# Materials Science and Engineering Catalog 2015

## NANOMATERIALS CONCENTRATION

### Fall
16 hours
- **English 101 or 118 (3) FA, SP, SU**
- **Chem 120 or 128 (4) FA, SP, SU**
- **Math 141 or 147 (4) FA, SP, SU**
- **EF 151 or 157 (4) FA, SP, SU**
- **EF 155 (1) FA, SP**

### Spring
16 hours
- **English 102 (3) FA, SP, SU**
- **Chem 130 or 138 (4) FA, SP, SU**
- **Math 142 or 148 (4) FA, SP, SU**
- **EF 152 or 158 (4) FA, SP**
- **MSE 101 (1) SP**

### Fall
17 hours
- **MSE 201 (3) FA, SP, SU**
- **MSE 210 (1) FA**
- **Math 241 or 247 (4) FA, SP, SU**
- **Physics 231 (3) FA, SP, SU**
- **Econ 201 or 207 (4) FA, SP, SU**
- **MSE 250 (3) SP**
- **MSE 260 (3) SP**
- **Gen. Ed. (3) FA, SP, SU**

### Spring
16 hours
- **MSE 290 (1) SP**
- **Math 200 (2) FA, SP**
- **Physics 232 (4) FA, SP, SU**
- **MSE 250 (3) SP**
- **MSE 260 (3) SP**

### Fall
16 hours
- **MSE 300 (1) FA**
- **MSE 301 (3) FA**
- **MSE 320 (3) FA**
- **MSE 340 or 347 (3) FA**
- **MSE 350 or 357 (3) SP**
- **Technical Elective* (3) FA, SP, SU**

### Spring
16 hours
- **MSE 304 (1) SP**
- **MSE 370 (3) SP**
- **MSE 302 (3) SP**
- **MSE 350 or 357 (3) SP**

### Fall
16 hours
- **MSE 410 (3) FA, SP**
- **MSE 405 (WC) (4) FA, SP**
- **MSE 460 (3) FA**
- **Gen. Ed. (3) FA, SP, SU**

### Spring
16 hours
- **MSE 408 (3) FA, SP**
- **Technical Elective* (3) FA, SP, SU**

### Notes
- Technical electives: Chem 473, MSE 421, 466, 474; Phys 411. Credit for other courses that address processing, structure, properties or behavior of nanomaterials may be substituted by permission of academic advisor and department head.

## Progression
Progression of students to departmental upper-division courses is competitive. Factors considered include overall grade point average, performance in selected lower division courses and evidence of satisfactory and orderly progress through the prescribed curriculum.

## Upper Division Status
A lower division student formally applies for upper division status after completing 50 hours of lower division engineering curriculum work with an overall GPA of at least 2.4. This must include MSE 201.

## Provisional Status
Students who have completed 50 hours of lower-division engineering curriculum work with an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of provisional upper-division status is based on the availability of space in the departmental programs after upper-division status students have been accommodated. Provisional students are required to demonstrate their ability to perform satisfactorily in upper-division courses by attaining a minimum GPA of 2.0 in at least 8 hours of 300-level required courses specified by the department. Further progression to upper-division courses is dependent upon this minimum level of performance.

## MSE Graduation Requirements
Graduation in materials science and engineering requires a minimum grade point average of 2.0 for all departmental courses.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.

## UTRACK Milestones:

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6 through 8</th>
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</thead>
<tbody>
<tr>
<td>Math 130 or higher or one SS or one AH or one CC</td>
<td>Math 130 or higher</td>
<td>EF 151/157 or Physics 135/137</td>
<td>EF 152/158 or Physics 136/138</td>
<td>ME 202 or CS 102 or MSE 201 or CBE 201</td>
<td>No Milestones</td>
</tr>
</tbody>
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