

Elgin Community College

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

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

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

1. When will I graduate?

Students transferring to UNI from this A.A.S. program at Elgin should **expect to complete 70 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	14
Other credits transferring to UNI (Gen eds or electives)	36
Total credits transferring towards UNI degree	50
Total credits needed at UNI	70 (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 1010 – Fundamentals of Metal Removal (3 cred.)
- TECH 1024 – Engineering Design with CAD (3 cred.)
- TECH 2024 – Technical Drawing with GD&T (3 cred.)
- ENGR 2080 – Statics (2 cred.)
- TECH 3024 – Solid Modeling & Additive Manufacturing for Design (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 Elgin as part of this A.A.S. curriculum:

- **ENG 101** – English Composition I & **ENG 102** – English Composition II (3 cred.)
 - Students must complete ENG 101 & ENG 102 at Elgin to meet the UNIFI Written Communication requirement at UNI.
- Humanities/Fine Arts course (3 cred.)
 - Students should complete **HUM 216** – Ethics at Elgin.
- Math/Science course (4 cred.)
 - Students should complete **CHM 142** – General Chemistry **or** **PHY 101** – General Physics I at Elgin.
- Social/Behavioral Science course (3 cred.)
 - Students should complete **PSY 100** – Intro to Psychology **or** **SOC 100** – Principles of Sociology at Elgin.
- Additional university electives transferring (23 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 1510 or CS 1160	Introduction to Computing or C/C++ Programming	3
CHEM 1020 or CHEM 1110	Chemical Technology or General Chemistry I	4
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 4560	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 3024	Solid Modeling & Add. Manuf.	3
TECH 3127	Applied Thermodynamics	3
TECH 3135	Product Design	3
TECH 3136	Principles of Metal Casting	3
TECH 3148	Machine Design	3
TECH 4137	Tooling Pract. 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		41

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 70

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.
MATH 1420	4
PHYSICS 1511	4
ENGR 1000	3
TECH 1008	3
Total	14

Spring 1	Cr.
CS 1160	3
TECH 2036	3
TECH 2072	3
ENGR 2180	2
UNIFI course	3
Total	14

Fall 2	Cr.
TECH 2065	3
TECH 3136	3
ENGLISH 3772	3
UNIFI course	3
UNIFI course	3
Total	15

Spring 2	Cr.
TECH 3127	3
TECH 3135	3
TECH 4137	3
UNIFI course	3
UNIFI course	3
Total	15

Fall 3	Cr.
TECH 3148	3
TECH 4162	3
ENGR 4500	3
UNIFI course	3
Total	12

Other Important Information

- This transfer guide is based off the 2025-2026 academic catalogs at UNI & Elgin 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.