

## Des Moines Area Community College

### Associate of Applied Science (A.A.S.) – Tool & Diemaking

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

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

#### 1. When will I graduate?

Students transferring to UNI from this A.A.S. program at DMACC should **expect to complete 81 credits at UNI**. Assuming that the student is starting at UNI during the fall semester, it will take roughly six semesters (three years, a fall/spring/fall/spring/fall/spring sequence), with no summer coursework, to graduate.

| Transfer Credit Summary                                  | Credits                  |
|--|--------------------------|
| A.A.S. credits transferring directly into UNI program    | 13                       |
| Other credits transferring to UNI (Gen eds or electives) | 26                       |
| Total credits transferring towards UNI degree            | 39                       |
| <b>Total credits needed at UNI</b>                       | <b>81</b><br>(120 total) |

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

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

- MATH 1420 – Calculus I (4 cred.)
  - Students must complete **MAT 211** – Calculus I at DMACC.
- TECH 1010 – Fundamentals of Metal Removal (3 cred.)
- TECH 1024 – Engineering Design with CAD (3 cred.)
- TECH 3113 – Manufacturing Tooling (3 cred.)

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

Other courses built into this A.A.S. curriculum, or open electives, will also transfer to UNI. The following courses are required to complete at DMACC as part of this A.A.S. curriculum:

- A.A.S. degree Distributed course option (3 cred.)
  - Students should choose **SPC 101** – Fundamentals of Oral Communication **or** **SPC 122** – Interpersonal Communication.
- **PSY 102** – Human & Work Relations **or** **PSY 111** – Introduction to Psychology **or** **SOC 110** – Introduction to Sociology (3 cred.)
  - Students should not complete MGT 145 – Human Relations in Management as the course will not transfer to UNI.
- Additional university electives transferring (20 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.          |
|--------------------------------|--|--------------|
| CHEM 1020 or<br>CHEM 1110      | Chemical Technology <b>or</b><br>General Chemistry I     | 4            |
| CS 1510 or<br>CS 1160          | Introduction to Computing <b>or</b><br>C/C++ Programming | 3            |
| <del>MATH 1420</del>           | <del>Calculus I</del>                                    | <del>4</del> |
| PHYSICS 1511                   | General Physics I  | 4            |
| <b>Total Credits Remaining</b> |  | <b>11</b>    |

| Technical Core                 |  | Cr.          |
|--------------------------------|--|--------------|
| ENGR 1000                      | Intro. to Eng. & Prof. Practices         | 3            |
| <del>TECH 1008</del>           | <del>Basic Manufacturing Processes</del> | <del>3</del> |
| TECH 1010                      | Fund. of Metal Removal                   | 3            |
| <del>TECH 1024</del>           | <del>Engineering Design with CAD</del>   | <del>3</del> |
| PHIL 1560                      | Science, Technology & Ethics             | 3            |
| TECH 2024                      | Technical Drawing with GD&T              | 3            |
| TECH 2036                      | Power Technology                         | 3            |
| TECH 2065                      | Industrial Robotics                      | 3            |
| TECH 2072                      | Engineering Materials                    | 3            |
| ENGR 2080                      | Statics                                  | 2            |
| ENGR 2180                      | Strengths of Materials                   | 2            |
| <del>TECH 3113</del>           | <del>Manufacturing Tooling</del>         | <del>3</del> |
| TECH 3136                      | Principles of Metal Casting              | 3            |
| TECH 3142                      | Statistical Quality Control              | 3            |
| TECH 3143                      | Manag. Ops. & Manuf. Systems             | 3            |
| TECH 3147                      | Comp.-Aided Manufacturing                | 3            |
| TECH 3177                      | Adv. Manufacturing Processes             | 3            |
| TECH 4137                      | Tooling Prac. in Metal Casting           | 3            |
| TECH 4162                      | Hydraulics & Pneumatics                  | 3            |
| ENGR 4500                      | Senior Design                            | 3            |
| ENGLISH 3772                   | Tech. Writing for Eng. Tech.             | 3            |
| <b>Total Credits Remaining</b> |  | <b>52</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            |
| <del>SR - Scientific Reasoning (with Lab)</del> |  | <del>4</del> |
| HE - Human Expression                           |  | 3            |
| <del>RE - Responsibility</del>                  |  | <del>3</del> |
| UNIFI certificate <b>or</b> UNIFI electives     |  | 9            |
| <b>Total UNIFI Credits Remaining</b>            |  | <b>18</b>    |

**Credits needed to earn UNI degree 81**

#### 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         |
| PHYSICS 1511 | 4         |
| ENGR 1000    | 3         |
| PHIL 1560    | 3         |
| UNIFI course | 3         |
| <b>Total</b> | <b>16</b> |

| Spring 1     | Cr.       |
|--------------|-----------|
| CHEM 1020    | 4         |
| TECH 1010    | 3         |
| TECH 2024    | 3         |
| TECH 2036    | 3         |
| <b>Total</b> | <b>13</b> |

| Fall 2       | Cr.       |
|--------------|-----------|
| TECH 2065    | 3         |
| ENGR 2080    | 2         |
| TECH 3142    | 3         |
| ENGLISH 3772 | 3         |
| UNIFI course | 3         |
| <b>Total</b> | <b>14</b> |

| Spring 2     | Cr.       |
|--------------|-----------|
| TECH 2072    | 3         |
| ENGR 2180    | 2         |
| TECH 3143    | 3         |
| TECH 3147    | 3         |
| UNIFI course | 3         |
| <b>Total</b> | <b>14</b> |

| Fall 3       | Cr.       |
|--------------|-----------|
| TECH 3136    | 3         |
| TECH 3177    | 3         |
| TECH 4162    | 3         |
| UNIFI course | 3         |
| <b>Total</b> | <b>12</b> |

| Spring 3     | Cr.       |
|--------------|-----------|
| TECH 4137    | 3         |
| ENGR 4500    | 3         |
| UNIFI course | 3         |
| UNIFI course | 3         |
| <b>Total</b> | <b>12</b> |

#### Other Important Information

- This transfer guide is based off the 2025-2026 academic catalogs at UNI & Des Moines Area Community College.
- Courses listed in the Remaining UNI Plan of Study (section 5) are subject to change at any time. This plan assumes transfer students start in the fall semester.
- 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 university's mission. For more information, visit [unifi.uni.edu](#).