

Astronautical Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
WRIT 150 4	GESM (GE B)# 4	GE C 4	AME 204 AME 201 4	PHYS 153L PHYS 152L 4	ASTE 301 AME 201 (MATH 245) 4	GE C 4	GE B 4
ASTE 101L 4	GE A* 4	AME 201 MATH 125 or 126 or 129 4	AME 208 PHYS 152 (MATH 245) 4	ASTE 331 ASTE 280 (PHYS 153) 4	AME 341BL AME 341AL 4	TECHNICAL ELECTIVE 4	ASTE 421 ASTE 331B 4
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 151, MATH 125 4	ASTE 305 PHYS 153, AME 310 (MATH 245) 4	ASTE 475 PHYS 152L and ASTE 305 or AME 309 2	WRIT 340 WRIT 150 4
CHEM 105aL or MASC 110L* 4	PHYS 151L (GE E) MATH 125 or 126 or 226 4	PHYS 152L PHYS 151L, (MATH 226) 4	ASTE 280 MATH 226, PHYS 151L or 161L 4	ASTE 341aL PHYS 152, AME 208 4	AME 308 AME 204, (AME 301) 4	ASTE 404 4	TECHNICAL ELECTIVE 4
ENGR 102 2	ITP 168 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	GE D* 4	OPTIONAL ELECTIVE 2

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 (70 UNITS)

AME 201: Statics

AME 204: Strength of Materials

AME 208: Mathematical Methods in ENGR

AME 301: Dynamics

AME 308: Comp. Aided Analysis for Design

AME 310: Engineering Thermodynamics I

AME 341aL: Mechoptronics Laboratory I

AME 341bL: Mechoptronics Laboratory II

ASTE 101L: Intro. to Astronautics

ASTE 280: Astronautics & Space Environment I

ASTE 305: Astronautics Gas Dynamics

ASTE 331: Spacecraft Systems Engineering

ASTE 404: Computational Programming & Numerical Methods

ASTE 421: Space Mission Design

ASTE 475: Rocket Propulsion

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 18 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 17 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.