

Iowa Western 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 Iowa Western should **expect to complete 69 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 two summer courses, to graduate.

Transfer Credit Summary	Credits
A.S. credits transferring directly into UNI major	8
Other credits transferring to UNI (Gen eds or electives)	43
Total credits transferring towards UNI degree	51
Total credits needed at UNI	69 (120 total)

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

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

- MATH 1420 – Calculus I (4 cred.)
- PHYSICS 1511 – General Physics I (4 cred.)

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

Upon completion of an Associate of Science (A.S.) degree from a two-year community college, students will transfer all the requirements for the University of Northern Iowa’s UNI Foundational Inquiry (UNIFI) general education program.

The following courses within the Automation Engineering Technology program at UNI will be completed:

- All remaining requirements towards the UNIFI general education program at UNI (37 cred.)
- Additional university electives transferring to UNI (6 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	Calculus for Technology or	4
MATH 1420	Calculus I	4
PHYSICS 1511	General Physics I	4
STAT 1772	Intro to Statistical Methods	3
Total Credits Remaining		6

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
Total Credits Remaining		63

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		12
Total UNIFI Credits Remaining		0

Credits needed to earn UNI degree 69

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.	Spring 1		Cr.
CS 1160		3	STAT 1772		3
ENGR 1000		3	TECH 1010		3
TECH 1024		3	TECH 1039		3
TECH 1037		3	ENGR 2080		2
TECH 2065		3	AET elective		3
ENGR 2080		2			
Total		17	Total		14

Summer 1		Cr.
PHIL 1560		3
ENGLISH 3772		3
Total		6

Fall 2		Cr.	Spring 2		Cr.
TECH 2053		4	TECH 2055		4
TECH 3148		3	TECH 3147		3
TECH 4162		3	TECH 3160		3
AET elective		3	TECH 3164		3
AET elective		3	ENGR 4500		3
Total		16	Total		16

Other Important Information

- This transfer guide is based off the 2025-2026 academic catalogs at UNI & Iowa Western 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.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](#).