

Southeastern 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.) – Automation Engineering Technology

1. When will I graduate?

Students transferring to UNI from this A.A.S. program at Southeastern should **expect to take 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 course work, to graduate.

Transfer Credit Summary	Credits
A.A.S. credits transferring directly into UNI major	19
Other credits transferring to UNI (Gen eds or electives)	31
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 AET major?

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

- PHYSICS 1511 – General Physics I (4 cred.)
 - Students must complete **PHY 162** – College Physics I at Southeastern.
- TECH 1010 – Fundamentals of Metal Removal (3 cred.)
- TECH 1024 – Engineering Design with CAD (3 cred.)
- AET Electives (9 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.

- **ENG 105** – Composition I & **ENG 106** – Composition II (3 cred.)
 - Students must complete ENG 105 – Composition I & ENG 106 – Composition II at Southeastern to satisfy the Written Communication requirement at UNI.
- **MAT 120** – College Algebra (3 cred.)
- **MAT 134** – Trigonometry & Analytic Geometry (3 cred.)
- **PHI 105** – Introduction to Ethics (3 cred.)
- **PHY 162** – College Physics I (4 cred.)
- **SOC 115** – Social Problems (3 cred.)
- Additional university electives transferring to UNI (12 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 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
Total Credits Remaining		10

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
Total Credits Remaining		48

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		3
Total UNIFI Credits Remaining		12

Credits needed to earn UNI degree	70
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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
STAT 1772	3
ENGR 1000	3
TECH 1037	3
UNIFI course	3
Total	15

Spring 1	Cr.
MATH 1150	4
TECH 1039	3
TECH 3147	3
UNIFI course	3
Total	13

Fall 2	Cr.
PHIL 1560	3
TECH 2053	4
TECH 2065	3
ENGR 2080	2
ENGLISH 3772	3
Total	15

Spring 2	Cr.
TECH 2055	4
ENGR 2180	2
TECH 3160	3
TECH 3164	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 of the 2024-2025 academic catalogs at UNI & Southeastern 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.