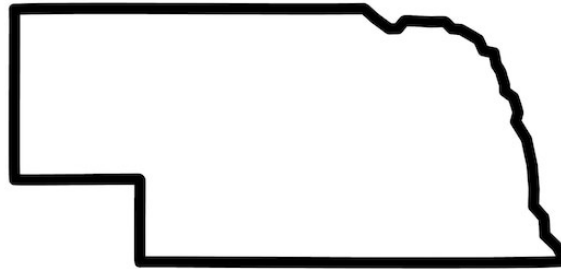


From Pilot to Statewide Pathway:

Building Nebraska's Manufacturing Workforce Through
Regional Collaboration



NADO Annual Training Conference – October 21, 2026

Doug Rood – Vice Chair of Workforce, NeMAC

What is NeMAC?

- **Nebraska Manufacturing Advisory Council (NeMAC)**
is an industry-driven advocate and advisory council to Nebraska agencies and leaders in maximizing global competitiveness in manufacturing. The council provides a forum for discussing industry-related problems and resolutions and serves as a voice for manufacturers to strengthen Nebraska's 2nd largest economic driver.
- In partnership with the Nebraska Departments of **Economic Development, Education, and Labor**, we work to enhance programs and communications strategies that attract students and prepare them for careers in modern manufacturing. We also support efforts to expand the reputation of manufacturing in Nebraska and promote policies that help this critical sector stay competitive and growing.

What's I'm About to Share

- What's the Problem
- Data Behind the Decisions
- How We to Got to a Solution
- Statewide Results So Far
- Where to Next
- Q&A

