

**EXECUTIVE COMMITTEE
BOURNS COLLEGE OF ENGINEERING
REPORT TO THE RIVERSIDE DIVISION
DECEMBER 5, 2017**

PROPOSED CHANGES TO THE MECHANICAL ENGINEERING MAJOR REQUIREMENTS

To be adopted

PRESENT:

Major Requirements

1. Lower-division requirements (73 units)
 - a) BIOL 005A, BIOL 05LA
 - b) CHEM 001A, CHEM 001B, CHEM 01LA, CHEM 01LB
 - c) EE 001A, EE 01LA
 - d) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
 - e) ME 002, ME 009, ME 010, ME 018
 - f) PHYS 040A, PHYS 040B, PHYS 040C

2. Upper-division requirements (77 units)
 - a) ME 100A, ME 103, ME 110, ME 113, ME 114, ME 116A, ME 118, ME 120, ME 135, ME 170A, ME 170B, ME 174, ME 175A, ME 175B, ME 175C
 - b) STAT 100A
 - c) Choose one Focus Area:

(1) Materials and Structures

Sixteen (16) units of technical electives chosen from ME 100B, ME 116B, ME 121, ME 122, ME 153, ME 156, ME 180, ME 197

(2) Energy and Environment

Sixteen (16) units of technical electives chosen from ME 100B, ME 116B, ME 117, ME 136, ME 137, ME 138, ME 197

(3) Design and Manufacturing

Sixteen (16) units of technical electives chosen from ME 121, ME 122, ME 130, ME 131, ME 133, ME 140, ME 153, ME 156, ME 176, ME 180, ME 197

PROPOSED:

Major Requirements

1. Lower-division requirements (73 units)
 - a) No Change
 - b) No Change
 - c) No Change
 - d) No Change
 - e) No Change
 - f) No Change

2. Upper-division requirements (77 units)
 - a) No Change
 - b) No Change
 - c) No Change

(1) Materials and Structures

No Change

(2) Energy and Environment

No Change

(3) Design and Manufacturing

Sixteen (16) units of technical electives chosen from ME 121, ME 122, ME 130, ME 131, ME 133, ME 140, ME 144/EE 144, ME 145, ME 153, ME 156, ME 175D, ME 176, ME 180, ME 197

(4) General Mechanical Engineering

Sixteen (16) units of technical electives chosen from the following list, in consultation with an advisor: ME 100B, ME 116B, ME 117, ME 121, ME 122, ME 130, ME 131, ME 133, ME 136, ME 137, ME 138, ME 140, ME 153, ME 156, ME 176, ME 180, ME 197

Visit the Student Affairs Office in the College of Engineering or student.engr.ucr.edu for a sample program.

(4) General Mechanical Engineering

Sixteen (16) units of technical electives chosen from the following list, in consultation with an advisor: ME 100B, ME 116B, ME 117, ME 121, ME 122, ME 130, ME 131, ME 133, ME 136, ME 137, ME 138, ME 140, ME 144/EE 144, ME 145, ME 153, ME 156, ME 175D, ME 176, ME 180, ME 197

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Justification:

- ME 121: It was discovered that ME 121 was added as a requirement in this focus area in the 2012-2013 academic catalog without approval by the Academic Senate. By submission of this program change, at the recommendation of Academic Senate, this requirement is to continue forward and be noted in the Catalog.
- Add ME/EE 144 (Introduction to Robotics) to list of technical electives for Design and Manufacturing Focus Area and to General Engineering - current catalog does not have this course listed as technical elective
- Add ME 145 (Robotic Planning and Kinematics) to list of technical electives for Design and Manufacturing Focus Area and to General Engineering – The ME faculty had discussion of this course being included but omitted to specify which area it belonged to. After further discussion, it was agreed to add it to General Engineering and to the Design and Manufacturing focus area.
- Add ME175D (Technological Entrepreneurship) to list of technical electives for Design and Manufacturing Focus Area and to General Engineering - The ME faculty had discussion of this course being included but omitted to specify which area it belonged to. After further discussion, it was agreed to add it to General Engineering and to the Design and Manufacturing focus area.

Approvals:

Approved by the faculty of the Department of Mechanical Engineering: May 12, 2017

Approved by the Executive Committee of the College of Engineering: May 15, 2017

Approved by the Committee on Educational Policy: November 16, 2017