



MONROE COUNTY COMMUNITY COLLEGE  
APPRENTICESHIP RTI CURRICULUM

Program: Electrician  
 Sponsor:  
 Apprentice Name & Student ID#:

Course	Contact Hours	Credit Hours	Semester Completed	Grade
Math 119 Tech Math I	30	2		
Math 124 Tech Math II	60	4		
ELEC 125 Fundamentals of Electricity	60	3		
ELEC 129 AC/DC Motors & Controls	90	4		
ELEC 130 Introduction to Programmable Logic Controls	60	3		
ELEC 132 Electronics I	90	4		
ELEC 115 Residential Wiring	30	1		
ELEC 200 Electrical Troubleshooting	90	4		
ELEC 211 Medium Voltage Power	45	3		
ELEC 214 National Electrical Code	30	2		
MECH 131 Automated Manufacturing	60	3		
<b>TOTAL HOURS</b>	<b>645</b>	<b>33</b>		

8/31/2021 (KH)

**Main Campus** ■ 1555 South Raisinville Road ■ Monroe, MI 48161-9746 ■ 1-734-242-7300  
**Whitman Center** ■ 7777 Lewis Avenue ■ Temperance, MI 48182 ■ 1-734-847-0559



**MONROE COUNTY  
COMMUNITY COLLEGE**

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Monroe County Community College Apprenticeship Curriculum

Company/Sponsor:

Apprentice Name:

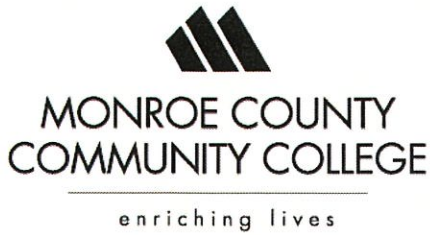
Type of Apprenticeship/Trade: Industrial Electrician

<b>Course</b>	<b>Contact Hours for RTI</b>	<b>Credit Hours</b>	<b>Semester</b>	<b>Grade</b>
MATH 119 Tech Math I	30	2		
MATH 124 Tech Math II	60	4		
ELEC 115 Residential Wiring	30	2		
ELEC 125 Fundamentals of Electricity	60	3		
ELEC 129 AC/DC Motors and Controls	90	4		
ELEC 130 Introduction to Programmable Logic Controls	60	3		
ELEC 132 Electronics I	90	4		
ELEC 133 Circuit Analysis	90	4		
ELEC 141 Industrial Automation and Process Control	60	3		
ELEC 200 Electronic & Electrical Troubleshooting	90	4		
ELEC 214 National Electrical Code	30	2		
MECH 131 Automated Manufacturing	60	4		
<b>Total Related Technical Instruction (RTI)</b>	<b>750</b>	<b>39</b>		

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**[www.monroeccc.edu](http://www.monroeccc.edu)**



Monroe County Community College Apprenticeship Curriculum

Company/Sponsor:

Apprentice Name:

Type of Apprenticeship/Trade: Machinist/Machine Repair

Course	Contact Hours for RTI	Credit Hours	Semester	Grade
MATH 119 Tech Math I	30	2		
MATH 124 Tech Math II	60	4		
ELEC 125 Fundamentals of Electricity	60	3		
MECH 102 Manufacturing Processes	90	4		
MECH 103 Machining Basics & CNC	90	4		
MECH 104 CNC II	60	3		
MECH 105 CNC III	60	3		
MECH 111 Fluid Power/Hydraulics	60	3		
MECH 112 Pneumatics	60	3		
MECH 131 Intro Automated Manufacturing	60	3		
MECH 201 CAD/CAM Milling I	60	3		
MECH 221 CAD/CAM Lathe	60	3		
WELD 100 Intro to Welding	90	4		
<b>Total Related Technical Instruction (RTI)</b>	<b>840</b>	<b>42</b>		

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Monroe County Community College Apprenticeship Curriculum

Company/Sponsor:

Apprentice Name:

Type of Apprenticeship/Trade: Mechanic

Course	Contact Hours for RTI	Credit Hours	Semester	Grade
MATH 119 Tech Math I	30	2		
MATH 124 Tech Math II	60	4		
ELEC 125 Fundamentals of Electricity	60	3		
ELEC 129 AC/DC Motors	90	4		
ELEC 141 Industrial Automation Processing Controls	60	3		
ELEC 130 Intro to PLC's	60	3		
ELEC 211 Medium Voltage Power Distribution Systems	60	3		
MECH 103 Machining Basics & CNC	90	4		
MECH 111 Intro to Fluid Power	60	3		
MECH 112 Pneumatics	60	3		
MECH 116 Industrial Plumbing & Pipefitting	60	3		
MECH 117 Basic Air Conditioning & Refrigeration	60	3		
QSTC 120 Intro to Quality Systems	60	3		
<b>Total Related Technical Instruction (RTI)</b>	<b>810</b>	<b>41</b>		

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MONROE COUNTY COMMUNITY COLLEGE  
APPRENTICESHIP RTI CURRICULUM

Program: Plumbing/Pipefitting

Sponsor:

Apprentice Name & Student ID#:

Course	Contact Hours	Credit Hours	Semester	Grade
Math 119 Tech Math I	30	2		
Math 124 Tech Math II	60	4		
MDTC 160 Mechanical Drafting & CAD	90	4		
CONM 105 Mechanical Building Systems & Equipment	90	4		
MATL 101 Industrial Materials	60	3		
MECH 111 Fluid Power	60	3		
MECH 112 Pneumatics	60	3		
MECH 116 Industrial Plumbing and Pipefitting	60	3		
PHY 101 Technical Physics	75	4		
WELD 100 Introduction to Welding Processes	90	4		
<b>TOTAL HOURS</b>	<b>675</b>	<b>34</b>		

8/31/2021 (KH)



# MONROE COUNTY COMMUNITY COLLEGE

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Monroe County Community College Apprenticeship Curriculum

Company/Sponsor:

Apprentice Name:

Apprenticeship Program: Tool and Die Maker

Course	Contact Hrs.	Credit Hours	Semester	Grade
Math 119 Tech Math I	30	2		
Math 124 Tech Math II	60	4		
MDTC 109 Mechanical Blueprint Reading	30	2		
MDTC-160 Mechanical Drafting and CAD I	90	4		
MDTC 226 Geometric Dimension & Tolerance	45	3		
MDTC 228 Intro to SolidWorks - CWSA	45	3		
MATL 101 Industrial Materials	60	3		
MECH 102 Manufacturing Processes	90	4		
MECH 103 Machining Basics and CNC	90	4		
MECH 104 CNC II	60	3		
MECH 201 CAD/CAM I	60	3		
Weld 100 Introduction to Welding Processes	90	4		
<b>TOTAL</b>	<b>750</b>	<b>39</b>		



Monroe County Community College Apprenticeship Curriculum

Company:

Apprentice Name:

Apprenticeship Program: Welding

Course	Contact Hours	Credit Hours	Semester	Grade
Math 119 Tech Math I	30	2		
WELD 100 Intro to Welding Processes	90	4		
WELD 102 Advanced SMAW	120	6		
WELD 103 Weldment Evaluation & Testing	60	3		
WELD 105 Welding Metallurgy	60	3		
WELD 106 Pipe Welding	120	6		
WELD 109 Basic Welding FAB	90	4		
WELD 110 Welding Symbols	30	2		
WELD 114 GMAW & GTAW Applications	120	6		
<b>TOTAL HOURS</b>	<b>720</b>	<b>36</b>		