

## Des Moines Area Community College

### Associate of Science (A.S.) – Engineering Transfer Major

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.S. program at DMACC should **expect to take 63 credits at UNI**. Assuming that the student is starting at UNI during the fall semester, it will take roughly four semesters (two years, a fall/spring/fall/spring sequence), with no summer course work, to graduate.

Transfer Credit Summary	Credits
A.S. credits transferring directly into UNI program	51
Other credits transferring to UNI (Extra recommended courses)	6
Total credits transferring towards UNI degree	57
<b>Total credits needed at UNI</b>	<b>63</b> (120 total)

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

Students from a community college that transfer an Associate of Science (A.S.) degree to UNI will automatically transfer all requirements towards the UNIFI general education curriculum to UNI. Students holding an A.S. degree from a community college are exempt from any general education (gen ed) courses at UNI.

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

- MATH 1150 – Calculus for Technology (4 cred.)
- PHYSICS 1511 – General Physics I (4 cred.)
- All remaining requirements towards the UNIFI general education program at UNI (33 cred.)
- Additional university elective credits transferring to UNI (10 cred.)

#### 3. Extra recommended courses to complete.

The following courses are recommended to take at DMACC as part of the A.S. curriculum or as an elective:

- **EGR 155** – Engineering C/C++ (3 cred.)
- **MAT 156** – Statistics (3 cred.)



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#### 4. What would I study at UNI?

By completing the recommended 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 1150 or MATH 1420	Calculus for Technology or Calculus I	4
PHYSICS 1511	General Physics I	4
STAT 1772	Intro to Statistical Methods	3
<b>Total Credits Remaining</b>		<b>0</b>

AET Technical Core		Cr.
ENGR 1000	Intro. to Eng. & Prof. Practices	3
TECH 1010	Fund. of Metal Removal	3
TECH 1024	Engineering Design with CAD	3
TECH 1037	Introduction to Circuits	3
TECH 1039	Circuits & Systems	3
PHIL 1560	Science, Technology & Ethics	3
TECH 2053	Digital Electronics	4
TECH 2055	Elec. Power Systems & Mach.	4
TECH 2065	Industrial Robotics	3
ENGR 2080	Statics	2
ENGR 2180	Strengths of Materials	2
TECH 3147	Computer-Aided Manufacturing	3
TECH 3148	Machine Design	3
TECH 3160	Comp.-Aided Instru. & Inter.	3
TECH 3164	Prog. Logic Controllers	3
TECH 4162	Hydraulics & Pneumatics	3
ENGR 4500	Senior Design	3
ENGLISH 3772	Tech. Writing for Eng. Tech.	3
	AET Electives	9
<b>Total Credits Remaining</b>		<b>63</b>

UNI Foundational Inquiry (UNIFI)		Cr.
WR – Written Communication		3
OC – Oral Communication		3
QR – Quantitative Reasoning		3
HD – Human Condition (Domestic)		3
HG – Human Condition (Global)		3
SR – Scientific Reasoning (with Lab)		4
HE – Human Expression		3
RE – Responsibility		3
UNIFI certificate or UNIFI electives		6
<b>Total UNIFI Credits Remaining</b>		<b>0</b>

**Credits needed to earn UNI degree 63**

#### 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.
ENGR 1000	3
TECH 1024	3
TECH 1037	3
TECH 2065	3
ENGR 2080	2
<b>Total</b>	<b>14</b>

Fall 2	Cr.
PHIL 1560	3
TECH 2053	4
TECH 2055	4
TECH 3148	3
TECH 4162	3
<b>Total</b>	<b>17</b>

Spring 1	Cr.
TECH 1010	3
TECH 1039	3
ENGR 2180	2
ENGLISH 3772	3
AET elective	3
AET elective	3
<b>Total</b>	<b>17</b>

Spring 2	Cr.
TECH 3147	3
TECH 3160	3
TECH 3164	3
ENGR 4500	3
AET elective	3
<b>Total</b>	<b>15</b>

#### Other Important Information

- This transfer guide is based off of the 2024-2025 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.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).