The Manufacturing Career Cluster incorporates six pathways: production; manufacturing production process development; maintenance, installation & repair; quality assurance; logistics & inventory control, and health, safety & environmental assurance. Students prepare for careers that require planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities.

6,394 enrollments in High School programs

1,084 enrollments in Middle School programs

7,478 students

Top High School Programs

- Welding Technology Fundamentals (2,013)
- Industry Biotechnology (1,619)
- Advanced Manufacturing Technology (1,485)
- Machining Technology (356)
- Applied Welding Technology (266)

Top Certifications Earned by K-12 Students

- Certified Welder
- NCCER Welding-Level I (Secondary)
- Certified Solidworks Associate-Academic
- Biotechnology-Assistant
- NIMS Machining Level I - Manual Milling Skills I

Articulation Pathway to College

- MSSC Certified Production Technician (CPT) (MSSCN001)
- Articulates 9 credits
- Manufacturing Technology A.S. Degree

$961.56 in State College Tuition Savings
3,258 District Postsecondary Enrollments

- 82% Certificate
- 18% Apprenticeship

Top Programs

- Machining Apprenticeship: 2,182
- Sheet Metal Fabrication Technology Apprenticeship: 148
- Welding: 164
- Machining Technologies: 196
- Electronic Technology: 196

Top Certifications Earned by District Postsecondary Students

1. AWS Certified Welder-SMAW Plate
2. AWS Certified Welder-FCAW Plate
3. Associate Certified Electronics Technician (CETa)
4. AWS Certified Welder-GTAW Pipe
5. AWS Certified Welder-GTAW Pipe

Employment Outlook

- High Growth: 1.41% Growth Rate
  - Welders, Cutters, Solderers & Brazers
- High Wage: $23.30 per hour Mean Wage
  - Industrial Machinery Mechanics
- Annual Openings: 1,812 Annual Openings
  - Welders, Cutters, Solderers, and Brazers

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students. Enrollment outlook is based on the 2019-20 Statewide Demand Occupations List.