

**EXECUTIVE COMMITTEE
BOURNS COLLEGE OF ENGINEERING
REPORT TO THE RIVERSIDE DIVISION
MAY 26, 2020**

To be adopted:

**PROPOSED CHANGES TO THE MATERIALS SCIENCE AND ENGINEERING MAJOR
REQUIREMENTS**

PRESENT:

College Requirements

See The Marlan and Rosemary Bourns College of Engineering, Colleges and Programs section.

The Materials Science and Engineering major uses the following major requirements to satisfy the college's Natural Sciences and Mathematics breadth requirement.

1. One course in the biological sciences chosen from an approved list
2. CHEM 001A, CHEM 001LA
3. MATH 008B or MATH 009A
4. PHYS 040A, PHYS 040B

Major Requirements

1. Lower-division requirements (~~72~~ units)
 - a) CHEM 001A, CHEM 01LA, CHEM 001B, CHEM 01LB, CHEM 001C, CHEM 01LC
 - b) CS 009M or CS 009P
 - c) EE 001A, EE 01LA
 - d) MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
 - e) ME 010
 - f) MSE 001
 - g) PHYS 040A, PHYS 040B, PHYS 040C
 - h) CHEM 008A, CHEM 08LA
2. Upper-division requirements (72 units)
 - a) BIEN 140A/CEE 140A
 - b) CHE 100
 - c) EE 138
 - d) ENGR 180W
 - e) ME 110, ME 114, ME 156
 - f) MSE 134, MSE 135, MSE 160, MSE 161, MSE 175A, MSE 175B
 - g) STAT 155
 - h) Technical Electives (20 units): chosen from ~~BIEN 140~~, BIEN/MSE 136, ~~BIEN 137~~, BIEN 140B/CEE 140B, ~~CEE 147~~, CHE 105, CHE

PROPOSED:

No change.

Major Requirements

1. Lower-division requirements (75 units)
 - a) CHEM 001A, CHEM 01LA, CHEM 001B, CHEM 01LB, CHEM 001C, CHEM 01LC
 - b) CS 009M or CS 009P
 - c) EE 001A, EE 01LA
 - d) MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
 - e) ME 010
 - f) MSE 001, MSE 002L, MSE 003L, MSE 004L
 - g) PHYS 040A, PHYS 040B, PHYS 040C
 - h) CHEM 008A, CHEM 08LA
2. Upper-division requirements (72 units)
 - a) BIEN 140A/CEE 140A
 - b) CHE 100
 - c) EE 138
 - d) ENGR 180W
 - e) ME 110, ME 114, ME 156
 - f) MSE 134, MSE 135, MSE 160, MSE 161, MSE 175A, MSE 175B
 - g) STAT 155
 - h) Technical Electives (20 units): chosen from BIEN/MSE 136, BIEN 140B/CEE 140B, CHE

161, EE 133, EE 136, EE 137, EE 139, EE 162,
ME 153, MSE 155, MSE 197

105, CHE 161, EE 133, EE 136, EE 137, EE
139, EE 162, ME 153, MSE 155, MSE 197

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

No change.

JUSTIFICATION:

MSE 002L General Materials Laboratory Spring, MSE 003L General Materials Laboratory Fall, and MSE 004L General Materials Laboratory Winter are to be added as required courses to the MSE curriculum per the recommendation by the MSE faculty and ABET Accreditation.

APPROVALS:

Approved by the MSE Undergraduate Committee:

November 26, 2019

Approved by the Materials Science and Engineering faculty:

December 5, 2019

Approved by the Executive Committee of the College of Engineering:

April 23, 2020

Approved by the Committee on Educational Policy:

April 30, 2020