### Electrical Engineering Technology

- Bachelor of Science (B.S.)
- Recommended Course Sequence

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1</td>
<td>LAC 1A - Cornerstone</td>
<td>TECH 1037: Introduction to Circuits <em>offered FALL ONLY</em></td>
</tr>
<tr>
<td>Spring 1</td>
<td>LAC SC</td>
<td>MATH 1140: Precalculus (4 cred.)</td>
</tr>
<tr>
<td>Fall 2</td>
<td>LAC 1B - Cornerstone</td>
<td>TECH 1039: Circuits &amp; Systems <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td>Spring 2</td>
<td>LAC 2A</td>
<td>MATH 1150: Calculus for Technology (4 cred.) <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td>Fall 3</td>
<td>LAC 1D - Cornerstone</td>
<td>TECH 2042: Intro to Digital Electronics <em>offered FALL ONLY</em></td>
</tr>
<tr>
<td>Spring 3</td>
<td>LAC 3B</td>
<td>TECH 2041: Intro to Analog Electronics <em>offered FALL ONLY</em></td>
</tr>
<tr>
<td>Fall 4</td>
<td>LAC 4A</td>
<td>TECH 3152: Advanced Analog Electronics <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td>Spring 4</td>
<td>LAC 5A</td>
<td>TECH 3156: Advanced Digital Electronics <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 5B</td>
<td>TECH 3157: Microcontroller Applications <em>offered FALL ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 6 - Cornerstone</td>
<td>TECH 3160: Comp. Aided Instr. &amp; Interfacing <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 2A</td>
<td>TECH 3164: Programmable Logic Controllers <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 5A</td>
<td>TECH 3166: Advanced Electrical Power Systems <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 2B</td>
<td>TECH 3152: Advanced Analog Electronics <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 3A</td>
<td>TECH 3166: Advanced Electrical Power Systems <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 4A</td>
<td>TECH 3164: Programmable Logic Controllers <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 5A</td>
<td>TECH 3166: Advanced Electrical Power Systems <em>offered SPRING ONLY</em></td>
</tr>
<tr>
<td></td>
<td>LAC 2A</td>
<td>TECH 3164: Programmable Logic Controllers <em>offered SPRING ONLY</em></td>
</tr>
</tbody>
</table>

### Important ALEKS Test Information

The ALEKS test is a math placement test that all UNI students must complete prior to enrolling in certain math & science courses. Below are the scores required for the math & science requirements in this program:

- PHYSICS 1511: 45
- STAT 1772: 50
- MATH 1140 & MATH 1150: 61
Electrical Engineering Technology
• Bachelor of Science (B.S.)
• Program Curriculum

Mathematics/Science coursework 22 cred.
- CS 1160 - C/C++ Programming 3 cr.
- MATH 1140 - Precalculus 4 cr.
- MATH 1150 - Calculus for Technology 4 cr.
- PHYSICS 1511 - General Physics I 4 cr.
- STAT 1772 - Introduction to Statistical Methods 3 cr.
  - course also satisfies LAC category 1C

or MATH 1420 - Calculus I 4 cr.

PHYSICS 1512 - General Physics II 4 cr.

Technical Core 52 cred.
- TECH 1037 - Introduction to Circuits 3 cr.
- TECH 1039 - Circuits & Systems 3 cr.
- TECH 2038 - Introduction to Electrical Power & Machinery 3 cr.
- TECH 2041 - Introduction to Analog Electronics 3 cr.
- TECH 2042 - Introduction to Digital Electronics 3 cr.
- TECH 3129 - Linear Control Systems 3 cr.
- TECH 3152 - Advanced Analog Electronics 3 cr.
- TECH 3156 - Advanced Digital Electronics 3 cr.
- TECH 3157 - Microcontroller Applications 3 cr.
- TECH 3160 - Computer-Aided Instrumentation & Interfacing 3 cr.
- TECH 3164 - Programmable Logic Controllers 3 cr.
- TECH 3166 - Advanced Electrical Power Systems 3 cr.
- TECH 4103 - Electronic Communications 3 cr.
- TECH 4104 - Applied Digital Signal Processing 3 cr.
- TECH 4165 - Wireless Communication Networks 3 cr.
- TECH 4167 - Power Electronics Application 3 cr.
- TECH 4174 - Senior Design I 1 cr.
- TECH 4176 - Senior Design II 3 cr.

Technical Writing coursework 3 cred.
- ENGLISH 3772 - Tech. Writing for Engineering Technologists 3 cr.

Liberal Arts Core (LAC) 44-45 cred.

Category I - Core Competencies 11 cred.
- A. Reading & Writing 3 cr.
- B. Speaking & Listening 3 cr.
- C. Quantitative Techniques & Understanding 3 cr.
  - category completed with STAT 1772
- D. Personal Wellness 2 cr.

Category II - Civilizations & Cultures 9 cred.
- A. Humanities 6 cr.
- B. Non-Western Cultures 3 cr.

Category III - Fine Arts, Literature, Philosophy & Religion 6 cred.
- A. Fine Arts 3 cr.
- B. Literature, Philosophy or Religion 3 cr.

Category IV - Natural Science & Technology 7 cred.
- A. Life Sciences 3 cr.
- B. Physical Science 4 cr.
  - category completed with CHEM 1110 or PHYSICS 1511

Category V - Social Science 9 cred.
- A. Sociocultural & Historical Perspectives 3 cr.
- B. Individual & Institutional Perspectives 3 cr.
- C. Topical Perspectives 3 cr.

Category VI - Capstone Experience 2-3 cred.

Credit Totals
- Math/Science coursework 22 cr.
- Technical Core 52 cr.
- Technical Writing coursework 3 cr.
- Liberal Arts Core (LAC) 45 cr.
- Credits counted twice (major & LAC) -7 cr.
- Total 115 cr.
- University Electives needed 11 cr.
- Grand Total 126 cr.

For detailed information regarding the Liberal Arts core (LAC), please visit www.uni.edu/lac.

Important ALEKS Test Information
The ALEKS test is a math placement test that all UNI students must complete prior to enrolling in certain math & science courses. Below are the scores required for the math & science requirements in this program:
- PHYSICS 1511: 45
- STAT 1772: 50
- MATH 1140 & MATH 1150: 61