The Manufacturing Career Cluster incorporates six pathways: production; manufacturing production process development; maintenance, installation & repair; quality assurance; logistics and 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.

**ENROLLMENT**

7,129
Enrollments in High School Programs

+ 1,082
Enrollments in Middle School Programs

= 8,211

**TOP CERTIFICATIONS EARNED BY K-12 STUDENTS**

1st
Autodesk Certified User - Fusion 360

2nd
Biotechnician Assistant

3rd
AWS Certified Welder - SMAW Plate

4th
NIMS Machining Level 1 - CNC Milling Operations

5th
AWS Certified Welder - FCAW Plate

**TOP HIGH SCHOOL PROGRAMS**

- Welding Technology Fundamentals (3,503)
- Advanced Manufacturing Technology (1,718)
- Industrial Biotechnology (1,271)
- Machining Technology (527)
- Manufacturing Directed Study (108)

**ARTICULATION PATHWAY TO COLLEGE**

- MSSC Certified Production Technician (CPT)
  Articulates 15 credits
- Engineering Technology A.S. Degree
- $1,603.50 in State College Tuition Savings
## Manufacturing

### Postsecondary & Employment

### District Postsecondary Enrollment
- **8,254** Enrollment
- **31** Districts

### College System Enrollment
- **8,923** Enrollment

### Top Certifications
1st: AWS Certified Welder - SMAW Plate
2nd: AWS Certified Welder - FCAW Plate
3rd: AWS Certified Welder - GMAW Plate

### Top Programs
- **Welding (CAR) (6,151)**
- **Machining Technologies (CAR) (328)**
- **Sheet Metal Fabrication Technology - Apprenticeship (CAR) (184)**
- **Major Appliance and Refrigeration Technician (CAR) (174)**
- **Electrical and Instrumentation Technology (CAR) (174)**

### Top Certifications
1st: AWS Certified Welder - SMAW Plate
2nd: AWS Certified Welder - FCAW Plate
3rd: NCCER Welding - Level 1 (Postsecondary)

### Top Programs
- **Engineering Technology (AS) (2,005)**
- **Industry Operations Specialist (CCC) (1,726)**
- **Chemical Technology (AS) (954)**
- **Welding Technology (CAR) (874)**
- **Electronics Engineering Technology (AS) (683)**

### Employment Outlook
- **High Wage**
  - **$53.70** Per Hour Mean Wage
  - General and Operations Managers*

- **Annual Openings**
  - **1,920** Annual Openings
  - Welders, Cutters, Solderers, and Brazers

- **High Growth**
  - **2.05%** Annual Growth Rate
  - Industrial Machinery Mechanics

* Indicates data sourced from the Florida College System (FCS) Employment Data

Notes: Based on 2021-2022 data.