Department of Mechanical and Aerospace Engineering
Suggested Program of Study
Aerospace Engineering: 2025 - 2026

First Year

Fall (12 credit hours)		**Spring** (15 credit hours)		**Summer** (10 credit hours)	
ENC 1101: English Comp I – COMM 1	(3)	**ENC 1102**: English Comp II – COMM 2	(3)	Historical Foundation – HUM 1	(3)
EGS 1006C: Intro to the Engr Prof	(1)	**EGN 1007C**: Engr Concepts & Methods	(1)	**EGN 3310**: Engr Analysis Statics *(PR: MAC 2311C, PHY 2048C (or PHY 2048 & PHY 2048L), CR: MAC 2312)*	(3)
Pick One - **CHS 1440**: Principals of Chemistry ***or*** **CHM 2045C**: Chemistry Fundamentals I – NAT SCI 1	(4)	**PHY 2048C** (or PHY 2048 & PHY 2048L): General Physics Using Calc I – NAT SCI 2 *(PR: MAC 2311C)*	(4)		
MAC 2311C: Calculus I – MATH 1 *(PR: MAC 1114C, MAC 1140C)*	(4)	**MAC 2312**: Calculus II – MATH 2 *(PR: MAC 2311C)*	(4)	**MAC 2313**: Calculus III *(PR: MAC 2312)*	(4)
		SPC 1603C: Fundamentals of Technical Presentations – GEP FLEX 1	(3)		

Second Year

Fall (13 credit hours)		**Spring** (12 credit hours)		**Summer** (6 credit hours)	
EGN 3321: Engineering Analysis - Dynamics *(PR: MAC 2313, EGN 3310)*	(3)	**EGM 3601**: Solid Mechanics *(PR: MAC 2311C, MAC 2312, MAC 2313, PHY 2048C (or PHY 2048 & PHY 2048L), EGN 3310)*	(3)	**EML 3701**: Fluid Mechanics *(PR: MAC 2313, MAP 2302, PHY 2048C (or PHY 2048 & PHY 2048L), EGN 3321, EGN 3343)*	(3)
PHY 2049C (or PHY 2049 & PHY 2049L): General Physics Using Calc II – GEP FLEX 2 *(PR: PHY 2048C (or PHY 2048 & PHY 2048L), MAC 2312)*	(4)	**EGN 3373**: Principles of Electrical Engr *(PR: PHY 2049C (or PHY 2049 & PHY 2049L); CR: MAP 2302)*	(3)	**COP 3223C**: Intro to Programming w/ C *(PR: COP 2500C or appropriate score in the CS Placement Test)*	(3)
MAP 2302: Differential Equations *(PR: MAC 2313)*	(3)	**EGN 3343**: Thermodynamics *(PR: MAC 2313, EGN 3310)*	(3)		
EMA 3706: Struct & Prop of Aerospace Matls. *(PR: CHS 1440 or CHM 2045C, MAC 2312)*	(3)	Cultural Foundation – HUM 2	(3)		

Third Year

Fall (15 credit hours)		**Spring** (15 credit hours)		**Summer**
EAS 3933: Career/Academic Advising I *(PR: MAP 2302)*	(0)	**EAS 4134**: High-Speed Aerodynamics *(PR: EAS 3101)*	(3)	Consider internship
EML 3034C: Modeling Methods in MAE *(PR: MAC 2313, MAP 2302, PHY 2048C (or PHY 2048 & PHY 2048L), COP 3223C; CR: EGN 3321, EAS 3933)*	(3)	**EAS 4505**: Orbital Mechanics *(PR: MAC 2313, MAP 2302, PHY 2048C (or PHY 2048 & PHY 2048L), EGN 3321)* ***Spring Only***	(3)	Make-up missed courses
EAS 3101: Fundamentals of Aerodynamics *(PR: EML 3701)*	(3)	**EML 4312**: System Dynamics & Control *(PR: EGN 3321, EGM 3601, EML 3034C, EGN 3373)*	(3)	Consider next courses, incl. Senior Design
EAS 3800C: Aerospace Engr Measurements *(PR: EGN 3343)*	(3)	**EAS 3810C**: Design Aerospace Experiments *(PR: EAS 3800C, EML 3701)*	(3)	
EAS 4200: Aerospace Structures *(PR: EGM 3601)* ***Fall Only***	(3)	**STA 3032**: Probability & Statistics for Engr *(PR: MAC 2312)*	(3)	
Social Sciences Foundation – SOC SCI 1	(3)			

Fourth Year

Fall (12 credit hours)		**Spring** (12 credit hours)	
EAS 4931: Career/Academic Advising II *(PR: EAS 3933, Department Consent)*	(0)	**EAS 4710C**: Aerospace Design II *(PR: EAS 4931, EAS 4700C)*	(3)
EAS 4700C: Aerospace Design I *(PR: EGN 3373, EAS 3800C, EML 3701, EAS 3101, EML 4225 and Department Consent; CR: EAS 4931)*	(3)	Approved Technical Elective	(3)
		Approved Technical Elective	(3)
EAS 4105: Flight Mechanics *(EAS 3101, CR: EML 4225)* ***Fall Only***	(3)	Social Sciences Foundation – SOC SCI 2	(3)
EAS 4300: Aerothermodynamics Prop. Syst. *(PR: EAS 4134)*	(3)		
Approved Technical Elective	(3)		

IMPORTANT NOTICES:

A “C” (2.0) or better is required in all major courses. All prerequisites require a “C” (2.0) or better.

EAS 4700C and EAS 4710C must be taken in consecutive terms (FA-SP, SP-SU, or SU-FA).

Must complete PHY 2048C or PHY 2048 and PHY 2048L (lecture and lab components) with a “C” (2.0) or better.
Must complete PHY 2049C or PHY 2049 and PHY 2049L (lecture and lab components) with a “C” (2.0) or better.

Courses can be taken ahead of this schedule if all prerequisites have been met. Please meet with your advisor if you have any questions regarding your schedule. Do not drop any course before discussing this action with your advisor.

Revised: 04/01/2025