



Advanced Manufacturing



Exploration:
PICC or Concurrent courses to explore NICC program courses in a career pathway.



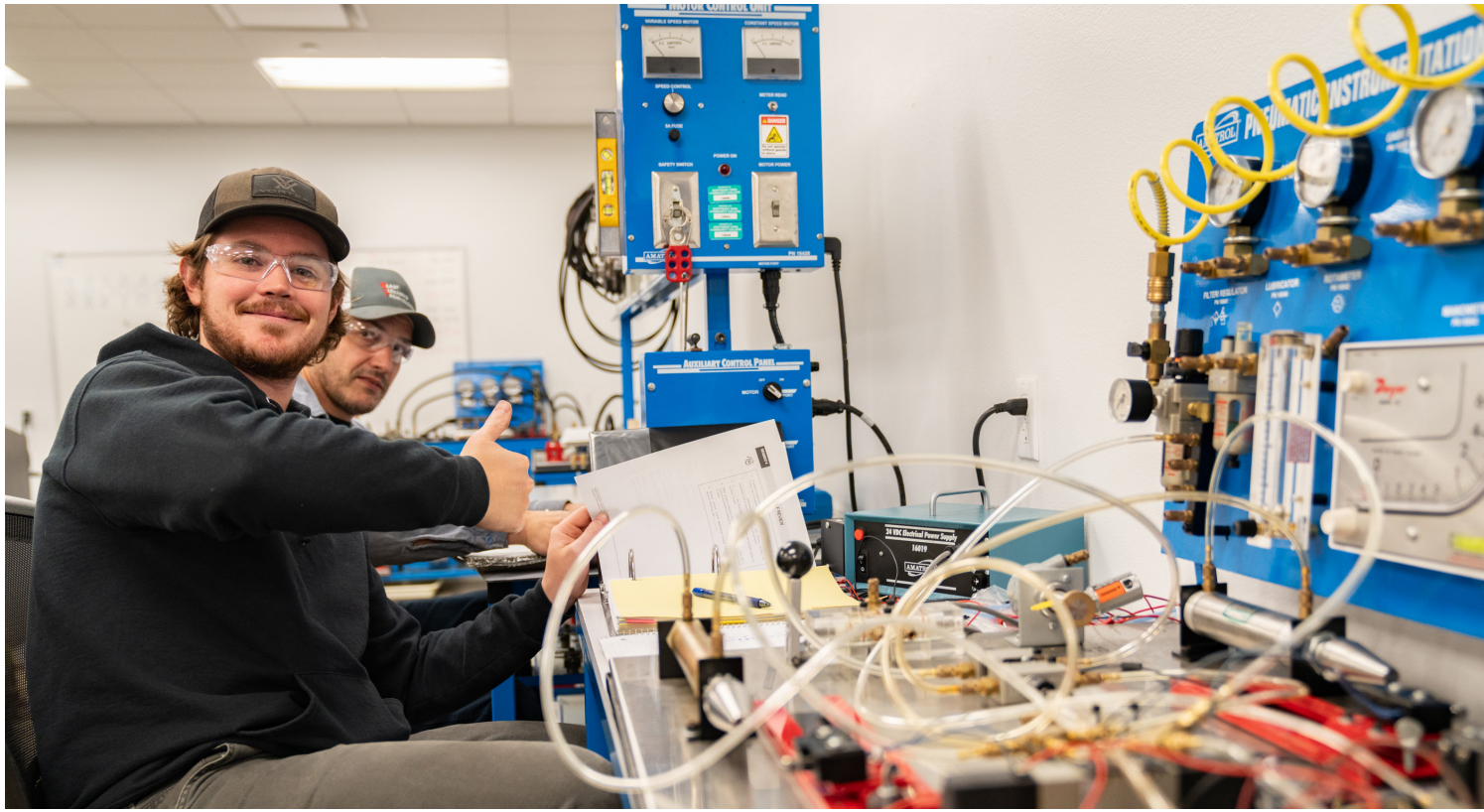
Early Admission:
Sequential PICC or Concurrent courses that go directly into a NICC program or award a Career Pathway Certificate.



General Education:
PICC or Concurrent courses that students complete to fulfill core degree requirements.

✔ Courses marked with a check mark satisfy a program degree requirement. Connect with your high school counselor and NICC College and Career Coach to learn what course options are available to you.

Course Number	Course Name	Computer Numerical Control (CNC) PEOSTA	Engineering Technology PEOSTA	Industrial Automation & Mechatronics PEOSTA	Industrial Maintenance Technician PEOSTA	Welding PEOSTA
EGT114	Introduction to Engineering Technology		✔			
EGT192	Engineering Graphics and Design		✔			
ELE:113	AC/DC Fundamentals		✔			
WEL192	Gas Tungsten Arc Welding					✔
WEL427	Basic Arc Welding (SMAW)					✔
WEL434	Flame/Plasma Cutting Fundamentals					✔
MFG119	Machine Trades Print Reading	✔	✔			
MFG149	Modeling and Programming	✔				
MFG163	Manual Mills and Grinders	✔				
MFG164	Manual Lathes	✔				
MFG182	Introduction to CNC	✔	✔			
WEL110	Welding Blueprint Reading		✔			✔
WEL330	Welding Fundamentals		✔		✔	
WEL433	Basic Gas Metal Arc Welding (GMAW)					✔
COM723	Workplace Communication	✔	✔	✔	✔	✔
MAT744	Technical Math	✔	✔			
MAT747	Technical Math II		✔			
MAT772	Applied Math					✔
MAT773	Applied Math II			✔	✔	
PSY112	Psychology of Human Relations		✔	✔	✔	
SDV179	The College Experience	✔	✔	✔	✔	✔



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▶ nicc.edu/advancedmanufacturing

State of Iowa Grant Eligible	Length	Program	Award	Location
✔	1 Year	Computer Numerical Control (CNC) Machinist Technician	D	P
	3-4 Months	Computer Numerical Control (CNC) Operator	CPC	P, CC
✔	2 Years	Engineering Technology	AAS	P
✔	2 Years	Industrial Automation and Mechatronics	AAS	P
✔	1-2 Years	Industrial Maintenance Technician	D, AAS	P
	1.5 Months	Introduction to Advanced Manufacturing	CPC	C, P
	3-4 Months	Introduction to Industrial Maintenance	CPC	C, P
	1.5 Months	Warehouse Technician	CPC	P
✔	9 Months	Welding	D	P
	3-4 Months	Welding: Basic	CPC	CC
	3-4 Months	Welding: GMAW	CPC	C, P, OC, WC

LEGEND

🎓 **Award:** AAS • Associate of Applied Science CPC • Career Pathway Certificate D • Diploma
 📍 **Location:** C • Calmar P • Peosta CC • Cresco Center OC • Oelwein Center WC • Waukon Center