2014-2015 Catalog Year - MAPP
Mechanical Engineering (Energy & Environment)
BSE

ASU Major

Mechanical Engineering (Energy and Environment), BSE - [Ira A. Fulton Schools of Engineering]

Special Requirements
Completion of the Maricopa to ASU Engineering Pathway and all special requirements meets ASU major map requirements and guarantees admission to the Aerospace (Aeronautics), Aerospace (Astronautics), Aerospace (Autonomous Vehicle) Engineering, Mechanical Engineering, Mechanical Engineering (Computational Mechanics), or Mechanical Engineering (Energy & Environment) BSE degree program. Note: Engineering Core Courses should be completed prior to enrolling in any additional lower division requirement courses. While requirements listed will meet ASU degree requirements, only 64 credit hours are transferable to ASU. Special Requirements: 3.0 transfer GPA as calculated by ASU for admissions. All courses must be completed with a grade of “C” or better.

Maricopa Community College District Course Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Pathway ENG 101: First-Year Composition</th>
<th>Credits</th>
<th>AGEC-S Reqs</th>
<th>ASU ENG 1101 OR ENG 107: First-Year Composition for ESL</th>
<th>Min. Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Core</td>
<td>ENG 102: First-Year Composition</td>
<td>3</td>
<td>●</td>
<td>●</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECE 102: Engineering Analysis Tools and Techniques AND ECE 103: Engineering</td>
<td>4</td>
<td>●</td>
<td>●</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

SUNY
### Problem Solving And Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 1102</td>
<td>Calculus With Analytic Geometry I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MAT 221</td>
<td>Calculus With Analytic Geometry I</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>MAT 231</td>
<td>Calculus With Analytic Geometry II</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>MAT 277</td>
<td>Modern Differential Equations</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>MAT 241</td>
<td>Calculus With Analytic Geometry III</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>PHY 121</td>
<td>University Physics I: Mechanics</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>PHY 131</td>
<td>University Physics II: Electricity</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>CHM 151</td>
<td>General Chemistry I AND CHM 151LL:</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>CHM 152</td>
<td>General Chemistry II AND CHM 152LL:</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>HU</td>
<td>Humanities, Arts and Design (HU)</td>
<td>3</td>
<td>C</td>
</tr>
</tbody>
</table>

### Humanities and Social Behavioral Sciences (SB) requirements:

- Select courses that ensure completion of all
three awareness areas (historical, global and cultural).

| Social and Behavioral Sciences AND Awareness Area | 3 | | | C |

### Additional Lower Division Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th></th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 225:</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Additional Lower Division Requirements:
Complete additional lower division requirements not to exceed 64 total transfer credits. Students should complete MAT 225, ECE 214, ECE 215, ECE 105 or CSC 110 and ECE 216/216LL before taking other additional courses listed. All other additional requirements listed can be completed after transfer to ASU.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th></th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 214:</td>
<td>Engineering Mechanics</td>
<td>4</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>ECE 215:</td>
<td>Mechanics Of Materials</td>
<td>3</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>ECE 105: Matlab Programming OR CSC 110: Introduction to Computer Science</td>
<td>1-3</td>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ECE 216:</td>
<td>Computer-aided Engineering AND</td>
<td>3</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>
### ASU will accept transfer credit for traditional course work you have successfully completed at regionally accredited institutions of higher education. The applicability of the specific course toward a degree depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Students are responsible for working with their advisor to confirm all transfer transcripts are on file with ASU. For more information: [https://transfer.asu.edu/credits](https://transfer.asu.edu/credits)