BS MECHANICAL 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

- ME 134 Introduction to Mechanical Engineering ............... 1
- ME 151 Engineering Design Communication I ................. 2
- ME 152 Engineering Design Communication II ............ 2
- ME 211 Engineering Statics ................................ 3
- ME 212 Engineering Dynamics ................................ 3
- ME 234 Philosophy of Design ................................ 3
- ME 236 Thermal Measurements ................................ 3
- ME 251 Intermediate Solid Modeling ...................... 1
- ME 302 Thermodynamics I .................................. 3
- ME 303 Thermodynamics II .................................. 3
- ME 318 Mechanical Vibrations .............................. 4
- ME 326 Intermediate Dynamics .............................. 4
- ME 328 Introduction to Design ................................ 4
- ME 329 Intermediate Design .................................. 4
- ME 341 Fluid Mechanics I .................................. 3
- ME 342 Fluid Mechanics II .................................. 3
- ME 422 Mechanical Control Systems ......................... 4
- ME 440 Thermal System Design .............................. 4
- Concentration (see below) ..................................... 21/22

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

Area A Communication (8 units)

- A1 Expository Writing ........................................... 4
- A2 Oral Communication ........................................ 4
- A3 Reasoning, Argumentation, and Writing * 4

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)

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

Additional Area B units 8 units in Support ............. 0

Area Concentration (72 units required)

- 32 units in Concentration
- 40 units in Support

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

198-199

CONCENTRATIONS (select one)

General Concentration

- ME 428, 429, 430 Sr. Design Project I, II, III ....... 3,2,1
- EE 255, 295 Energy Conversion Electromagnetics
  and Lab .......................................................... 3,1

Technical electives selected from emphasis area...

Select at least 8 units of ME courses from:

- ME 305, 359, 401, 402, 405, 410, 412, 415, 416, 423, 424, 431, 432, 434, 435, 436, 441,

Notes:

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

2. Notes:
   a) ME 470, 471, 570 and 571 are variable topics courses and may or may not count as ME electives. Please contact instructor for additional information.
   b) ME 400 and ME 500 are independent study classes and may be acceptable for technical elective credit. A course substitution form is required.
   c) Exceptions to this policy are possible through consultation with the department chair.

3. ME 271 (Intermediate Solid Modeling) may substitute. (7/23/13)
443, 444, 445, 446, 450, 456, 457, 458, 488,
506, 507, 517, 518, 531, 540, 541, 542, 551,
552, 553, 554, 579;
ME/CE 404, ME 501/CE 511, ME 503/CE 513,
ME/CE 504, ME/CE 505;
ME/MATE 555
Select up to 4 units of non-ME courses from:
Any upper division or graduate level course in
the College of Engineering with the exception
of GE Area F, senior project, thesis, special
problems, and coop courses.
Total units for General Concentration: 22

Heating, Ventilating, Air-Conditioning and
Refrigerating Concentration (HVAC&R)
ME 359 Fundamentals of HVAC Systems .......... 4
ME 456 HVAC Air and Water Distribution System
Design.......................................................... 4
ME 457 Refrigeration Principles and Design......... 4
ME 458 Building Heating and Cooling Loads ........ 4
ME 459, 460 HVAC Senior Design Project I, II...... 3,2

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Mechatronics Concentration
ME 305 Introduction to Mechatronics.............. 4
ME 405 Mechatronics.................................. 4
ME 423 Robotics: Fundamentals and Applications 4
ME 428, 429, 430 Sr. Design Project I, II, III ..... 3,2,1
1 CPE 336/IME 356/ME 506............................ 4

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1 Elective based on interests of students.