## Assessment Plan and Support of Program Outcomes by Technical Courses in the Major
### (Smart Grid Option)

<table>
<thead>
<tr>
<th>Program Outcomes</th>
<th>Required Courses</th>
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<tbody>
<tr>
<td></td>
<td>ENT300 Analytical Methods</td>
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<tr>
<td></td>
<td>ENT301 Mechanics I</td>
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<tr>
<td></td>
<td>ENT330 Electrical Circuits Analysis I</td>
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<td>ENT332 Electrical Circuits Analysis II</td>
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<td></td>
<td>ENT341 Electronics</td>
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<td>ENT342 Advance Circuits Analysis</td>
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<td>ENT345 Digital Systems</td>
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<td>ENT466 Microcontrollers</td>
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<td>ENT445 Power Electronics</td>
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<td>ENT461 Control Systems I</td>
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<td>ENT462 Control Systems II</td>
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<td>ENT465 Electrical Design I</td>
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<td></td>
<td>ENT466 Electrical Design II</td>
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<td>ENT471 Power Systems I</td>
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<td>ENT472 Power Systems II</td>
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<tr>
<td>1. An ability to apply knowledge, techniques, skills and modern tools of</td>
<td>X R R I R I R R R R M M M M M X X X X X X X X X X X X</td>
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<td>mathematics, science, engineering, and technology to solve broadly-defined</td>
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<td>engineering problems appropriate to the discipline</td>
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<td>2. An ability to design systems, components, or processes meeting specified</td>
<td>X R X X X X X X X M M M M M M M X X X X X X X X X X X</td>
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<td>needs for broadly-defined engineering problems appropriate to the discipline</td>
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<td>3. An ability to apply written, oral, and graphical communication in broadly-</td>
<td>X R X X X X X X X X X X X X X X X X X X X X X X X X</td>
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<td>defined technical and non-technical environments; and an ability</td>
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</tbody>
</table>
to identify and use appropriate technical literature

| 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes |
|---|---|---|---|---|---|---|---|---|---|
| X | X | X | X | X | X | X | X | X |
| I | R | I | R | M | M | I | M | M |

| 5. An ability to function effectively as a member or leader on a technical team |
|---|---|---|---|---|---|---|---|
| X | X | X | X | X | X | X |
| R | M | R | M | M | M |

Note: I – Introduction, R – Reinforcement, M – Mastery. Color-filled cells indicate that these courses are used for assessment.