



Pipeline Knowledge & Development,
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Oil and Gas Pipeline Construction		
Energy Introduction to Midstream	90 slides	90 minutes
An overview of gas and oil gathering, transmission and distribution pipelines, as well as storage. This module contains many pictures and examples. Also discussed are industry dimensions, and an introduction to customers, regulations and standards is included. Those new to the industry will find the module a valuable introduction.		
Equipment and Components	140	120 minutes
Pipe, coating, meters, valves, pumps, compressors, motors, engines, and a myriad of other pieces of equipment comprise pipeline systems. Photographs and drawings allow students to see what components actually look like. Compressor and pump characteristics and how those characteristics impact pressure and rate management are explained with the help of charts and graphs.		
U. S. Pipeline Regulations	80 slides	75 minutes
An introductory guide to safety, environmental, economic, and land use legislation and regulations, this module provides a valuable background to the rules and standards affecting this highly regulated industry.		
Introduction to Hydraulics	87 slides	90 minutes
Concepts, not equations are the focus of this module. It covers fluid properties and behavior, demonstrating the practical aspects of pipeline flow. Intended for those without a technical background, even veteran engineers comment they gain a fuller understanding of why pipelines behave the way they do. Students find the water hose, air compressor, and beer bottle examples bring home their understanding.		
Pipeline and Facility Engineering and Design	98 slides	90 minutes
Beginning with conceptual design and moving through front end engineering into detailed design and preparation of specifications, this module provides an overview of the engineering and design process. It is a valuable introduction for those working with engineers helping them understand more of the regulations, standards, and constraints.		
Line and Station Construction	90 slides	90 minutes
Pictures taken at actual construction sites by field engineers form the basis for this class. From staking and clearing the right-of-way, through ditching, welding, testing, lowering, backfilling, final clean up and restoration, this module takes the student through pipeline construction from start to finish.		