CCA to CU Boulder Transfer Advising Guide for
Aerospace Engineering (B.S.)

Aerospace Engineering Sciences Department Website

Program Overview:

CU-Boulder's Department of Aerospace Engineering Sciences is nationally known for teaching, research and hands-on experiments and design projects alongside expert faculty. CU aerospace alumni are working at top companies and research labs, including the Jet Propulsion Laboratory, Johnson Space Center, Boeing, and Lockheed Martin. Our graduates tackle challenges in aerospace technology and science, focusing on Aerospace Engineering Systems, Astrodynamics & Satellite Navigation Systems, Bioastronautics and Remote Sensing, Earth & Space Sciences.

Admission Requirements:

Please see this website for more information regarding CU Engineering admission criteria

CCA Course Summary: (the following courses will apply directly to the degree)
***BOLD** denotes admission requirement courses*
***denotes recommended requirement before transferring*

Mathematics:

MAT 201*	**Calculus 1**	**(5 credits)**
MAT 202*	**Calculus 2**	**(5 credits)**
MAT 204	Calculus 3 w/Engineering Applications	(5 credits)
MAT 266	Differential Equations/Linear Algebra	(4 credits)

Science:

PHY 211*	**Calc-based Physics 1**	**(5 credits)**
PHY 212	Calc-based Physics 2	(5 credits)
CHE 111	General Chemistry 1	(5 credits)

^CHE 111 will also count for admission requirement in place of PHY 211, though not recommended for this major

Engineering/Computer Science:

CSC 160**	**Computer Science 1**	**(4 credits)**
EGG 106	Robotics	(1 credit)
EGG 151	Experimental Design	(2 credits)

Humanities and Social Sciences (H/SS):

- Minimum of nine (9) credit hours at the lower division (100-200) level
    - Six (6) credit hours at the upper-division level – *typically taken at CU Boulder*
- Please consult our CCCS humanities and social science list when selecting these classes

Suggested Five-Year Course Plan for Aerospace Engineering

This is a suggested guide of coursework only and is subject to change. Always consult with your academic advisor for graduation planning purposes.

*denotes courses that do not apply directly to degree, other than as free electives

Community College of Aurora

Fall Semester 1

Course	Course Title	Credits
MAT 121	College Algebra*	4
CHE 101	Intro to Chemistry (with Lab)*	5
ENG 121	English Composition*	3
	Intro to Engineering Workshop*	0
	Humanities/Social Science	3
	Total Credits	**15**

Spring Semester 1

Course	Course Title	Credits
MAT 166	Pre-Calculus*	5
ENG 122	English Composition 2 (H/SS)	3
CSC 119	Intro to Programming*	3
EGG 106	Robotics	1
	Humanities/Social Science	3
	Total Credits	**15**

Fall Semester 2

Course	Course Title	Credits
MAT 201	Calculus 1	5
CHE 111	Chemistry 1 (with lab)	5
CSC 160	Computer Science 1	4
EGG 132*	Data Analysis	1
	Total Credits	**15**

Spring Semester 2

Course	Course Title	Credits
MAT 202	Calculus 2	5
PHY 211	Physics 1	5
CAD	101+102, or 255, or 227)	--
EGG 151	Experimental Design	2
	Total Credits	**12+**

CU-Boulder (last three years)

Fall Semester 3

Course	Course Title	Credits
APPM 2350	Calculus 3	4
ASEN 2001	Statics, Structures and Matls.	4
ASEN 2002	Thermo and Aerodynamics	4
ASEN 2012	Exp. & Comp. Methods	2
	Total Credits	**14**

Spring Semester 3

Course	Course Title	Credits
APPM 2360	Differential Eq./Lin. Algebra	4
ASEN 1022	Materials Science for Aero.	4
ASEN 2003	Intro to Dynamics and Syst.	5
ASEN 2004	Vehicle Design and Perform.	5
	Total Credits	**18**

CU-Boulder (last three years)...continued

Fall Semester 4

Course	Course Title	Credits
ASEN 3111	Aerodynamics	4
ASEN 3112	Structures	4
ASEN 3113	Themo and Heat Transfer	4
PHYS 1120	Physics 2	4
	Total Credits	**15**

Spring Semester 4

Course	Course Title	Credits
ASEN 3128	Aircraft Dynamics	4
ASEN 3200	Orbit Mech. /Attitude Dyn.	4
ASEN 3300	Electronics and Comms.	4
	Professional Area Elective	3
	Total Credits	**15**

Fall Semester 5

Course	Course Title	Credits
ASEN 4013	Found. of Propulsion	3
ASEN 4018	Senior Projects	4
	Professional Area Elec. (x2)	6
	Engineering Writing Course	3
	Total Credits	**17**

Spring Semester 5

Course	Course Title	Credits
ASEN 4028	Senior Projects 2	4
	Professional Area Elec. (x2)	6
	UD Humanities/Social Science	3
	UD Humanities/Social Science	3
	Total Credits	**15**