Des Moines Area Community College
Transfer guide to the University of Northern Iowa
Bachelor of Science (B.S.) – Automation Engineering Technology

1. When will I graduate?
Students transferring to UNI from this A.A.S. program at DMACC should expect to take 69 credits at UNI.
Assuming that the student is starting at UNI during the fall semester, it will take roughly five semesters (two and a half years, a fall/spring/fall/spring/fall sequence), with two summer courses, to graduate.

<table>
<thead>
<tr>
<th>Transfer Credit Summary</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.S. credits transferring directly into UNI program</td>
<td>48</td>
</tr>
<tr>
<td>Other credits transferring to UNI</td>
<td>3</td>
</tr>
<tr>
<td>Total credits transferring towards UNI degree</td>
<td>51</td>
</tr>
<tr>
<td>Total credits needed at UNI</td>
<td>69 (120 total)</td>
</tr>
</tbody>
</table>

2. What A.A.S. courses transfer?
Upon completion of this A.A.S. degree, the following courses within the listed program at UNI will be completed:

- PHYSICS 1511 – General Physics I (4 cred.)
  - Students must complete PHY 162 – College Physics or PHY 710 – Technical Physics at DMACC.
- TECH 1037 – Introduction to Circuits (3 cred.)
- TECH 1039 – Circuits & Systems (3 cred.)
- TECH 2053 – Digital Electronics & Lab (4 cred.)
- TECH 2055 – Electrical Power & Machinery & Lab (4 cred.)
- TECH 2065 – Industrial Robotics (3 cred.)
- TECH 3160 – Computer-Aided Instrumentation & Interfacing (3 cred.)
- TECH 3164 – Programmable Logic Controllers (3 cred.)
- AET Electives (15 cred.)
- Additional university electives transferring (6 cred.)

3. What other courses transfer?
Other courses built into this A.A.S. curriculum, or open electives, will also transfer to UNI. The following courses are recommended to take at DMACC as part of this A.A.S. curriculum:

- A.A.S Degree core Social & Behavioral Sciences/Humanities elective (3 cred.)
  - Students should complete ART 101 – Art Appreciation or MUS 101 – Music Appreciation at DMACC.
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4. What would I study at UNI?
By completing the recommended A.A.S. degree plan, the student would be required to complete the courses in black, listed below, at UNI.

<table>
<thead>
<tr>
<th>Math/Science Coursework</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1160 C/C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1150 or MATH 1420 Calculus for Technology or Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYSICS 1511 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>STAT 1772 Intro to Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits Remaining</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AET Technical Core</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1000 Intro to Eng. &amp; Prof. Practices</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1560 Science, Technology &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1010 Fund. of Materials Removal</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1024 Engineering Design with CAD</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1037 Intro to Circuits</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1039 Circuits &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>TECH 2053 Digital Electronics &amp; Lab</td>
<td>4</td>
</tr>
<tr>
<td>TECH 2055 Electrical Power &amp; Mach &amp; Lab</td>
<td>4</td>
</tr>
<tr>
<td>TECH 2085 Industrial Robots</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2080 Statics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2180 Strengths of Materials</td>
<td>2</td>
</tr>
<tr>
<td>TECH 3147 Computer-Aided Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>TECH 3148 Machine Design</td>
<td>3</td>
</tr>
<tr>
<td>TECH 3160 Comp.-Aided Instru. &amp; Inter.</td>
<td>3</td>
</tr>
<tr>
<td>TECH 3164 Prog. Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>TECH 4162 Automation: Pneu &amp; Hydru.</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4500 Senior Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3772 Tech. Writing for Eng. Tech.</td>
<td>3</td>
</tr>
<tr>
<td><strong>AET Electives</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Total Credits Remaining</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

5. How would I complete my degree?
Based on the remaining coursework, below is a semester-by-semester breakdown of how the student would complete any remaining requirements at UNI.

<table>
<thead>
<tr>
<th>Fall 1</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1160</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1772</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1000</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1024</td>
<td>3</td>
</tr>
<tr>
<td><strong>UNIFI course</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 1</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1150</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 1560</td>
<td>3</td>
</tr>
<tr>
<td>TECH 1010</td>
<td>3</td>
</tr>
<tr>
<td><strong>UNIFI course</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2080</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2180</td>
<td>2</td>
</tr>
<tr>
<td>TECH 3147</td>
<td>3</td>
</tr>
<tr>
<td>TECH 4162</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4500</td>
<td>3</td>
</tr>
<tr>
<td><strong>UNIFI course</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 3148</td>
<td>3</td>
</tr>
<tr>
<td>TECH 3149</td>
<td>3</td>
</tr>
<tr>
<td>TECH 4162</td>
<td>3</td>
</tr>
<tr>
<td><strong>UNIFI course</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Other Important Information
- This transfer guide is based off the 2023-2024 academic catalogs at UNI & Des Moines Area Community College and includes future adjustments to the UNI curriculum.
- Courses listed in the Remaining UNI Plan of Study section are subject to change at any time and are based on a fall semester start.
- This transfer guide assumes the student is only transferring in coursework from this A.A.S. degree plan. Students **may transfer additional credits to UNI**, which will be evaluated on an individual basis.
- The UNI Foundational Inquiry (UNIFI) at UNI is the collection of general education courses required by the institution to fulfill the universities mission. For more information, visit unifi.uni.edu.