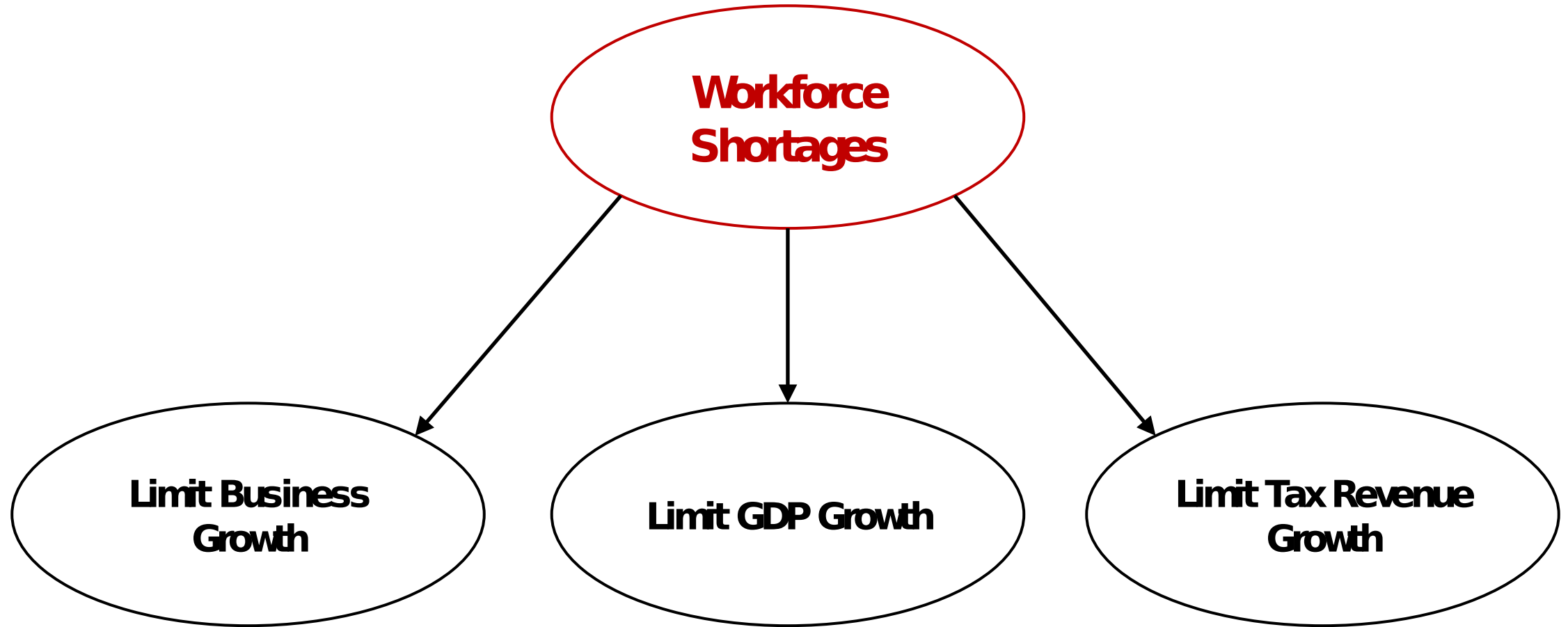
Nebraska Manufacturing Workforce

What are the top two industries by GDP in Nebraska?

Nebraska GDP by Industry

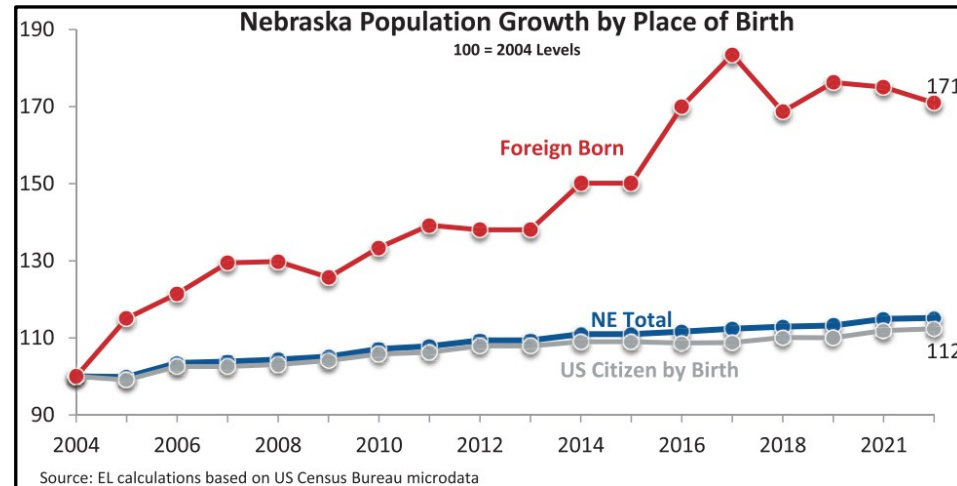
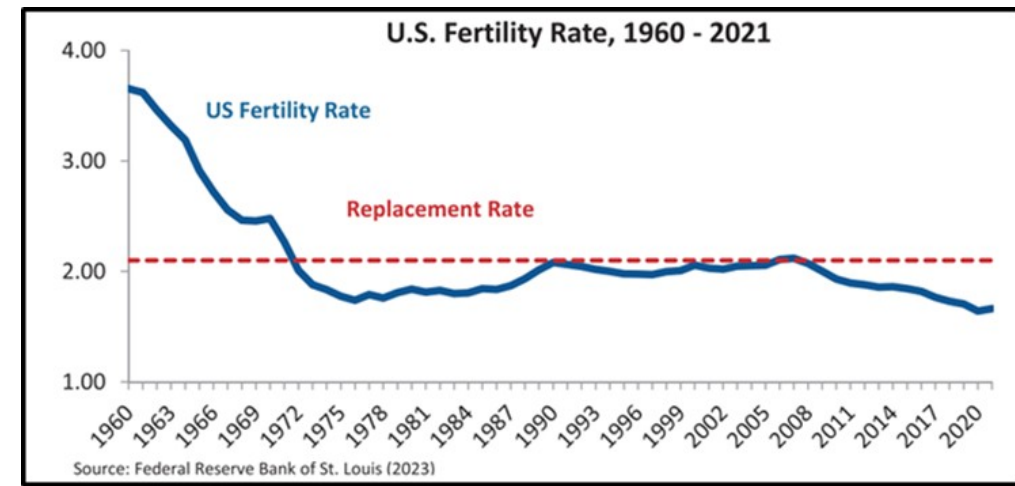
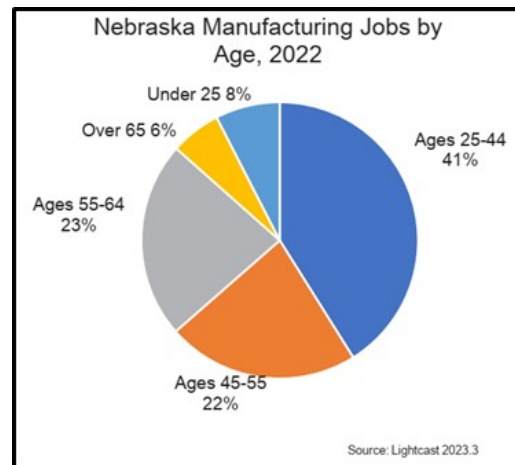
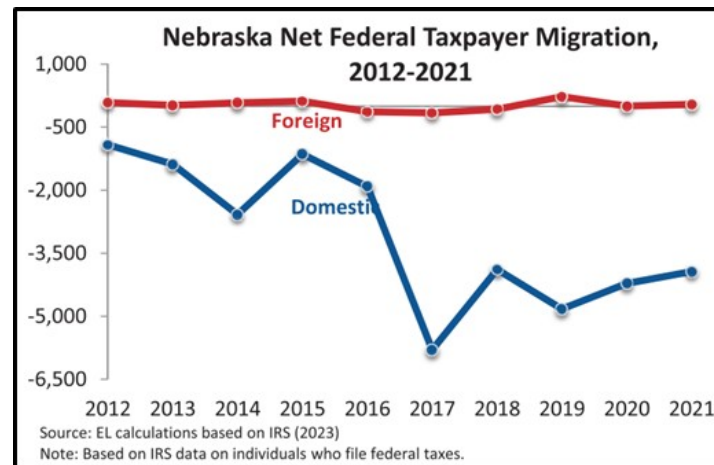
Industry	GDP (Annualized)	% Contribution to GDP
Finance and Insurance	\$25.2 Billion	13%
Manufacturing	\$21.8 Billion	12%
Government and Government Enterprises	\$20.7 Billion	11%
Real Estate, Rental, and Leasing	\$17.2 Billion	9%
Health Care and Social Assistance	\$14.0 Billion	7%
Transportation and Warehousing	\$12.0 Billion	6%
Wholesale Trade	\$11.8 Billion	6%
Retail Trade	\$9.9 Billion	5%
Construction	\$8.9 Billion	5%
Professional, Scientific, and Technical Services	\$8.6 Billion	5%
Agriculture, Forestry, Fishing, and Hunting	\$8.5 Billion	4%
Information Services, Publishing, and Broadcasting	\$5.7 Billion	3%
Administrative, Support, Waste Management, and Remediation Services	\$5.2 Billion	3%
Accommodations and Food Services	\$4.5 Billion	2%
Other Services	\$4.0 Billion	2%
Utilities	\$3.9 Billion	2%
Management of Companies and Enterprises	\$3.9 Billion	2%

