PPSC (all campuses) 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

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

Mathematics:

MAT 2410*	**Calculus 1**	**(5 credits)**
MAT 2420*	**Calculus 2**	**(5 credits)**
MAT 2430 OR	Calculus 3	(5 credits)
MAT 2431	Calculus 3 with Engineering Applications	(5 credits)
MAT 2562	Differential Equations/Linear Algebra	(4 credits)

Science:

PHY 2111*	**Calc-based Physics 1**	**(5 credits)**
PHY 2112	Calc-based Physics 2	(5 credits)
CHE 1111^	General Chemistry 1	(5 credits)

^ also counts for admission requirement in place of PHY 2111

Engineering/Computer Science:

EGG 1060 (*preferred*)**	**Introduction to Engineering Computing**	**(4 credits)**
OR CSC 1060 (C++)	Computer Science 1	(4 credits)
EGG 1020/1040	Engineering Methodologies/Eng. Projects	(3 credits)
OR EGT 1110	Intro to Design and Engineering Applications	(3 credits)
EGG 2011	Statics	(3 credits)

Humanities and Social Sciences (H/SS):

- Up to nine (9) credit hours at the lower division (1000-2000) level
  - Six (6) credit hours 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

Pikes Peak State College (first two years)

Fall Semester 1

Course	Course Title	Credits
MAT 1440	Pre-Calculus*	5
ENG 1021	English Composition (H/SS)	3
	Free Elective*	3
	Free Elective*	3
	Total Credits	**12**

Spring Semester 1

Course	Course Title	Credits
MAT 2410	Calculus 1	5
CHE 1111	College Chemistry (with lab)	5
ENG 1022	English Composition 2 (H/SS)	3
	Total Credits	**13**

Fall Semester 2

Course	Course Title	Credits
MAT 2420	Calculus 2	5
PHY 2111	Physics 1	5
EGG 1040	Engineering Projects	3
	Humanities/Social Science	3
	Total Credits	**16**

Spring Semester 2

Course	Course Title	Credits
MAT 2431	Calculus 3 (Engr. Applications)	5
PHY 2112	Physics 2	5
EGG 1060	Engineering Computing	4
	Total Credits	**14**

CU-Boulder (last three years)

Fall Semester 3

Course	Course Title	Credits
APPM 2360	Differential Eq./Lin. Algebra	4
ASEN 2401	Statics	3
ASEN 2501	Intro to Astrodynamics	3
	Math/Science Elective	3
WRTG 3030	Writing on Science	3
	Total Credits	**16**

Spring Semester 3

Course	Course Title	Credits
ASEN 2403	Dynamics	3
ASEN 2402	Thermodynamics	3
ASEN 2502	Intro to Aerodynamics	3
ASEN 3401	Aerospace Structures	3
	Total Credits	**13**

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

Fall Semester 4

Course	Course Title	Credits
ASEN 3402	Aerospace Heat Transfer	3
ASEN 3404	Aero Dynamics and Controls	3
ASEN 3501	Aero Experimental Methods	3
	Tech Elective	3
	UD Humanities/Social Science	3
	Total Credits	**15**

Spring Semester 4

Course	Course Title	Credits
ASEN 3403	Aerodynamics	3
ASEN 3405 OR 3406	Astrodynamics OR Aircraft Dynamics	3
ASEN 3502	Aero Comp Methods	3
ASEN 3503	Aerospace Electronics	3
	Tech Elective	3
	Total Credits	**15**

Fall Semester 5

Course	Course Title	Credits
ASEN 4018	Senior Projects 1	4
ASEN 4401 OR 4402	Aero Communications OR Materials and Structures	3
	Tech Elective	3
	ASEN UD Tech	3
	Total Credits	**13**

Spring Semester 5

Course	Course Title	Credits
ASEN 4028	Senior Projects 2	4
ASEN 4013	Propulsion	3
	Tech Elective	4
	UD Humanities/Social Science	3
	Total Credits	**14**