1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3. An ability to communicate effectively with a range of audiences.

4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. An ability to function on teams whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## Mapping of program outcomes to curriculum

<table>
<thead>
<tr>
<th>Program Outcomes</th>
<th>ENGR 200 - Introduction to Engineering and Design (3)</th>
<th>ENGR 215 – Computational Methods in Engineering (3)</th>
<th>CIVE 200 – Engineering Materials and Laboratory (3)</th>
<th>CMGT 201 - Surveying (2)</th>
<th>ENGR 220 - Statics (3)</th>
<th>CIVE 319 - Fluid Mechanics (3)</th>
<th>CIVE 330 - Strength of Materials (3)</th>
<th>CIVE 350 - Geotechnical Engineering (3)</th>
<th>CIVE 361 - Transportation Engineering (3)</th>
<th>CIVE 385 - Structural Analysis (3)</th>
<th>CIVE 410 - Hydraulics and Water Resources (3)</th>
<th>CIVE 421 - Structural Engineering Design (4)</th>
<th>CIVE 430 - Environmental Engineering and Sustainability (3)</th>
<th>CIVE 435 - Highways and Pavement Design (3)</th>
<th>CIVE 440 - Construction Engineering (3)</th>
<th>CIVE 492 - Senior Design Project (4)</th>
<th>ENGR 320 - Engineering Economics (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.</td>
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<td>M</td>
<td>M</td>
<td>M/A</td>
<td>M/A</td>
<td>D</td>
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</tr>
</tbody>
</table>

### Evaluation of outcomes for Industrial Engineering

2023-2024 ABET (EAC) Outcomes

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