Astronautical Engineering

**First Year**

**FALL**
- ATE 101L
- ENGR 102
- MATH 125
- CHEM 105aL or MASC 110L
- WRIT 150

**SPRING**
- ITP 168
- PHYS 191L
- MATH 126
- GEN ED
- OPTIONAL ELECTIVE

**Second Year**

**FALL**
- ATE 201
- PHYS 152L
- MATH 226
- GEN ED
- OPTIONAL ELECTIVE

**SPRING**
- ATE 204
- ATE 280
- MATH 245
- GEN ED
- WRIT 150

**Third Year**

**FALL**
- ATE 301a
- PHYS 151L
- ATE 341aL
- GEN ED
- OPTIONAL ELECTIVE

**SPRING**
- ATE 301b
- PHYS 153L
- ATE 341bL
- GEN ED
- WRIT 340

**Fourth Year**

**FALL**
- ATE 470
- AME 404
- ATE 441aL
- TECHNICAL ELECTIVE
- GEN ED

**SPRING**
- ATE 421
- AME 480
- TECHNICAL ELECTIVE
- OPTIONAL ELECTIVE
- OPTIONAL ELECTIVE

**Engineering**
- AME 201: Statics
- AME 204: Strength of Materials
- AME 301: Dynamics
- AME 308: Comp. Aided Analyses for Aeronautical and Mechanical Design
- AME 341aL: Mechoptronics Laboratory I
- AME 341bL: Mechoptronics Laboratory II
- AME 404: Comp. Solutions to Engr. Problems
- AME 441aL: Senior Projects Laboratory
- ATE 101L: Introduction to Astronautics
- ATE 280: Foundations of Astronautical Engineering
- ATE 301a: Thermal & Statistical Systems
- ATE 301b: Thermal & Statistical Systems
- ATE 331a: Spacecraft Systems Engineering
- ATE 331b: Spacecraft Systems Engineering
- ATE 421: Space Mission Design
- ATE 470: Spacecraft Propulsion
- ATE 480: Spacecraft Dynamics
- ENGR 102: Engineering Freshman Academy
- ITP 168: Introduction to MATLAB

**Mathematics**
- MATH 125: Calculus I
- MATH 126: Calculus II
- MATH 226: Calculus III
- MATH 245: Mathematics of Phys. & Engr.

**Science**
- CHEM 105aL: General Chemistry or MASC 110L: Materials Science
- PHYS 151L: Mechanics & Thermodynamics
- PHYS 152L: Electricity & Magnetism
- PHYS 153L: Optics & Modern Physics

**General Education**
As a USC Viterbi student your General Education (Gen Ed) curriculum will include courses in the Arts, Humanistic Inquiry and Social Analysis.

**Writing**
- WRIT 150: Writing & Critical Reasoning
- WRIT 340: Advanced Writing

**Electives**
Your optional electives are one way to build engineering+ into your curriculum by choosing classes of interest to you.

Courses with this symbol may be satisfied with certain AP, IB or A-Level exams. With each requirement you replace with prior credit, you increase your optional electives, creating more flexibility for you to pursue additional electives and increase your engineering+ education.

This is a simplified version of a complex curriculum with options and choices made between advisor and student. Course choices can vary by semester and adjust to include relevant topics and materials. Although every attempt has been made to ensure accuracy, the program requirements listed in the USC Catalogue supersede any information which may be contained in this or any other publication of any school or department. The information found in this document is not intended for advising purposes. The University reserves the right to change its policies, rules, regulations, requirements and course offerings at any time.