

Electrical

	<i>Basic Electricity Theory</i>	<i>Fundamentals of Electricity I</i>	<i>Fire Protection Systems</i>	<i>Introduction to Electrical Safety & Tools</i>	<i>Commercial/Industrial Blueprint Reading</i>	<i>National Electrical Code I</i>	<i>National Electrical II</i>	<i>Fundamentals of Electricity</i>	<i>Residential Wiring</i>	<i>Commercial Wiring</i>	<i>Motors & Transformers</i>	<i>Cooperative Education- Electrical & Power Transmission Install, General</i>
	ELPT 1311	ELPT 1319	OSHT 1321	ELPT 1321	CNBT 2310	ELPT 1325	ELPT 2325	ELPT 1320	ELPT 1329	ELPT 1345	ELPT 2305	ELPT XX80, XX81
Skills												
Basic Electrical Mathematics	X	X				X	X	X	X	X	X	
Safety & First Aid	X	X		X				X	X	X	X	
Care & Use of Hand Tools				X								
Care & Use of Power-Operated Tools				X								
Blueprint Reading & Electrical Symbols					X				X	X		
National Electrical Code Requirements	X	X	X	X		X	X		X	X	X	
Electrical Fundamentals & Basic Theory	X	X						X	X	X	X	
Principles of Alternating Current Circuits								X			X	
Principles & Circuitry of Direct Current	X	X									X	
Portable Electric Measuring Devices	X	X		X				X	X	X	X	
Wiring Methods	X	X	X			X	X	X	X	X	X	
Low Voltage Circuits		X	X			X		X				
Appliances					X	X	X					
Interior Distribution					X	X			X	X		
Industrial & Commercial Calculations						X	X			X	X	
Motors & Generator							X	X			X	

Practical Circuit Sketching					X		X		X	X		
Transformers							X			X	X	
Illumination & Design					X	X	X		X	X		
Primary Distribution							X			X	X	
Fundamental of Electronics								X				
Medium Voltage Circuitry						X	X			X	X	

Troubleshooting Heat Pumps							X			X					
Troubleshooting Accessories							X								
Troubleshooting Electronic Controls							X								
Hydronic Heating & Cooling Systems			X		X	X	X			X					
Airside Systems					X	X	X			X					
Air Properties & Balancing				X					X	X					
Advanced Blueprint Reading									X						
Indoor Air Quality					X										
Water Treatment														X	
System Start-up & Shutdown				X											
Heating & Cooling System Design									X						
Commercial & Industrial Refrigeration												X	X		

MASONRY

	<i>Masonry I</i>	<i>Masonry II</i>	<i>Masonry III</i>	<i>Masonry IV</i>	<i>Masonry V</i>	<i>Masonry VI</i>
	MBST 1407	MBST 1409	MBST 2407	MBST 2409	MBST 2447	MBST 2449
Skills						
Use and maintain equipment and tools for the craft, including trowels, levers, rulers, jointers and brick saws	X	X	X	X	X	X
Use masonry terms	X	X	X	X	X	X
Practice math necessary for the craft, including whole numbers, fractions, addition and multiplication	X	X	X	X	X	X
Learn and practice safety guidelines	X	X	X	X	X	X
Practice necessary introductory skills such as spreading mortar, completing a full head joint, hanging a line and using a level	X	X				
Build and brick a clock wall using a level	X	X				
Calculate, mix and spread mortar	X	X				
Understand how modular increments are used to build a building			X	X		

Build a lead in, both block and brick			x	x		
Understand blueprints and building plans, especially structural and architectural plans used in the craft			x	x		
Estimate materials needed based on blueprints			x	x		
Work with speed lead/story pole			x	x		
Pratice different ways to lay bricks			x	x		
Learn different types of joints			x	x		
Lay out a wall					x	x
Build projects to demonstrate mastery of masonry guidelines					x	x
Learn specifics of blueprints including use of various detailed schedules					x	x
Pratice tuck point and brick repair					x	x
Build an arch					x	x
Understand construction of fireplaces and lintels/angle iron					x	x
Understand how state and federal guidelines affect the craft	x					
Learn different façade & finishes and used reinforced mortar		x		x		
Construct piers	x					

