

**Materials Science and Engineering 2/03/2021**

<p>UCLA General Catalog 2016-17 <del>striketrough</del> to be <i>deleted</i></p>	<p>Proposed changes to the text in the next catalog <u>underlined</u> to be <i>added</i></p>
<p><b>Materials Engineering Option</b></p> <p><b>Preparation for the Major</b> Required: Chemistry and Biochemistry 20A, 20B, 20L; Computer Science 31 (or Civil and Environmental Engineering M20/ Mechanical and Aerospace Engineering M20); Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.</p> <p><b>The Major</b> Required: Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 108, Electrical Engineering 100, Materials Science and Engineering 104, 110, 110L, 120, 130, 131, 131L, 132, 143A, 150, 160; one upper division math course selected from Mechanical and Aerospace Engineering 182B, 182C, Civil and Environmental Engineering 103, Electrical Engineering 102, Mathematics 132 ; two laboratory courses (4 units) from Materials Science and Engineering 121L, 141L, 143L, 161L or up to 2 units of 199; three technical breadth courses (8 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and two major field elective courses (12 units) from Chemical Engineering C114, Civil and Environmental Engineering 130, 135A, Electrical Engineering 2, 123A, 123B, Materials Science and Engineering C111, C112, 121, 122, 151, 161, 162, Mechanical and Aerospace Engineering 156A, 166C, plus at least one elective course (4 units) from Chemistry and Biochemistry 30A, 30AL, Electrical Engineering 131A, Materials Science and Engineering 170, 171, Mathematics 170A, or Statistics 100A.</p>	<p><b>Materials Engineering Option</b></p> <p><b>Preparation for the Major</b> Required: Chemistry and Biochemistry 20A, 20B, 20L; Computer Science 31 (or Civil and Environmental Engineering M20/ Mechanical and Aerospace Engineering M20); Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (<u>or Mechanical and Aerospace Engineering 82</u>); Physics 1A, 1B, 1C.</p> <p><b>The Major</b> Required: Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 108, Electrical Engineering 100, Materials Science and Engineering 104, 110, 110L, 120, 130, 131, 131L, 132, 143A, 150, 160; one upper division math course selected from Mechanical and Aerospace Engineering 182B, 182C, Civil and Environmental Engineering 103, Electrical Engineering 102, Mathematics 132; two laboratory courses (4 units) from Materials Science and Engineering 121L, 141L, 143L, 161L or up to 2 units of 199; three technical breadth courses (8 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and two major field elective courses (12 units) from Chemical Engineering C114, Civil and Environmental Engineering 130, 135A, Electrical Engineering 2, 123A, 123B, Materials Science and Engineering <u>105</u>, <u>C111</u>, C112, 121, 122, 151, 161, 162, Mechanical and Aerospace Engineering 156A, 166C, plus at least one elective course (4 units) from Chemistry and Biochemistry 30A, 30AL, Electrical Engineering 131A, Materials Science and Engineering 170, 171, Mathematics 170A, or Statistics 100A.</p>

### **Electronic Materials Option**

#### **Preparation for the Major**

Required: Chemistry and Biochemistry 20A, 20B, 20L; Computer Science 31 (or Civil and Environmental Engineering M20/ Mechanical and Aerospace Engineering M20); Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

#### **The Major**

Required: Electrical Engineering 100, 101A, 121B, Materials Science and Engineering 104, 110, 110L, 120, 121, 121L, 122, 130, 131, 131L, 132, Mechanical and Aerospace Engineering 101; one upper division math course selected from Mechanical and Aerospace Engineering 182B, 182C, Civil and Environmental Engineering 103, Electrical Engineering 102, Mathematics 132; either Materials Science and Engineering 150 or 160 and one course (4 units) from Electrical Engineering 123A, 123B, Materials Science and Engineering 150, 160; 4 laboratory units from Materials Science and Engineering 141L, 161L, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and one major field elective course (4 units) from Electrical Engineering 110, 131A, Materials Science and Engineering C111, C112, 143A, 162.

### **Electronic Materials Option**

#### **Preparation for the Major**

Required: Chemistry and Biochemistry 20A, 20B, 20L; Computer Science 31 (or Civil and Environmental Engineering M20/ Mechanical and Aerospace Engineering M20); Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

#### **The Major**

Required: Electrical Engineering 100, 101A, 121B, Materials Science and Engineering 104, 110, 110L, 120, 121, 121L, 122, 130, 131, 131L, 132, Mechanical and Aerospace Engineering 101; one upper division math course selected from Mechanical and Aerospace Engineering 182B, 182C, Civil and Environmental Engineering 103, Electrical Engineering 102, Mathematics 132; either Materials Science and Engineering 150 or 160 and one course (4 units) from Electrical Engineering 123A, 123B, Materials Science and Engineering 150, 160; 4 laboratory units from Materials Science and Engineering 141L, 161L, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and one major field elective course (4 units) from Electrical Engineering 110, 131A, Materials Science and Engineering [105](#), [C111](#), C112, 143A, 162.