

Pipefitter Apprentice - Suggested Courses

Companies use TPC's Training Needs Analysis to implement highly successful technical skills training for apprenticeship programs. These programs are tailored precisely to the needs of their plants/facilities and maintenance workforce. We've organized the results of these analyses into job/craft-specific apprenticeship curricula for a variety of maintenance positions. Each curriculum includes those TPC courses most frequently selected by organizations like yours to meet the performance goals for their maintenance apprentices.

The suggested curricula provide a proven starting point for planning your own apprenticeship programs. TPC can help fine-tune your program for your unique workforce requirements using our copyrighted Training Needs Analysis process—it's simple, accurate, and only takes a few hours.



Pipefitter Apprentice Curriculum

The suggested curriculum for Pipefitter Apprentices includes 31 technical skills courses. Each course contains 5-12 detailed, topic-specific lessons for a total of 250 lessons in this curriculum. The subject matter ranges from fundamental knowledge required by an entry-level apprentice to advanced competencies for your senior apprentices.

Fundamentals

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|------------------------------------|------------------------------------|
| 101 - Reading Blueprints | 106 - Nonmetals in the Plant |
| 102 - Reading Schematics & Symbols | 107 - Hand Tools |
| 103 - Mathematics in the Plant | 108 - Portable Power Tools |
| 104 - Making Measurements | 109.1 - Industrial Safety & Health |
| 105 - Metals in the Plant | 110 - Troubleshooting Skills |

Industrial Hazard Control

- 151 - OSHA Hazard Communication Standard

Mechanical Systems

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|------------------------|---------------------------------|
| 301 - Basic Mechanics | 308 - Hydraulic Troubleshooting |
| 305 - Pumps | 309 - Basic Pneumatics |
| 306 - Piping Systems | 310 - Pneumatic Troubleshooting |
| 307 - Basic Hydraulics | |

Mechanical Maintenance Applications

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|---------------------------------------|--|
| 344 - Pump Installation & Maintenance | 346 - Tubing & Hose System Maintenance |
| 345 - Maintenance Pipefitting | 347 - Valve Maintenance/Piping System Protection |

Welding

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|-------------------------------------|------------------------------|
| 416 - Blueprint Reading for Welders | 418 - Oxyfuel Operations |
| 417 - Welding Principles | 419 - Arc Welding Operations |

Rigging & Equipment Installation

318 - Industrial Rigging

Energy Conservation

376 - Energy Conservation Basics

378 - Heating/Cooling Systems Efficiency

Machine Shop Practices

315 - Machine Shop Practice

328 - Multiple-Machine Procedures

Additional Suggested TPC Apprentice Curricula

Electrical/Instrumentation Systems
 Electrical Systems
 Facility/Building Maintenance
 HVAC
 Instrumentation/Control Systems
 Lubricator/Oiler

Machinist/Tool & Die Maker
 Mechanical Systems
 Millwright
 Multi-Craft Maintenance
 Refrigeration/Utilities
 Welder