Astronautical Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
GESM (GE B)# 4	WRIT 150 4	GE C 4	GE D* 4	GE C 4	ASTE 331b *ASTE 331a* 3	AME 441aL *AME 341BL* 3	GE B 4
ASTE 101L 4	GE A* 4	AME 201 *PHYS 151Lg or 161Lg or 171L* 3	AME 204 *AME 201 or CE 205* 3	AME 301 *AME 201 or CE 205* 3	WRIT 340 *WRIT 150* 4	TECHNICAL ELECTIVE 3	ASTE 421 *ASTE 330* 3
MATH 125 (GE F)* 4	MATH 126 or MATH 129* *MATH 125* 4	MATH 226 or MATH 229 *MATH 126 or 129* 4	MATH 245 *MATH 226 or 229* 4	AME 310 *PHYS 153 OR 163 (MATH 245)* 3	ASTE 305 *MATH 226, 227 OR 229* 3	ASTE 470 3	ASTE 480 3
CHEM 105aL or MASC 110L* 4	PHYS 151L (GE E) *MATH 125 or 126 or 226* 4	PHYS 152L *PHYS 151L, (MATH 226)* 4	PHYS 153L *PHYS 152L* 4	ASTE 331a *ASTE 280* 3	AME 308 *AME 204, (AME 301)* 3	ASTE 404 3	TECHNICAL ELECTIVE 3
ENGR 102 2	ITP 168 2	OPTIONAL ELECTIVE 3	ASTE 280 *MATH 226, PHYS 151L or 161L* 3	AME 341aL *PHYS 152L or 162L, MATH 126 or 127 or 129* 3	AME 341bL *AME 341aL* 3	TECHNICAL ELECTIVE 3	OPTIONAL ELECTIVE 5
				OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 3	

MATHEMATICS (16 UNITS)

MATH 125: Calculus I*
MATH 126 or MATH 129: Calculus II*
MATH 226 or MATH 229: Calculus III
MATH 245: Mathematics of Phys. and Engr.

PHYSICS (12 UNITS)

PHYS 151L: Mechanics and Thermodynamics
PHYS 152L: Electricity and Magnetism
PHYS 153L: Optics and Modern Physics

CHEMISTRY/MATERIALS SCIENCE (4 UNITS)

CHEM 105aL: General Chemistry*
or MASC 110L: Materials Science

GENERAL EDUCATION (32 UNITS)

GE A The Arts (1 Course)*
GE B Humanistic Inquiry (2 Courses)
GE C Social Analysis (2 Courses)
GE D Life Sciences (1 Course)*
GE E Physical Sciences (1 Course)*
GE F Quantitative Reasoning (1 Course)*
GE G,H Global Perspectives (2 Courses)*
GESM General Education Seminar (1 Course)

WRITING (8 UNITS)

WRIT 150: Writing and Critical Reasoning
WRIT 340: Advanced Writing

ENGINEERING (68 UNITS)

AME 201: Statics
AME 204: Strength of Materials
AME 301: Dynamics
AME 308: Comp. Aided Analysis for Design
AME 341aL: Mechoptronics Laboratory I
AME 341bL: Mechoptronics Laboratory II
AME 404: Comp. Solutions to Engr. Problems
AME 441aL: Senior Projects Laboratory
ASTE 101L: Intro. to Astronautics
ASTE 280: Astronautics & Space Environment I
ASTE 305: Astronautics Gas Dynamics
ASTE 331a: Spacecraft Systems Engineering
ASTE 331b: Spacecraft Systems Engineering
ASTE 404: Computational Programming & Numerical Methods
ASTE 421: Space Mission Design
ASTE 470: Spacecraft Propulsion
ASTE 480: Spacecraft Dynamics
ENGR 102: Engineering Freshman Academy
ITP 168: Introduction to MATLAB
TECHNICAL ELECTIVES

SPECIAL NOTES

*Courses with the * symbol may be satisfied with AP, IB or A-Level exams. See page 16 for more information.*

GESM#: GESM can be taken from GE categories: A, B, C, or D. Courses listed in the guide are options for a four-year course plan.

GE: Engineering students are encouraged to satisfy GE-G and GE-H with a course that also satisfies a Core Literacy. GE-H may be satisfied by AP/IB. Additionally, your GESM course should be taken in categories A, B, C, or D only. See page 15 for more information and consult your advisor for detailed assistance.

TECHNICAL ELECTIVES: Any upper-division course in engineering, chemistry, physics, and mathematics. See academic advisor for exceptions/substitutions.