Nebraska's Workforce Problem



Workforce shortages restrict growth in **every region**

Nebraska Chamber Foundation Workforce Study



2026 Omaha Center for Public Affairs Research

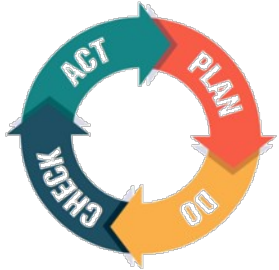
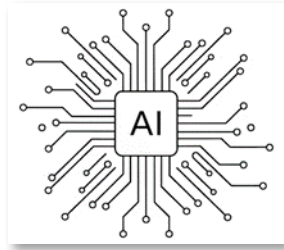
Nebraska's Workforce

1. Total Population Growth – 23rd (nationally)
2. International Migration Rate – 19th
3. Domestic Migration Population Loss – 35th
4. Share of Residents in Prime Working Ages – 48th
5. **Full-Time Employment Rate – 4th**
6. **Labor Force Participation Rate – 2nd**
7. Labor Force Participation, Parents of Young Children – 8th

Nebraska's Innovation

1. Density of High-Skill, High-Wage Jobs – 31st
2. Adults With Science and Engineering Degrees – 49th
3. Business R&D Spending – 34th
4. Patents Per Capita – 41st

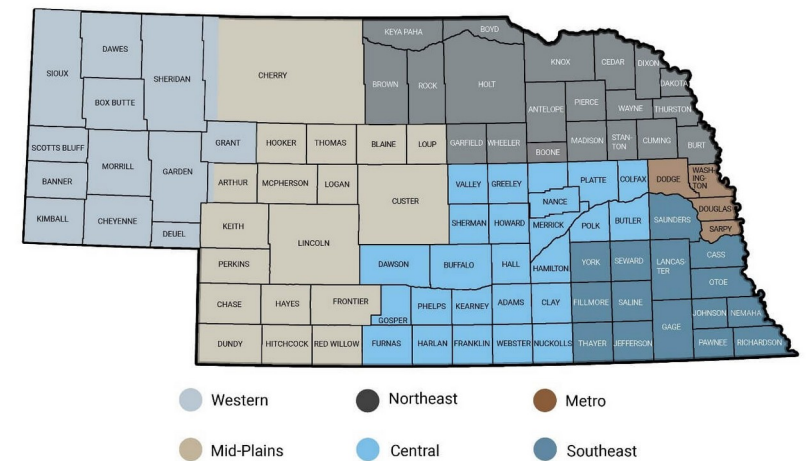
Barriers to Growing the Pipeline



1. Manufacturing not a desired career path – the 3 D's remain
2. Only successful if going to college
3. Don't know about local tech careers
4. Don't know about “hands on” opportunities or not available
5. Don't know about the cool things we work on
6. School tech/shop classes may not be available
7. School class times don't align with personal schedules
8. Can't afford school beyond high school
9. Not enough Career and Technical Education (CTE) teachers

The Solution - Nebraska Manufacturing Credential

- Examined best practices in other industries.
- Created core competencies for Manufacturing in Nebraska.
- This engages all Community Colleges and allow for local regional effort with a consistent statewide curriculum.
- Three Major Pathways:
 - Adult Learning
 - Immigrants/Refugees
 - High School/Middle School



Building the Solution

- Nebraska Manufacturing Credential
 - Developed with Nebraska Manufacturing Advisor Council (NeMAC) leadership
 - Aligned with Nebraska's industry expectations
 - Followed the DACUM process
 - Conducted industry job shadowing to align curriculum with workplace reality
 - Strengthens pathways to high demand careers

Nebraska Manufacturing Credential Level 1

- Module 1 - Workplace Safety and OSHA Concepts
- Module 2 - Quality Control and Defect Identification
- Module 3 - Daily Readiness and Personal Responsibility
- Module 4 - Introduction to Manufacturing Metrics
- Module 5 - Tool Use, Gauging, Basic Metrics and Print Reading
- Module 6 - Workplace Communication and Teamwork
- Module 7 - Problem Solving and Critical Thinking
- Module 8 - Foundations of Lean Manufacturing

Nebraska Manufacturing Alliance Credential – Level 1

Build Job-Ready Skills for Modern Manufacturing

Industry-Recognized • Hands-On • Nebraska-Focused

- Tuition Covered (Estimated value: \$2,000+)
- Stipends available for successful completion of all 8 modules

Train for a future-ready career pathway in manufacturing.

Build skills employers value—and prepare for H3 careers (High-Wage, High-Skill, High-Demand) and Registered Apprenticeship opportunities (where available).

Who It's For

- Individuals exploring manufacturing careers
- New hires and entry-level manufacturing workers
- Career changers and adult learners
- Employers developing a skilled workforce

What You Get / Unlock

- **Nebraska Manufacturing Alliance Credential – Level 1**
- **Transferable, stackable credentials** toward advanced training
- **A career pathway with upward mobility**
- A quicker path toward **higher-paying opportunities** over time
- **Connections to manufacturing** locally and statewide
- Hands-on, value-added learning aligned to industry expectations

How the Training Works

- Hands-on, applied learning
- Real-world manufacturing scenarios
- Short, focused modules
- Practical assessments aligned to industry expectations

Prepares you for roles such as:

- Manufacturing Technician
- Production Operator
- Quality or Safety Support Roles
- Entry-Level Advanced Manufacturing Positions



This training program is supported in part through charitable funding from Collins Aerospace, an RTX Business, and grant support from the Nebraska Department of Labor.

