

# PETROLEUM TECHNOLOGY

## PETROLEUM TECHNOLOGY – AAS DEGREE PLAN

**PROGRAM INFORMATION:** The Petroleum Technology Degree will help prepare students for careers in the oil and gas industry where they will perform the duties of lease operators and function as a member of oil and/or gas production team. Graduates from the program will be responsible for ensuring that oil and natural gas well-flow rate and product quality is maintained at optimal levels. They will be required to perform basic maintenance and equipment repair. Through leading by example, employees are expected to lead, guide and train other lease operators. They must ensure that all regulatory and environmental standards are strictly adhered to and appropriate records are maintained.

**Program Demand and Occupational Need:** Employers in the oil and gas industry report considerable difficulty recruiting qualified individuals to fill open positions. This is partly attributable to characteristics of the industry. The oil and gas boom has resulted in increased demand for workers in this and related positions. According to employers, this trend is expected to continue. Competition for qualified workers continues to increase, especially in the rural counties of Limestone, Freestone, and Leon, where natural gas production is booming. EnCana Oil and XTO Energy have asked Navarro College to implement an oil and gas production training program to train workers for employment in these counties. Other companies including Marathon are also interested in employing graduates from the program.

Industry partners, oil and gas companies, indicate that starting salaries range from upper \$40,000 to \$60,000 annually.

**Curriculum:** The certificate program requires students complete 40 semester hours that includes technical courses from the Workforce Education Course Manual.

A cooperative education class is used to verify workplace competencies. Students successfully completing the program will be awarded an oil and gas production technology certificate.

## FRESHMAN YEAR - FALL

INTC 1305: Required for Automation Certificate

COURSE SECTION	COURSE TITLE	CREDIT HOURS
PTRT 1301	Overview of Petroleum Industry	3
PTRT 1313	Industrial Safety	3
PHYS 1415 OR XXXX	Physical Science I OR Approved Science	4
MATH 1314 OR MATH 1332	College Algebra OR Contemporary Mathematics (Quantitative Reasoning)	3
INMT 2345 OR RBTC 1309 OR INTC 1305	Industrial Troubleshooting OR Pneumatics OR Intro to Instrumentation	3
Fall Total Credit Hours		16

## FRESHMAN YEAR - SPRING

COURSE SECTION	COURSE TITLE	CREDIT HOURS
PTRT 1317	Natural Gas Processing	3
PTRT 1307	Recovery and Production Methods	3
PTRT 2323	Natural Gas Production	3
ARTS 1301 OR MUSI 1306 OR DRAM 1310	Art Appreciation OR Music Appreciation OR Theatre Appreciation	3
ENGL 1301	Composition I	3
Spring Total Credit Hours		15

### SOPHOMORE YEAR - FALL

COURSE SECTION	COURSE TITLE	CREDIT HOURS
PTRT 2280	Cooperative Education	2
PTRT 1309 OR PTRT 1312	Corrosion Basics OR Petroleum Regulations	3
PTRT 1321	Oil Field Hydraulics	3
SPCH 1321 OR SPCH 1315	Business & Professional Communication OR Public Speaking	3
PTRT 1324	Petroleum Instrumentation	3
Fall Total Credit Hours		14

### SOPHOMORE YEAR - SPRING

COURSE SECTION	COURSE TITLE	CREDIT HOURS
BMGT 2309	Leadership	3
PTRT 2359	Petroleum Computer Applications	3
PTRT 2332	Artificial Lift	3
PTRT 1391	Natural Gas Processing II	3
ECON 2302 OR GOVT 2305 OR HIST 1301	Principles Economics Micro OR Federal Government OR United States History I	3
Spring Total Credit Hours		15
Program Total Credit Hours		60