

# Aerospace Engineering

2020-2021 Catalog

129 Total Credits

## First Year

### Semester 1

- 3 Aer E 160 (Engr Problem Solving)
- 4 Chem 167 (Chem for Engrs)
- 3 Engl 150 (Critical Think & Comm)
- R Engr 101 (Engr Orientation)
- 1 Lib 160 (Library)
- 4 Math 165 (Calculus I)

15 Total Credits

### Semester 2

- 3 Aer E 161 (Prob Solving for Aer E)
- R Aer E 192 (Aerospace Seminar)
- 3 General Education Elective
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)

15 Total Credits

## Sophomore Year

### Semester 3

- 3 Aer E 261 (Intro Perform & Design)
- 3 CE 274 (Statics)
- 4 Math 265 (Calculus III)
- 4 Phys 232 (Classical Physics II)
- 1 Phys 232L (Classical Physic II lab)
- 3 Engl 250 (WOVE Comp)

18 Total Credits

### Semester 4

- 3 EM 324 (Mechanics of Materials)
- 3 ME 345 (Dynamics)
- 4 Math 267 (Differential Equations)
- 3 Mat E 273 (Principles of Materials)
- 3 General Education Elective

16 Total Credits

## Junior Year

### Semester 5

- R Aer E 301 (Flight Experience)
- 3 Aer E 310 (Aerodynamics I)
- 3 Aer E 321 (Flight Structures I)
- 2 Aer E 322 (Aer E Structures Lab)
- 3 Aer E 351 (Astrodynamics I)
- 3 Aer E 355 (Flight Dynamics)
- 3 ME 231 (Thermodynamics)

17 Total Credits

### Semester 6

- 3 Aer E 331 (Flight Control Systems)
- 3 Aer E 344 (Aerodynamics Lab)
- 3 Aer E 361 (Comp Tech Aero Design)
- 3 Aer E 362 (Systems Integration)
- 3 Aer E 421 (Adv Flight Structures)
- 3 Aer E 311 (Aerodynamics II)

18 Total Credits

## Senior Year

### Semester 7

- 3 Aer E 411 (Vehicle Propulsion)
- 3 Aer E 461 (Modern Design Method)
- 3 Engl 314 or 309 (Tech Comm or Report Writing)
- 3 Technical Elective
- 3 Technical Elective

15 Total Credits

### Semester 8

- 3 General Education Elective
- 3 General Education Elective
- 3 Technical Elective
- 3 Aer E 462 (Design Aero Systems)
- 3 Technical Elective

15 Total Credits

*Shading indicates Basic Program courses*

Compiled from official ISU catalog 4-year plans ([catalog.iastate.edu/undergraduatemajors-alpha/](http://catalog.iastate.edu/undergraduatemajors-alpha/))