

## Iowa Central Community College

### Associate of Applied Science (A.A.S.) – Electrical/Mechanical Technician

Transfer guide to the [University of Northern Iowa](#)

### Bachelor of Science (B.S.) – Electrical Engineering Technology

#### 1. When will I graduate?

Students transferring to UNI from this A.A.S. program at Iowa Central should **expect to take 80 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 no summer coursework, to graduate.

| Transfer Credit Summary                                  | Credits                  |
|--|--------------------------|
| A.A.S. credits transferring directly into UNI program    | 17                       |
| Other credits transferring to UNI (Gen eds or electives) | 23                       |
| Total credits transferring towards UNI degree            | 40                       |
| <b>Total credits needed at UNI</b>                       | <b>80</b><br>(120 total) |

#### 2. Which A.A.S. courses transfer directly into the EET major?

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 184** – Applied Physics at Iowa Central.
- TECH 1037 – Introduction to Circuits (3 cred.)
- TECH 1039 – Circuits & Systems (3 cred.)
- TECH 2055 – Electrical Power Systems & Machinery (4 cred.)
- ENGLISH 3772 – Technical Writing for Engineering Technologists (3 cred.)

#### 3. Which A.A.S. courses transfer directly to UNI as “gen eds” or electives?

Other general education courses built into this A.A.S. curriculum, or open electives, will also transfer to UNI.

- Communications elective (3 cred.)
  - Students should complete **SPC 101** – Fundamentals of Oral Communication **or** **SPC 112** – Public Speaking **or** **SPC 122** – Interpersonal Communications at Iowa Central.
- Humanities/Social Science elective (3 cred.)
  - Students should complete **PSY 111** – Introduction to Psychology **or** **SOC 110** – Introduction to Sociology at Iowa Central.
- Additional university electives transferring (17 cred.)



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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.

| Math/Science Coursework        |  | Cr.          |
|--------------------------------|--|--------------|
| CS 1160                        | C/C++ Programming                        | 3            |
| MATH 1140                      | Precalculus                              | 4            |
| MATH 1150 or<br>MATH 1420      | Calculus for Technology or<br>Calculus I | 4            |
| <del>PHYSICS 1511</del>        | <del>General Physics I</del>             | <del>4</del> |
| STAT 1772                      | Intro to Statistical Methods             | 3            |
| <b>Total Credits Remaining</b> |  | <b>14</b>    |

| Technical Core                 |  | Cr.          |
|--------------------------------|--|--------------|
| ENGR 1000                      | Intro. to Eng. & Prof. Practices               | 3            |
| <del>TECH 1037</del>           | <del>Introduction to Circuits</del>            | <del>3</del> |
| <del>TECH 1039</del>           | <del>Circuits &amp; Systems</del>              | <del>3</del> |
| PHIL 1560                      | Science, Technology & Ethics                   | 3            |
| TECH 2051                      | Analog Electronics                             | 4            |
| TECH 2053                      | Digital Electronics                            | 4            |
| <del>TECH 2055</del>           | <del>Elec. Power Systems &amp; Machinery</del> | <del>4</del> |
| TECH 3129                      | Linear Control Systems                         | 3            |
| TECH 3157                      | Microcontroller Applications                   | 3            |
| TECH 3160                      | Comp.-Aided Instru. & Interfacing              | 3            |
| TECH 3164                      | Programmable Logic Controllers                 | 3            |
| TECH 4103                      | Electronic Communications                      | 3            |
| TECH 4104                      | App. Digital Signal Processing                 | 3            |
| TECH 4165                      | Wireless Comm. Networks                        | 3            |
| TECH 4167                      | Power Electronics Applications                 | 3            |
| ENGR 4500                      | Senior Design                                  | 3            |
| <del>ENGLISH 3772</del>        | <del>Tech. Writing for Eng. Tech.</del>        | <del>3</del> |
| <b>Total Credits Remaining</b> |  | <b>41</b>    |

| UNI Foundational Inquiry (UNIFI)           |  | Cr.          |
|--|--|--------------|
| WR - Written Communication                 |  | 3            |
| <del>OC - Oral Communication</del>         |  | <del>3</del> |
| <del>QR - Quantitative Reasoning</del>     |  | <del>3</del> |
| <del>HD - Human Condition (Domestic)</del> |  | <del>3</del> |
| HG - Human Condition (Global)              |  | 3            |
| SR - Scientific Reasoning (with Lab)       |  | 4            |
| HE - Human Expression                      |  | 3            |
| <del>RE - Responsibility</del>             |  | <del>3</del> |
| UNIFI certificate or UNIFI electives       |  | 12           |
| <b>Total UNIFI Credits Remaining</b>       |  | <b>25</b>    |

**Credits needed to earn UNI degree 80**

#### 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.

| Fall 1       | Cr. |           |
|--------------|-----|-----------|
| CS 1160      | 3   |           |
| MATH 1140    | 4   |           |
| ENGR 1000    | 3   |           |
| UNIFI course | 3   |           |
| UNIFI course | 3   |           |
| <b>Total</b> |     | <b>16</b> |

| Spring 1     | Cr. |           |
|--------------|-----|-----------|
| MATH 1150    | 4   |           |
| TECH 3164    | 3   |           |
| UNIFI course | 3   |           |
| UNIFI course | 3   |           |
| UNIFI course | 3   |           |
| <b>Total</b> |     | <b>16</b> |

| Fall 2       | Cr. |           |
|--------------|-----|-----------|
| STAT 1772    | 3   |           |
| PHIL 1560    | 3   |           |
| TECH 2051    | 4   |           |
| TECH 2053    | 4   |           |
| UNIFI course | 3   |           |
| <b>Total</b> |     | <b>17</b> |

| Spring 2     | Cr. |           |
|--------------|-----|-----------|
| TECH 3160    | 3   |           |
| TECH 4104    | 3   |           |
| TECH 4167    | 3   |           |
| UNIFI course | 4   |           |
| UNIFI course | 3   |           |
| <b>Total</b> |     | <b>16</b> |

| Fall 3       | Cr. |           |
|--------------|-----|-----------|
| TECH 3129    | 3   |           |
| TECH 3157    | 3   |           |
| TECH 4103    | 3   |           |
| TECH 4165    | 3   |           |
| ENGR 4500    | 3   |           |
| <b>Total</b> |     | <b>15</b> |

#### Other Important Information

- This transfer guide is based off of the 2024-2025 academic catalogs at UNI & Iowa Central 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](http://unifi.uni.edu).