BS MECHANICAL ENGINEERING

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 343 Heat Transfer .................................. 4
ME 346 Thermal Science Laboratory................... 1
ME 347 Fluid Mechanics II ................................ 4
ME 422 Mechanical Control Systems ................... 4
ME 440 Thermal System Design or ME 420 (9/4/15) ... 4

CONCENTRATIONS (select one)

General Concentration

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

Technical electives selected from emphasis area.... 12
Select at least 8 units of ME courses from:
ME 305, 359, 401, 402, 405, 410, 412, 415, 418, 419

Area B Science and Mathematics (no add’l units reqd)
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 ...... 0
B5 (not required for Engineering students) ......... 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

72 units required, 32 of which are specified in Support.
See page 39 for complete GE course listing.
Minimum of 8 units required at the 300 level.

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

Area A Communication (8 units)
A1 Expository Writing .................................... 4
A2 Oral Communication ................................... 4
A3 Reasoning, Argumentation, and Writing * 4
units in Support ......................................... 0

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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D3 Comparative Social Institutions .................... 4
D4 Self Development (CSU Area E) ..................... 4

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units in Support ......................................... 0

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

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Note: No major, support or concentration courses may be taken as credit/no credit.
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
CPE 336/IME 356/ME 506................................. 4
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1 Elective based on interests of students.