

Catalog Year: 2023-2024

Georgia Tech of Aerospace Engineering

Courses Required for BS in Aerospace Engineering Degree

Sample Order of Coursework

Notes: The following may be taken anytime:

HUM Electives	6 hrs needed
SOC SCI Electives	6 hrs needed
Free Electives	9 hrs needed

Course Tile KEY

Course No.	Cred Hrs	
Course Title		
Pre	Prerequisite	→ Must be taken before the course
PC	Prerequisite with concurrency	→ Must be taken either before or at the same time
Co	Co-Req	↔ Enter grade earned in yellow box
		↔ Must be taken during the same semester as the course

Course Categories

GT & Engineering Core
Tech Course Req by AE
AE Core Course
AE Option Course
Free Elective
Humanities
Social Sciences

1st Year

2 hrs. **MATH 1551** 2
Differential Calculus

16 hrs. **MATH 1552** 4
Integral Calculus

16 hrs. **MATH 1553** 2
Intro to Linear Algebra

2nd Year

16 hrs. **MATH 2551** 4
Multivariable Calc

15 hrs. **MATH 2552** 4
Differential Equations

ENGL 1101 and ENGL 1102 must be completed in the first 30 hours.

Study abroad programs may have more flexible prereq requirements for a few courses.

Credit for Math 1551 is often earned before 1st year via AP credits
But if not, Math 1551 may be taken with Math 1553 in the 1st sem (and Math 1552 taken in 2nd sem)

CHEM 1xxx 4
1310 or (1211K & 1212K)

CS 1371 3
Computing for Engineers

ENGL 1101 3
English Composition I

APPH 2
1040 or 1050

PHYS 2211 4
Intro Physics 1

AE 1601 1
Intro to AE

ENGL 1102 3
English Composition 2

ME 1670 3
Intro to Eng Graphics

SOC SCI 3
HIST 2111, HIST 2112, POL 1101, INTA 1200, or PUBP 3000

PHYS 2212 4
Intro Physics 2

COE 2001 2
Statics

MSE 2001 3
Engineering Materials

ECON 3
2100, 2101, 2105, or 2106

AE 2010 4
Thermo and Fluid Fund.

AE 2220 3
Dynamics

AE 2610 1
Intro Exp Methods Lab

AE 2611 1
Technical Comm for AE

ECE 3710 2
Circuits and Electronics

Credit not allowed for both INTA 1200 & POL 1101

3rd Year

17 hrs.	<table border="1"> <tr><td>MATH Option</td><td>3</td></tr> <tr><td>See list here</td></tr> <tr><td>Pre</td></tr> <tr><td>PC</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	MATH Option	3	See list here	Pre	PC	Co	Grade	<table border="1"> <tr><td>COE 3001</td><td>3</td></tr> <tr><td>Deformable Bodies</td></tr> <tr><td>Pre COE 2001</td></tr> <tr><td>PC Math 2552</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	COE 3001	3	Deformable Bodies	Pre COE 2001	PC Math 2552	Co	Grade	<table border="1"> <tr><td>AE 3030</td><td>4</td></tr> <tr><td>Aerodynamics</td></tr> <tr><td>Pre AE 2010</td></tr> <tr><td>PC</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	AE 3030	4	Aerodynamics	Pre AE 2010	PC	Co	Grade	<table border="1"> <tr><td>AE 3330</td><td>3</td></tr> <tr><td>AE Vehicle Performance</td></tr> <tr><td>Pre Math 2552</td></tr> <tr><td>PC AE 3030</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	AE 3330	3	AE Vehicle Performance	Pre Math 2552	PC AE 3030	Co	Grade	<table border="1"> <tr><td>AE 3530</td><td>3</td></tr> <tr><td>System Dynamics and Vib</td></tr> <tr><td>Pre AE 2220 Math 2552</td></tr> <tr><td>PC</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	AE 3530	3	System Dynamics and Vib	Pre AE 2220 Math 2552	PC	Co	Grade	<table border="1"> <tr><td>ECE 3741</td><td>1</td></tr> <tr><td>Circuits/Electronics Lab</td></tr> <tr><td>Pre ECE 3710</td></tr> <tr><td>PC</td></tr> <tr><td>Co</td></tr> <tr><td>Grade</td></tr> </table>	ECE 3741	1	Circuits/Electronics Lab	Pre ECE 3710	PC	Co	Grade
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Choose one Design I: 4311 (Aircraft), 4321 (Space) or 4331 (Rotorcraft)

Choose one flight dyn: AE 4531 (Aircraft) or AE 4532 (Spacecraft)

Choose one Design II: 4312 (Aircraft), 4322 (Space) or 4332 (Rotorcraft)

Other Programs	
Enter Course No.	
Pre	
PC	
Co	
Grade	

May use this tile to represent as many courses as needed for optional programs beyond the BSAE degree requirements.
Examples: Minor, ROTC, Double-Major, ...

These courses do not count toward 131 credit hours used for BSAE degree

- Notes:**
- 1 Total credit hours = 131
 - 2 A grade of C or better is required in each 1000- and 2000-level mathematics and physics course
 - 3 Math or physics course with a D or F grade must be repeated next semester student is in residence
 - 4 A cumulative GPA of 2.0 or higher is required to schedule COE 2001 or AE 2010
 - 5 A grade of C or better must be attained in all required 2000-level AE and COE courses
 - 6 At the 3000-level and above, no more than two D grades are permitted in required AE (core & AE options) and required COE courses. Additional D grades must be repeated
 - 7 Only free electives may be taken pass/fail. All other courses must be taken on a letter grade basis
 - 8 Minimum cumulative GPA to graduate is 2.0