8 Job-Ready Skill Modules

- **Workplace Safety & OSHA Concepts**
- **Quality Control & Defect Identification**
- **Daily Readiness & Personal Responsibility**
- **Introduction to Manufacturing Metrics**
- **Tool Use, Gauging, Basic Metrics, & Blueprint Reading**
- **Workplace Communication & Teamwork**
- **Problem-Solving & Critical Thinking**
- **Foundation of Lean Manufacturing**

TRAINING DATES & LOCATION

March 3-June 25, 2026

Tues., Wed., & Thurs.
5:30-8:30 p.m.

The Career Academy at
Southeast Community College,
8800 O St., Room 107

Apply Today



Or use this link:
<https://pxlInk.co/nema1capp>

For more information, contact
Amy Chesley at 402-437-2711 or
achesley@sestc.edu.

CE-0027 (1/2026)



Program Aligns to
Nebraska Manufacturing
Alliance Credential Level 1

Training Dates and Location

Coming Summer
2026 at the iHub.

707 West Norfolk Ave
Norfolk, NE

For More Information

Erin Sharpe / 402-844-7224
esorensen@northeast.edu

Industry-Recognized. Hands-On. Nebraska-Focused.

- Tuition covered (estimated value: \$2,000+)
- Stipends available upon successful completion of all 8 modules

Train for a future-ready career pathway in manufacturing

Build in-demand skills for high-wage, high-growth careers. Get hands-on training with modern equipment and graduate ready to excel in today's evolving workforce.

Who It's For

- Anyone exploring manufacturing careers
- New hires / Entry-level manufacturing workers
- Career changers and adult learners
- Employers building a skilled manufacturing workforce

How the Training Works

This program is built with a blend of theory and hands-on, applied learning that mirrors real manufacturing environments. Students work through short, focused modules using real-world scenarios and demonstrate what they've learned through practical assessments aligned with industry expectations.

Get What You Need to Move Your Manufacturing Career Forward

- Training aligned with the Nebraska Manufacturing Alliance Bronze Credential.
- A transferable, stackable credential you can build on with advanced training.
- Job-ready skills in core areas of industrial production, including workplace safety, materials and processes, blueprint reading, precision measurement, quality practices, equipment operation, and effective communication and teamwork.
- Connections to manufacturing employers across Nebraska.
- Preparation for roles such as: Production Technician, Machine Operator, Quality Technician, Material Handler, and other industrial manufacturing positions in Northeast Nebraska's growing workforce.

8 Job-Ready Skill Modules

- 1 / Workplace Safety and OSHA Concepts
- 2 / Quality Control and Defect Identification
- 3 / Daily Readiness and Personal Responsibility
- 4 / Introduction to Manufacturing Metrics
- 5 / Tool Use, Gauging, Basic Metrics and Blueprint Reading
- 6 / Workplace Communication and Teamwork
- 7 / Problem-Solving and Critical Thinking
- 8 / Foundations of Lean Manufacturing



The Statewide Results

Current Results – All in 2026:

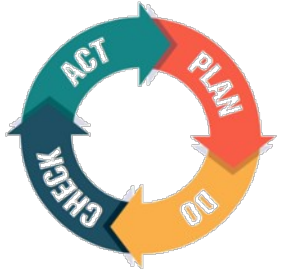
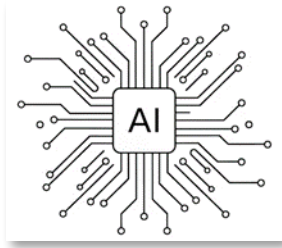
- Total Enrollment: 83
- Total Completers: 33
- Active Enrollments: 42
- **Completion Percentage: 90.4%**
- NE Dept of Ed is working on launch process for Level 1 Credential to be earned in your classrooms.
- All 6 Community Colleges are participating, with 4 Community Colleges having completed or active in at least 1 cohort (Metro, Southeast, Central, Northeast)

