

# INDUSTRIAL MANUFACTURING TECHNICIAN

## Occupation Overview

### THE INDUSTRIAL MANUFACTURING PROGRAM . . .

- \* Lays the foundation for many career paths in manufacturing and production
- \* Stackable apprenticeship that feeds into longer, higher-level apprenticeship programs
- \* ~3000 hour registered apprenticeship program
- \* Easily adapted to many industries, and highly customizable

### SAMPLE OCCUPATIONS / JOB TITLES

Production Workers, All Other (51-9199)

Helpers--Production Workers (51-9198)

Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Sheet Metal Workers (47-2211)

Molding and Casting Workers (51-915.07)

Conveyor Operators and Tenders (53-7011)

Electrical and Electronic Equipment Assemblers (51-2022)

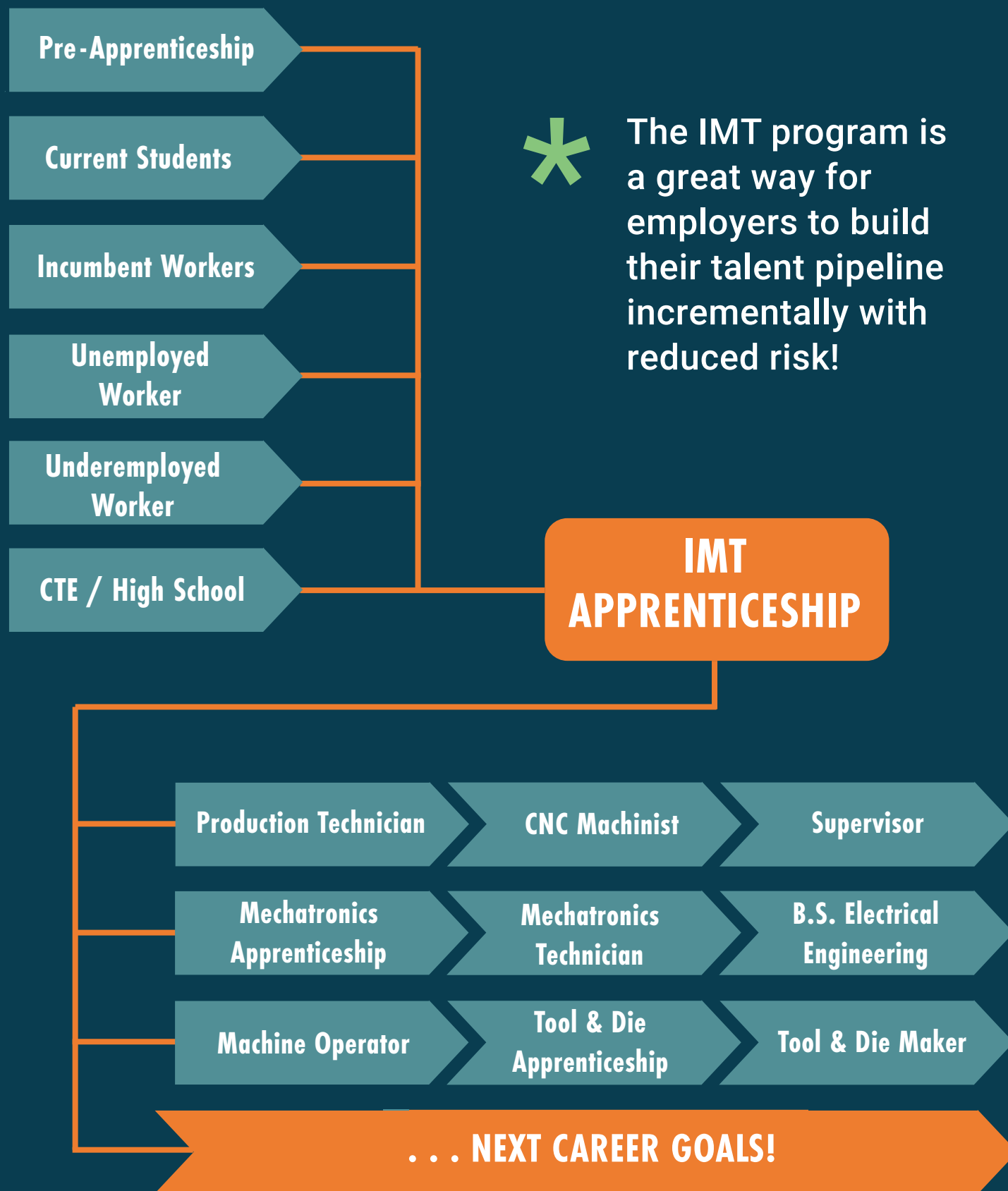
Engineering Technicians, Except Drafters, All Other (17-3029)

### MICHIGAN WAGE INFORMATION

PERCENTILE	25%	median	75%
Production Workers, All Other (51-9199)	\$11.52	\$16.47	\$20.91
Helpers--Production Workers (51-9198)	\$9.94	\$11.42	\$13.99
Engineering Technicians, Except Drafters, All Other (17-3029)	\$20.26	\$28.24	\$36.78
Conveyor Operators and Tenders (53-7011)	\$12.32	\$16.26	\$20.76

# INDUSTRIAL MANUFACTURING TECHNICIAN

## Potential Pathways



# INDUSTRIAL MANUFACTURING TECHNICIAN

Prepares apprentices for entry level production occupations higher level, stackable apprenticeships.

Highly customizable based on employers' needs and technologies.

## SAMPLE RTI PROGRAMS

### 1 BASIC PRODUCTION SKILLS

COURSE	CONTACT HOURS
Technical Math	32
Industrial Computer Applications	75
Quality	24
Industrial Safety Awareness	32
Communication and Teamwork	16
Lean Manufacturing	16

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**TOTAL HOURS** 195

### 2 INTEGRATED SYSTEMS FOCUS

COURSE	CONTACT HOURS
Technical Math	32
Industrial Computer Applications	75
Quality	24
Industrial Safety Awareness	32
Introduction to Integrated Manufacturing Systems	16

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**TOTAL HOURS** 179

Skills checklists for competency based apprenticeship assessments are attached

### 3 MECHATRONICS FOCUS

COURSE	CONTACT HOURS
Technical Math	24
Basic Electricity, AC/DC, and Meters	16
Sensors, Indicators, and Analog Devices	16
Basics of PLCs	16
Systems Controls	16
Troubleshooting Mechatronics and Electrical Control Systems	16
First Aid and Safety	8
Vision Systems	16
Leadership	24
Leadership, Continuous Improvement and Coaching	24

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**TOTAL HOURS** 176

### 4 MSSC CERTIFIED PRODUCTION TECHNICIAN FOCUS

COURSE	CONTACT HOURS
Technical Math	32
Industrial Computer Applications	75
MSSC Safety	15-45
MSSC Quality	15-45
MSSC Manufacturing Processes	15-45
MSSC Maintenance	15-45
Print Reading and Measurement	15-45

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**TOTAL HOURS** 182 - 332

Length depends on apprentice experience level and delivery method

# INDUSTRIAL MANUFACTURING TECHNICIAN

## Sample Work Process

WORK PROCESS ACTIVITY	HOURS
Protect self and other workers from accidents and injuries	100
Operate production equipment	1000
Produce quality product	500
Interpret technical information	200
Measure and inspect work using mechanical tools and testing equipment	200
Demonstrate knowledge of routine equipment maintenance	100
Demonstrate knowledge of inventory and material processes	100
Demonstrate knowledge of trends and the current state of the business	100
Demonstrate continuous improvement	100
Set-up production equipment	200
Local Options	136

\* More detailed work process information is attached.