EXECUTIVE COMMITTEE
BOURNS COLLEGE OF ENGINEERING
REPORT TO THE RIVERSIDE DIVISION
MAY 25, 2021

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 009A or MATH 009B
4. PHYS 040A, PHYS 040B

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 (76 units)
   a) BIEN 140A/CEE 140A
   b) CHE 100

PROPOSED:

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.

5. One course in the biological sciences chosen from an approved list
6. CHEM 001A, CHEM 001LA
7. MATH 009A
8. PHYS 040A, PHYS 040B

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

No Change.
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 105, CHE 161, EE 133, EE 136, EE 137, EE 139, EE 162, ME 153, MSE 142, MSE 143, MSE 148, MSE 155, MSE 156, MSE 197

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

**JUSTIFICATION:**
The ECE department is restructuring their program and will eliminate EE 001 and EE 01LA from their program curriculum. After review of the available and proposed courses, EE 005 was deemed appropriate as a replacement for EE 001 and EE 001LA as an introductory course in circuits and electronics. MATH008B has also been removed as the course is no longer being offered. The program is being modified to reflect these changes.

**APPROVALS:**
Approved by the MSE Undergraduate Committee: November 13, 2020  
Approved by the Materials Science and Engineering faculty: January 26, 2021  
Approved by the Executive Committee of the College of Engineering: January 27, 2021  
Approved by the Committee on Educational Policy: April 15, 2021