BS AEROSPACE ENGINEERING

AERO 121 Aerospace Fundamentals ..................... 2
AERO 215 Introduction to Aerospace Design .......... 2
AERO 300 Aerospace Engineering Analysis .......... 5
AERO 301, 302, 303 Aerothermodynamics .......... 4,4,4
AERO 304 Experimental Aerothermodynamics ....... 2
AERO 360 Aerodynamics and Flight Performance .... 4
AERO 370 Experimental Aerodynamics............... 2
AERO 320 Fundamentals of Guidance and Control .... 4
AERO 401 Propulsion Systems.......................... 4
AERO 420 Stability/Control of Aerospace Vehicles .... 4
AERO 431 Aerospace Structural Analysis I .......... 4
AERO 433 Aerospace Structural Analysis II ......... 4
AERO 433 Experimental Stress Analysis .......... 1
AERO 446 Introduction to Space Systems .......... 4
AERO 461, 462 Senior Project I, II or
AERO 463, 464 Senior Project Laboratory I, II .... 2,3
CE 204 Mechanics of Materials I .................... 3
CE 207 Mechanics of Materials II .................... 2,3
EE 201, 251 Electric Circuit Theory and Lab .......... 3,1
Concentration courses (see below) .................... 22

SUPPORT COURSES

BIO 213 and ENGR/BRAE 213 (B2)* .................... 2,2
CHEM 124 Gen Chem for Engineering (B3/B4)* ... 4
EE 321, 361 Electronics and Lab ..................... 3,1
ENGL 149 Technical Writing for Engineers (A3)* .. 4
IME 144 Intro Design and Manufacturing .......... 4
MATE 210 Materials Engineering .................... 3
MATH 141, 142 Calculus I, II (B1)* .................... 4,4
MATH 143 Calculus III (Add’l Area B)* .......... 4
MATH 241 Calculus IV .................................. 4
MATH 244 Linear Analysis I ............................ 4
ME 211 Engineering Statics ............................ 3
ME 212 Engineering Dynamics ........................ 3
PHYS 131 General Physics I or PHYS 141 General
Physics IA (Add’l Area B)* (5/23/12) ............ 4
PHYS 132, 133 General Physics II, III .............. 4,4
STAT 312 Statistical Methods for Engineers (B6)* 4

GENERAL EDUCATION (GE)

72 units required, 32 of which are specified in Support.

A1 Expository Writing .................................. 4
A2 Oral Communication ............................... 4
A3 Reasoning, Argumentation, and Writing * 4
units in Support ........................................ 0

Area B Science and Mathematics (no add’l units req’d)
B1 Mathematics/Statistics * 8 units in Support .... 0
B2 Life Science * 4 units in Support ................... 0
B3 Physical Science * 4 units in Support ......... 0
B4 One lab taken with either a B2 or B3 course
B5 (not required for Engineering students)
B6 Upper-division Area B * 4 units in Support .... 0
Additional Area B units* 8 units in Support .... 0

Area C Arts and Humanities (16 units)
C1 Literature ............................................ 4
C2 Philosophy ............................................ 4
C3 Fine/Performing Arts ............................... 4
C4 Upper-division elective ............................ 4

Area D/E Society and the Individual (16 units)

D1 The American Experience (40404) .......... 4
D2 Political Economy .................................. 4
D3 Comparative Social Institutions ............... 4
D4 Self Development (CSU Area E) ............... 4

FREE ELECTIVES .................................... 0

CONCENTRATIONS (select one)

Aeronautics Concentration
AERO 405 Supersonic/Hypersonic Aerodynamics .... 4
AERO 443, 444, 445 Aircraft Design I, II, III ....  4,3,3
Aeronautics approved electives ....................... 8
Select 8 units from the following:
AERO 311, 407, 409, 416, 419, 425, 432, 434,
435, 450, 452, 457, 510, 511, 512, 515, 517,
519, 520, 521, 522, 523, 524, 525, 526, 530,
532, 533, 534, 535, 540, 541, 550, 551, 552,
553, 555, 557, 560, 561, 562, 565, 566, 567.
AERO 360, 570, 571 require a petition.

Astronautics Concentration
AERO 451 Spaceflight Dynamics I .................... 4
AERO 447, 448, 449 Spacecraft Design I, II, III .... 4,3,3
Astronautics approved electives ...................... 8
Select 8 units from the Aeronautics approved electives list, above.

Note: No major, support or concentration courses may be taken as credit/no credit.

Area C Arts and Humanities (16 units)
Area B Science and Mathematics (no add’l units req’d)
Area A Communication (8 units)

† Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

‡ If CE 207 is taken for 2 units the department waives the third unit.