Nebraska Manufacturing Credential Level 1

- Success Stories:
 - “Our first cohort includes four female students pursuing careers in nontraditional fields, representing an important step toward increasing gender diversity in these industries. Additionally, the cohort is comprised of English Language Learner (ELL) students, all of whom are demonstrating measurable progress in their language development while advancing through the program. Their success highlights the program's ability to support both workforce training and language acquisition, helping participants build the skills needed for long-term educational and career success.”
 - “Most students are former Tyson employees looking for new gateways to employment after plant closure. Most were meat cutters and didn't have entry level manufacturing experience. Most also are ESL or former ESL students. They have learned many new skills and it has been amazing to watch their advancement in their English skills, particularly in manufacturing verbiage, to set them up for success after completing the program.”

Where Do We Go Next?

Manufacturing Innovation Headwinds



1. Don't have in-house skills
2. Difficult to deeply understand the technology
3. Difficult to get started
4. Difficult to select projects
5. Difficult to maintain the technology
6. Too much risk, can't sell to stakeholders
7. No local support, dependent on consultants
8. Too expensive, low ROI

Nebraska Manufacturing Credential Level 2

- Level 2 Apprenticeship Pilot will be launching in Fall 2026
- Tied to apprenticeship (NDOL Office of Apprenticeships/Community College Apprenticeship Offices)
 - State-wide pathway to advanced manufacturing careers
 - Customized to meet individual needs
- Pathways technology/automation driven

Nebraska Manufacturing Credential Level 2

**METROPOLITAN**
Community College

**NE MANUFACTURING ALLIANCE**

Nebraska Manufacturing Alliance Credential Level 2

Intermediate Manufacturing Skill Advancement for Nebraska

Industry-Defined. Competency-Based. Built for Nebraska.



A shared statewide framework for intermediate manufacturing skill development across Nebraska. Level 2 helps learners advance beyond entry-level readiness by building operator-level technical skills, troubleshooting awareness, quality practices, lean habits, automation knowledge, and safe decision-making for modern manufacturing environments.

 WHO IT'S FOR	 WHAT STUDENTS LEARN	 PRACTICAL SKILLS. REAL OPPORTUNITIES.	 PROGRAM HIGHLIGHTS
 Incumbent manufacturing workers	 Intermediate Machine Operation 18 lessons 54 hours	 Electrical Fundamentals for Manufacturing Systems 15 lessons 45 hours	 Intermediate Quality Control and Assurance 12 lessons 36 hours
 Registered apprentices	 Lean Manufacturing and Process Efficiency 10 lessons 30 hours	 Intermediate Robotics and Automation 12 lessons 36 hours	 7 modules
 Adult learners advancing beyond Level 1	 Blueprint Reading and GD&T — Intermediate 8 lessons 24 hours	 Advanced Safety and Compliance 5 lessons 15 hours	 25 units
 Employers upskilling frontline talent			 80 lessons
 Individuals preparing for greater responsibility in production environments			 240 contact hours
			 3 hours per lesson
			 65% lab / hands-on
			 35% classroom
			 Operator-level boundaries and escalation awareness
			 Statewide shared framework

 240 Contact Hours	 7 Learning Modules	 25 Units	 80 Lessons	 65% Lab / Hands-On	 Advancement Pathways
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 **BUILT BY INDUSTRY. DESIGNED FOR NEBRASKA. ADVANCING SKILLS FOR MODERN MANUFACTURING.**

 **Questions?** Marcy Owens | mowens@mccneb.edu | 531-622-4057

PEOPLE + SKILLS + STRONGER NEBRASKA

The Journey is just beginning...

- Expansion of the role types and number of apprenticeships
- Partnering with 4-year Universities to develop professional degree apprenticeships (Engineering, Automation, Business/Leadership)
- Connect workforce development and job wage and skill growth to statewide investment and innovation grants and incentives



Any Questions?

Contact



Collins Aerospace
An **RTX** Business

