



PenEdu Learning & Consulting, LLC

"Where questions become knowledge"

Member - *Energy Learning Network* a Consortium of Energy Industry Learning Professionals

Pipeline Operations & Maintenance

Online courses in this Curriculum Block focus on operational topics for Pipelines that transport Natural Gas. These type pipelines are typically called "Gas Transmission Pipelines." Highly skilled technicians are required to test, maintain, and repair natural gas pipeline and related equipment. Our focus in this curriculum is on Operations equipment testing, calibration, and Personnel Safety.

Course Curriculum



Certificate of Completion in Pipeline Operations & Maintenance

Certificate of Energy Industry Technical Skills - eLearning

Introduction:

Participants who complete the curriculum outlined below will earn a **Certificate of Completion *in Pipeline Operations & Maintenance***.

Participants that complete one or more of the Certificate of Completion programs often focus their work careers in an Energy Industry organization, performing functions in departments such as:

- Human Resources
- Natural Gas Measurement
- Liquefied Natural Gas (LNG) Operations
- Pipeline Corrosion
- Pipeline Repair and Maintenance
- Instrumentation & Electronics (I&E)
- System (Gas) Control
- Compression & Pump Stations
- Above Ground Tank Storage of Hydrocarbons
- Underground Gas Storage
- Gas Plant Operations
- Safety & Environmental
- Marketing
- Accounting & Finance
- Projects Managers
- Engineering & Technical Staff
- Clerical support
- Operations

Certificate in Pipeline Operations and Maintenance

Pipeline Operations & Maintenance eLearning		
Topic	PenEdu Course	Hours
Core Curriculum		
Administration	1010 Abnormal Operating Conditions	60 minutes
Excavation	0981 Backfilling	20 minutes
Maintenance	105 CGI & Flame Ionization Units	60 minutes
Excavation	106 OSHA/DOT Excavation Safety	60 minutes
Maintenance	107 Pipeline Pigging	90 minutes
Maintenance	201 Population Density change & Pipeline Patrol	75 minutes
Maintenance	205 Pipeline Crossings	65 minutes
Maintenance	207 Investigating Pipeline Failures	15 minutes
Maintenance	3000 Damage Prevention	35 minutes
Maintenance	3001 Locating & Marking Buried Pipelines	30 minutes
Maintenance	305 Dehydration of Natural Gas	40 minutes
Maintenance	306 Dehydration with Triethylene Glycol	75 minutes
Maintenance	4010 General Valve Maintenance	25 minutes
Maintenance	4011 Plug Valve Maintenance	20 minutes
Maintenance	4012 Ball Valve Maintenance	25 minutes
Maintenance	4013 Gate Valve Maintenance	25 minutes

Pipeline Operations & Maintenance eLearning		
	PenEdu Course	
Core Curriculum		
Maintenance	ER1305 Pipeline Security Planning	35 minutes
Maintenance	4030 Pressure Testing Steel Pipelines	40 minutes
Maintenance	407 Joining Steel Pipe Other than by Welding	35 minutes
Maintenance	4090 Pipeline Repair: Grinding, Welding, & Sleeving	35 minutes
Maintenance	4091 Pipeline Repair: Composite Repairs	25 minutes
Maintenance	4095 Pipeline Repair: Sleeving Including Helical Pipe	40 minutes
Maintenance	Pipeline Purging with Air and Gas	40 minutes
Maintenance	414 Abandonment of Facilities	45 minutes
Maintenance	416 Pipeline Shutdown & Start-up Planning	45 minutes
Maintenance	5110 Rigging: Planning & Inspection	55 minutes
Maintenance	608 Pipeline Integrity: High Consequence Areas Field Surveys	30 minutes
Maintenance	609 Dresser Coupled Pipelines	25 minutes
Maintenance	1312 Aerial Patrol	30 minutes
Inspection	ER1308 SPCC Plans for Non-Production/Bulk Storage Facilities	35 minutes
Inspection	ER1309 SPCC Plans for Onshore Production Storage Facilities	35 minutes
Total		19.3 hours