MILLWRIGHT

	<i>Millwright I</i>	<i>Millwright II</i>	<i>Millwright III</i>	<i>Millwright IV</i>	<i>Millwright V</i>	<i>Print Reading for Machining Trades</i>	<i>Fundamentals of Computer Numerical Controlled (CNC) Machine Controls</i>	<i>Millwright VI</i>	<i>Hydraulics & Pneumatics</i>	<i>Millwright VII</i>	<i>Millwright VIII</i>
	MCHN 1025, 1325, 1425	MCHN 1029, 1329, 1429	MCHN 2005, 2305, 2405	MCHN 2007, 2307, 2407	MCHN 2012, 2312, 2412	MCHN 1002, 1302	MCHN 2003, 2303, 2403	MCHN 2014, 2314	HYDR 1045, 1345, 1445	MCHN 2016, 2316	MCHN 2018, 2318
Skills											
Safety & Accident Prevention	X	X	X	X	X	X		X	X	X	X
Intro to Millwright	X	X									
Math for Trades	X	X	X	X	X	X		X	X	X	X
Blueprint & Layout		X	X	X	X	X			X	X	
Lubrication				X	X			X		X	X
Hydraulics & Pneumatics				X	X			X	X	X	X
Mechanical Drive				X	X			X	X	X	X
Conveyor			X	X	X	X			X		
Machine Align					X			X			
Pump Repair								X	X	X	X
Compressor Fan & Blower									X	X	
Turbine			X	X		X			X	X	X
Bearings					X			X	X	X	X
Welding			X	X		X					
Seals/Mechanical Seals								X	X	X	X
Gear Box								X	X	X	X
Rigging Signal					X	X			X		X
Aerial Lift	X	X	X	X	X			X	X	X	X
PITO	X	X	X	X	X			X	X	X	X
Advanced Optic Alignment				X	X	X		X		X	X

Types of Venting					X							X		X		
Indirect and Special Waste														X		
Sewage and Sump Pumps														X		
Intro to Water Pipe Sizing			X									X			X	
Backflow & Prevention								X								
Water Pressure Booster & Recirculation Systems					X										X	
Servicing Piping Systems, Fixtures & Appliances					X		X							X		X
Water Pump Theory and Service					X											
International Plumbing Code						X						X		X		
IPC	X	X				X				X	X	X		X	X	X
Client Customer Relations				X	X					X		X		X		
On-the-Job Learning			X	X	X	X	X	X	X	X	X	X	X	X	X	X
Care and Use of Tools, Equipment and Material for Plumbing and Heating			X	X			X	X	X		X			X	X	
Preparation of Tools, Equipment and Material for Plumbing and Heating			X	X			X	X			X	X	X			
Drainage Piping and Fittings			X	X	X	X				X	X	X		X		
Venting					X	X				X		X		X		
Single Fixture Installations, Setting Fixtures			X		X					X		X		X	X	X
Pipecutting, Reaming, Threading & Flanging			X				X	X	X	X		X		X	X	
Install & Maintain Steam and Hot Water Heating Systems														X		X
Hot and Cold Water Distribution Systems	X	X	X							X	X	X	X	X		X
High & Low Pressure Boilers			X				X	X						X	X	
Water Heater Installation												X		X		X
Water Pumps						X								X	X	
Code Review and Plumbing Math Review			X			X	X				X		X		X	
Sizing DWV and Storm Systems			X	X								X		X	X	
Locating Buried Sewer and Water Lines												X				
Water Supply Treatment														X		
Hot Tubs																X
Corrosive-Resistant Waste Piping															X	
Plumbing for Mobile Home Parks												X				X

