# ONLINE Engineering Management, BSE
## Bachelor of Science in Engineering, 2019 Catalog Year
### ESEMGBSE

### Color Coding Key:
- **Completed Requirements**
- **Enrolled**
- **Need to Retake**

### *Review EM Major Map for specific focus area courses for Business Analytics or Software Engineering focus areas: [http://cidse.engineering.asu.edu/forstudent/undergraduate/majors/engineering-management-bse/degree-requirements-online](http://cidse.engineering.asu.edu/forstudent/undergraduate/majors/engineering-management-bse/degree-requirements-online)*

### **IEE380** is the prerequisite to many IEE upper division courses

### Prerequisite
- Pre or Co-requisite

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<thead>
<tr>
<th>FALL-1</th>
<th>SPRING-2</th>
<th>FALL-3</th>
<th>SPRING-4</th>
<th>FALL-5</th>
<th>SPRING-6</th>
<th>FALL-7</th>
<th>SPRING-8</th>
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<tbody>
<tr>
<td>ENG 101 (3) 1st-Year Comp.</td>
<td>ENG 102 (3) 1st-Year Comp.</td>
<td>CHM 114 (4) CHM for Engr OR CHM 116 (4) Gen CHM II</td>
<td>COM 263 (3) Intercultural Communication</td>
<td>IEE 300 (3) Economic Analysis for Engr</td>
<td>IEE 369 (3) Work Analysis &amp; Design (L)</td>
<td>IEE 454** (3) Risk Management</td>
<td>IEE 456 (3) Intro to Systems Engr</td>
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<td>ASU 101- UC (1) ASU Experience</td>
<td>ASU 101- UC (1) ASU Experience</td>
<td>ACC 231 (3) Uses of Acctg Info I</td>
<td>ACC 241 (3) Uses of Acctg Info II</td>
<td>MGT 300** (3) Org. &amp; Mgmt. Leadership</td>
<td>IEE 321 (1) Ethics &amp; Technology</td>
<td>HU &amp; H (3)</td>
<td>Upper Division Humanities (3)</td>
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<td>FSE 100 (2) Intro to Engineering</td>
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<td>CSE 205 (3) Principles of Programming Java</td>
<td>CSE 205 (3) Programming &amp; Data Structures</td>
<td>IEE 380** (3) Prob. &amp; Stats.</td>
<td>IEE 477** (3) System Dynamics and Thinking</td>
<td>IEE 485 (3) Capstone I (L)</td>
<td>IEE 486 (3) Capstone II (L)</td>
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<td>MAT 265 (3) CALC I</td>
<td>MAT 266 (3) CALC II</td>
<td>IEE 320 (1) Extreme Excel</td>
<td>IEE 320 (1) Extreme Excel</td>
<td>IEE 431 (3) Engr. Admin (L)</td>
<td>IEE 320 (1) Extreme Excel</td>
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<td>Basic Science Elective (3)</td>
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<td>MAT/SCI* FOR FOCUS AREA (3)</td>
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<td>FOCUS AREA* (3) business analytics or software engr.</td>
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<td>PHY 121 &amp; 122 (3 &amp; 1) University Physics I and Laboratory</td>
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<td>Global Eng or Sustainability or Entrepreneur Elective (3)</td>
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<th>15 HOURS</th>
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### *IEE380* is the prerequisite to many IEE upper division courses
Six Sigma Methodology for Business and Quality Improvement

IEE 310: Principles of Programming with Java

MAT 242: Elementary Linear Algebra

IEE 380: Probability and Statistics for Engineers

ACC 241: Uses of Accounting

CHM 116: General Chemistry II (pre-req is CHM 113)

MAT 267: Calculus for Engineers II

PHY 121/122: University Physics I: Mechanics and Laboratory

MAT 265: Calculus for Engineers I

ECN 212: Microeconomics Principles

COM 263: Elements of Intercultural Communication

ENG 101: First-Year Composition

ASU 101-CSE: The ASU Experience

FSE 100: Introduction to Engineering

FSE 301: Engineering Problem Solving

IEE 300: Economic Analysis for Engineers

IEE 320: Extreme Excel

IEE 431: Engineering Administration

Math or Science Elective: Depends on Industry Focus Area (Business Analytics or Software Engineering)