

# B.S. in Aerospace Engineering

## Aeronautics Plan of Study

Students should be aware that most courses in each academic year have prerequisites and/or corequisites (check the Undergraduate Courses section before registering for classes to ensure required sequencing). See the AE flowchart(s) from the department for the recommended plan of study.

NOTE: Students in the Aerospace Engineering program desiring to complete a minor must complete at least six credit hours of coursework applied to the minor that are not specifically required in the student's degree program.

### Year One

	Credits
See the College of Engineering, Engineering Fundamentals Program for course selection	33
<b>Credits Subtotal</b>	<b>33.0</b>
<b>Credits Total:</b>	<b>33.0</b>

## Aeronautics Option

### Year Two

	Credits
AE 201 Aerospace Flight Vehicles	3
COM 221 Technical Report Writing	3
ES 201 Statics	3
ES 202 Solid Mechanics	3
ES 204 Dynamics	3
ES 305 Thermodynamics	3
MA 243 Calculus and Analytical Geometry III	4
MA 441 Mathematical Methods for Engineering and Physics I	3
PS 160 Physics for Engineers II	3
PS 250 Physics for Engineers III	3
PS 253 Physics Laboratory for Engineers	1
<b>Credits Subtotal</b>	<b>32.0</b>

### Year Three

AE 307 Incompressible Aerodynamics	3
AE 308 Compressible Aerodynamics	3
AE 313 Space Mechanics	3
AE 314 Experimental Aerodynamics *	1
AE 315 Experimental Aerodynamics Laboratory *	1
AE 316 Aerospace Engineering Materials	3
AE 318 Aerospace Structures I	3
AE 403 Jet Propulsion	3
AE 413 Airplane Stability and Control	3
COM 219 Speech	3
EE 327 Electrical Engineering Fundamentals *	3
EE 328 Electrical Engineering Fundamentals Laboratory	1
MA 345 Differential Equations and Matrix Methods	4
<b>Credits Subtotal</b>	<b>34.0</b>

### Year Four

AE 416 Aerospace Structures and Instrumentation *	1
AE 417 Aerospace Structures and Instrumentation Laboratory	1
AE 418 Aerospace Structures II	3

AE 420 Aircraft Preliminary Design	4
AE 421 Aircraft Detail Design	4
AE 432 Flight Dynamics and Control	3
AE 442 Experimental Dynamics and Control *	1
AE 443 Experimental Dynamics and Control Laboratory	1

Humanities or Social Sciences Lower or Upper-Level Elective	3
Humanities or Social Sciences Upper-Level Elective	3
Approved Upper-Level Technical Electives	3
Approved AE Upper-Level Technical Electives	3
<b>Credits Subtotal</b>	<b>30.0</b>
<b>Credits Total:</b>	<b>129</b>

## Technical Electives

Two upper-level Technical Electives needs to be selected from the BSAE Approved Technical Electives list, in the areas of Engineering and Science, maintained by the AE Department. One Technical Elective must be a non-duplicating AE undergraduate or graduate course. The second Technical Elective can be any course on the BSAE Approved Technical Elective list. Proposed courses not on the list may be submitted to the AE Curriculum Committee.

\* Lecture/Lab courses must be taken at the same time.