

Western Iowa Technical Community College

Associate of Applied Science (A.A.S.) – Mechanical Engineering Technology

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 Western Iowa Tech should **expect to take 75 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 courses, to graduate.

Transfer Credit Summary	Credits
A.A.S. credits transferring directly into UNI program	42
Other credits transferring to UNI	3
Total credits transferring towards UNI degree	45
Total credits needed at UNI	75 (120 total)

2. What A.A.S. courses transfer?

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.)
- TECH 2036 Power Technology (3 cred.)
- ENGR 2080 Statics (2 cred.)
- ENGR 2180 Strengths of Materials (2 cred.)
- TECH 3148 Machine Design (3 cred.)
- Additional university electives transferring (23 cred.)

3. What other courses transfer?

Other courses built into this A.A.S. curriculum, or open electives, will also transfer to UNI. The following courses are recommended to take at Western Iowa Tech as part of this A.A.S. curriculum:

PSY 102 – Human & Work Relations (3 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	Introduction to Computing or	3
CS 1160	C/C++ Programming	
CHEM 1020 or	Chemical Technology or	4
CHEM 1110	General Chemistry I	
MATH 1420	Calculus I	4
PHYSICS 1511	General Physics I	4
	Total Credits Remaining	15

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 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 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	39

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	21

Credits needed to earn UNI degree 75

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.
CHEM 1020	4
MATH 1420	4
ENGR 1000	3
TECH 1008	3
Total	14

Total	16
UNIFI course	3
TECH 3135	3
TECH 2072	3
PHYSICS 1511	4
CS 1160	3

Spring 1

Fall 2	Cr.
PHIL 1560	3
TECH 2065	3
TECH 3024	3
TECH 3136	3
ENGLISH 3772	3
Total	15

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

Fall 3	Cr.
TECH 4162	3
ENGR 4500	3
UNIFI course	3
UNIFI course	3
UNIFI course	3
Total	15

Other Important Information

- This transfer guide is based off of the 2024-2025 academic catalogs at UNI & Western Iowa Technical 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.