

## Marshalltown Community College

### Associate of Applied Science (A.A.S.) – Machine Tool Technology Tool & Die

Transfer guide to the [University of Northern Iowa](http://www.uni.edu)

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

#### 1. When will I graduate?

Students transferring to UNI from this A.A.S. program at MCC should **expect to take 85 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	32
Other credits transferring to UNI	3
Total credits transferring towards UNI degree	35
<b>Total credits needed at UNI</b>	<b>85</b> (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 3113 – Manufacturing Tooling (3 cred.)
- ENGLISH 3772 – Technical Writing for Engineering Technologists (3 cred.)
- Additional university electives transferring (20 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 MCC as part of this A.A.S. curriculum:

- Social/Behavioral Science course (3 cred.)
  - Students should complete PSY 111 – Introduction to Psychology **or** SOC 110 – Introduction to Sociology at MCC.



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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.
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
<b>Total Credits Remaining</b>		<b>15</b>

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
<b>Total Credits Remaining</b>		<b>49</b>

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
<b>Total UNIFI Credits Remaining</b>		<b>21</b>

**Credits needed to earn UNI degree 85**

#### 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	
TECH 1008	3	
UNIFI course	3	
<b>Total</b>		<b>16</b>

Spring 1	Cr.	
MATH 1420	4	
PHIL 1560	3	
TECH 2024	3	
TECH 2036	3	
UNIFI course	3	
<b>Total</b>		<b>16</b>

Fall 2	Cr.	
CHEM 1020	4	
TECH 2065	3	
ENGR 2080	2	
ENGLISH 3772	3	
<b>Total</b>		<b>12</b>

Spring 2	Cr.	
TECH 2072	3	
ENGR 2180	2	
UNIFI course	3	
UNIFI course	3	
<b>Total</b>		<b>14</b>

Fall 3	Cr.	
TECH 3136	3	
TECH 3142	3	
TECH 3177	3	
TECH 4162	3	
UNIFI course	3	
<b>Total</b>		<b>15</b>

Spring 3	Cr.	
TECH 3143	3	
TECH 3147	3	
TECH 4137	3	
ENGR 4500	3	
<b>Total</b>		<b>12</b>

#### Other Important Information

- This transfer guide is based off of the 2024-2025 academic catalogs at UNI & Marshalltown 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](http://unifi.uni.edu).