BS AEROSPACE ENGINEERING

☐ 60 units upper division  ☐ GWR
☐ 2.0 GPA  ☐ USCP

* = Required in Support; also satisfies GE

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

MAJOR COURSES
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 306 Aerodynamics and Flight Performance 4
AERO 307 Experimental Aerodynamics ............. 2
AERO 320 Fundamentals of Guidance and Control 4
AERO 331 Aerospace Structural Analysis I ....... 4
AERO 401 Propulsion Systems......................... 4
AERO 420 Stability-Control of Aerospace Vehicles 4
AERO 431 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 .................... 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, 322 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 (Add’l Area B)* ...... 4
PHYS 132, 133 General Physics II, III ............. 4,4
STAT 312 Statistical Methods for Engineers (B6)* 4

FRE ELECTIVES ............................................... 0

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1  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.

GENERAL EDUCATION (GE)
72 units required, 32 of which are specified in Support.
→See page 50 for complete GE course listing.
→Minimum of 8 units required at the 300 level.

Area A Communication (8 units)
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 (requirement for Liberal Arts students only)
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

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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

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CONCENTRATIONS (select one)

Aeronautics Concentration
AERO 405 Supersonic/Hypersonic Aerodynamics... 4
AERO 443, 444, 445 Aircraft Design I, II, III ....... 4,3,3
1 Aeronautics approved electives ..................... 8

Select 8 units from the following:
AERO 360, 570, 571 require a petition.

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Astronautics Concentration
AERO 451 Spaceflight Dynamics I .................... 4
AERO 447, 448, 449 Spacecraft Design I, II, III ... 4,3,3
1 Astronautics approved electives .................... 8

Select 8 units from the Aeronautics approved electives list, above.

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