Agriculture and Environmental Systems Pathway Model

Certificate, Pipeline Technician

Associate Degree, Pipeline Technician

Bachelor's Degree, Petroleum Engineering

Start Pre-Agriculture
As early as grade 7
(based on readiness)

Pipeline Technician
Salary: $35,940
Job Growth (10 yr): 5.1%
Annual Openings: 425
Average Tuition: $0 - 4,000

Petroleum Technician
Salary: $51,520
Job Growth (10 yr): 14.8%
Annual Openings: 13
Average Tuition (2 yr): $7,600

Petroleum Engineer
Salary: $109,130
Job Growth (10 yr): 42.6%
Annual Openings: 39
Average Tuition (4 yr): $39,700

Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Agriculture and Environmental Systems Pathway Model

Secondary Pathway: **Natural Resource Management** Postsecondary Program: **Petroleum Technology**

Courses with Secondary and Post-Secondary Credits

Secondary	**7 8**	English	Algebra I	Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources		
	9 10	English	Geometry	Biology	US History	Health (.5) PE (.5)	Environmental Science	Natural Resources	
	11	English	Algebra II	Chemistry	US Government & Economics	Foreign Language	Oil & Gas Operations		
	12	English	Trigonometry	Physics	Psychology	Foreign Language	Hydraulics & Pneumatics	Electronic & Electrical Systems	
Post-Secondary	**Year 1 1st Semester**	Interpersonal Communication	Regulations & Compliance	Introduction to Petroleum Industry	Electrical Circuits & Devices	Mechanical Drive Components	Supervisory Control & Data Acquisition		
	Year 1 2nd Semester	Corrosion Basics	Petroleum Instrumentation	Gas Compression & Flow Dynamics	Pipeline Operations	Basic Pumps	Engineering Co-Op		
	Year 2 1st Semester	Physical Geology	College Algebra	College Composition	Chemistry				
	Year 2 2nd Semester	Computer Applications	Physics	Arts & Humanities Elective					

High School CTE Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommend Electives

Visit education.ohio.gov/CareerConnections for reference information

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