

Des Moines Area Community College

Associate of Applied Science (A.A.S.) – Computer-Aided Design Technology

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 take 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	9
Other credits transferring to UNI (Gen eds or electives)	30
Total credits transferring towards UNI degree	39
Total credits needed at UNI	81 (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:

- TECH 1008 – Basic Manufacturing Processes (3 cred.)
- TECH 1024 – Engineering Design with CAD (3 cred.)
- TECH 2024 – Technical Drawing with GD&T (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.

- A.A.S. Degree core Math course (4 cred.)
 - Students should complete **MAT 211** – Calculus I at DMACC.
- **ENG 105** – Composition I
- **ENG 106** – Composition II (3 cred.)
 - Students should complete **ENG 105**–Composition I & **ENG 106**–Composition II at DMACC.
- **PSY 102** – Human & Work Relations (3 cred.)
- Additional university electives transferring (20 cred.)



Des Moines Area Community College

Associate of Applied Science (A.A.S.) – Computer-Aided Design Technology

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

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

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 CHEM 1110	Chemical Technology or General Chemistry I	4
CS 1510 or CS 1160	Introduction to Computing or C/C++ Programming	3
MATH 1420	Calculus I	4
PHYSICS 1511	General Physics I	4
Total Credits Remaining		11

Technical Core		Cr.
ENGR 1000	Intro. to Eng. & Prof. Practices	3
TECH 1008	Basic Manufacturing Processes	3
TECH 1010	Fund. of Metal Removal	3
TECH 1024	Engineering Design with CAD	3
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
TECH 3113	Manufacturing Tooling	3
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
Total Credits Remaining		52

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		9
Total UNIFI Credits Remaining		18

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	
Total		16

Spring 1	Cr.	
CHEM 1020	4	
TECH 1010	3	
TECH 2036	3	
ENGLISH 3772	3	
Total		13

Fall 2	Cr.	
TECH 2065	3	
ENGR 2080	2	
TECH 3142	3	
UNIFI course	3	
UNIFI course	3	
Total		14

Spring 2	Cr.	
TECH 2072	3	
ENGR 2180	2	
TECH 3147	3	
UNIFI course	3	
UNIFI course	3	
Total		14

Fall 3	Cr.	
TECH 3136	3	
TECH 3177	3	
TECH 4162	3	
UNIFI course	3	
Total		12

Spring 3	Cr.	
TECH 3113	3	
TECH 3143	3	
TECH 4137	3	
ENGR 4500	3	
Total		12

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.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.