## **PTRT - PETROLEUM TECH**

PTRT 1001 Introduction to Petroleum Industry 4.8-12.8 Credit Hours (48 to 128 Lec)

PTRT 1013 Industrial Safety 4.8-12.8 Credit Hours (48 to 128 Lec)

PTRT 1307 Recovery Methods and Production 3 Credit Hours (2 Lec, 2 Lab)

Petroleum recovery and production methods.

Course Type: Technical/Vocational Course

### PTRT 1313 Industrial Safety 3 Credit Hours (3 Lec)

An overview for petroleum and manufacturing workers of state/federal regulations and guidelines which require industrial safety training. Topics include the 29 C.F.R. 1910, 1926 standards such as confined space entry, emergency action, lock out/tag, and other work relates subjects. Course Type: Technical/Vocational Course

### PTRT 1324 Petroleum Instrumentation 3 Credit Hours (2 Lec, 2 Lab)

Study of instruments, instrument systems, terminology, process variables, and control coops as used in a petroleum environment. Course Type: Technical/Vocational Course

## PTRT 1391 Special Topics in Petroleum Technology Technician 3 Credit Hours (2 Lec, 2 Lab)

Topics address recently identified current events, skills, knowledge, and/ or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Course Type: Technical/Vocational Course

### PTRT 1401 Introduction to Petroleum Industry 4 Credit Hours (4 Lec)

An introduction to the various aspects of petroleum industry including equipment, systems, instrumentation, operations, and the various scientific principles. Addresses a variety of petroleum technologies: exploration, drilling, production, transportation, marketing, and chemical processing industries.

Course Type: Technical/Vocational Course

### PTRT 1409 Corrosion Basic 4 Credit Hours (2 Lec, 2 Lab)

Principles of corrosion as it applies to oil and gas industries. Addresses the deterioration of materials, devices, and pieces of oil field (or other) machinery/equipment. Emphasis on terminology associated with metallic and nonmetallic corrosion.

Course Type: Technical/Vocational Course

### PTRT 1413 Industrial Safety 4 Credit Hours (4 Lec)

An overview for petroleum and manufacturing workers of state/federal regulations and guidelines which require industrial safety training. Topics include the 29 C.F.R. 1910, 1926 standards.

Course Type: Technical/Vocational Course

### PTRT 1417 Natural Gas Processing I 4 Credit Hours (5 Lec)

An overview of natural gas processing operations. Fundamentals of gas processing, the scientific principles and how they apply to the process, processing equipment, and procedures from raw material to the refined product.

Course Type: Technical/Vocational Course

### PTRT 1421 Oil Field Hydraulics 4 Credit Hours (2 Lec, 2 Lab)

Presents hydraulics applicable to drilling, completion, and production. Includes calculating and evaluating the characteristics of the flowing and static fluids in various tubular and annular systems.

Course Type: Technical/Vocational Course

#### PTRT 1424 Petroleum Instrumentation 4 Credit Hours (4 Lec, 1 Lab)

Study of instruments, instrument systems, terminology, process variables, and control coops as used in a petroleum environment.

Course Type: Technical/Vocational Course

## PTRT 2025 Petroleum Safety and Environmental Hazards 0.7-4 Credit Hours (7 to 40 Lec)

# PTRT 2280 Cooperative Education Petroleum Technology/Technician 2 Credit Hours (1 Lec, 9 Lab)

This cooperative education course is a learning experience of the courses in the program in consolidation of a student's educational experience. Course Type: Cooperative Course, Technical/Vocational Course

# PTRT 2281 Cooperative Education Petroleum Technology/Technician 2 Credit Hours (1 Lec, 9 Lab)

This cooperative education course is a learning experience of the courses in the program in consolidation of a student's educational experience.

Course Type: Cooperative Course, Technical/Vocational Course

### PTRT 2323 Natural Gas Production 3 Credit Hours (2 Lec, 1 Lab)

An overview of the aspects of natural gas and oil production including various aspects of hydrocarbon production equipment, and gas compression/transportation.

Course Type: Technical/Vocational Course

### PTRT 2332 Artificial Lift 3 Credit Hours (2 Lec, 2 Lab)

Practical aspects of artificial lift in production systems.

Course Type: Technical/Vocational Course

#### PTRT 2335 Basic Pipeline Operations 3 Credit Hours (3 Lec)

An overview of pipeline design, maintenance, and operations, including safety and regulatory compliance.

Course Type: Technical/Vocational Course

# PTRT 2359 Petroleum Computer Applications 3 Credit Hours (2 Lec, 1 Lab)

Computer applications used in the petroleum industry. Includes the automation of open and closed loop systems.

Course Type: Technical/Vocational Course

## PTRT 2423 Natural Gas Production 4 Credit Hours (2 Lec, 2 Lab)

An overview of the aspects of natural gas and oil production including various aspects of hydrocarbon production equipment and gas compression/transportation.

Course Type: Technical/Vocational Course

### PTRT 2431 Well Completions 4 Credit Hours (3 Lec, 2 Lab)

Drilling and wellbore analysis data to develop a well completion plan. Course Type: Technical/Vocational Course

## PTRT 2435 Basic Pipeline Operations 4 Credit Hours (3 Lec, 2 Lab)

An overview of pipeline design, maintenance, and operations, including safety and regulatory compliance.

Course Type: Technical/Vocational Course

### PTRT 2443 Refining Methods 4 Credit Hours (3 Lec, 2 Lab)

An Analysis of petroleum refining technologies from well head to gasoline pump.

Course Type: Technical/Vocational Course