Mechanics	3		
C1. ♦ MAC 2311C Calc I w/ Analytic Geometry	•4*			EML 3701 Fluid Mechanics I	3		
C2. STA 3032 Probability & Statistics for Engineers	•3			EAS 3800C Aerospace Engineering Measurements	3		
D. SOCIAL FOUNDATION - 6 CrHs				EAS 3810C Design of Aerospace Experiments	3		
D1. Select 1: ♦ AMH 2020, ♦ ECO 2013, ECO 2023, ♦ POS 2041	3			EAS 4105 Flight Mechanics Fall Only	3		
D2. Select 1: ♦ ANT 2000, ♦ PSY 2012, ♦ SYG 2000	3			EAS 4134 High-Speed Aerodynamics Fall Only	3		
E. SCIENCE FOUNDATION - 7 CrHs				EML 4142 Heat Transfer	3		
E1. ♦ PHY 2048C General Physics I using Calculus	4*			EAS 4200 Analysis and Design Aerospace Structures Fall Only	3		
E2. Select 1: ANT 2511, ♦ BSC 1005, BSC 1050, ♦ BSC 2010C,	3			EML 4225 Introduction to Vibrations and Controls	3		
GEO 1200, GLY 1030, MCB 1310	5			EAS 4300 Aerothermodynamics of Propulsion Systems Spring Only	3		
ENGINEERING CORE				EAS 4700C Aerospace Design I	3		
MAC 2311C Calculus I w/ Analytic Geometry	•GEP*			EAS 4710C Aerospace Design II	3		
MAC 2312 Calculus II w/ Analytic Geometry	4*			EAS 3933 Career/Academic Advising I	0		
MAC 2313 Calculus III w/ Analytic Geometry	4*			EAS 4931 Career/Academic Advising II	0		
MAP 2302 Differential Equations	3*			Technical Electives			
CHS 1440 Principles of Chemistry	4*			Approved Technical Electives (4 courses)	12		
PHY 2048C General Physics I using Calculus	GEP*			GPA for the Major	74		
PHY 2049C General Physics II using Calculus	4			Cumulative GPA and Total Credit Hours	128		

## Notes:

\*\* A Grade of "C" (2.0) or better is required in these courses - CHS 1440, PHY 2048C, MAC 2311C, MAC 2312, MAC 2313, MAP 2302, EGN 3310, EGN 3321, and EGN 3343

"•" Indicates a "C-" minimum required by the Gordon Rule

GEP = General Education Program (These courses may also satisfy Engineering credits)

Students will need to complete at least one diamond () course per General Education section. If you have any questions regarding the General Education program, please speak with the FYAE Office in HPH 116

The minimum GPA for a Mechanical or Aerospace Engineering Major = 2.25