## **PIPELINE INTEGRITY TECHNOLOGY**

## **ASSOCIATE IN APPLIED SCIENCE (72 CREDIT HOURS)**

The world is dependent on oil and gas for a majority of its energy source. The movement of these products safely and efficiently is critical to the global economy. Using over two million miles of pipeline and associated equipment to transport hydrocarbon products, the pipeline industry is a large sector of the energy business.

The large majority of the world's pipeline infrastructure is approaching 50 years of age. These pipelines will be called upon to continue to operate for many more decades as demand increases and new sources of products are discovered. The integrity and security of these structures must be well maintained and managed.

The need for skilled technicians to operate, maintain, repair, and manage the integrity and security of pipelines is increasing as federal, state, and local regulations impact the daily operation of pipelines. This program prepares students to be contributing members of the energy industry as Pipeline Integrity technicians, with a primary focus on the safety of the pipeline assets, environment, and general public.

Students will develop the skills and knowledge required to be successful in the pipeline integrity industry by completing this five-semester program. Key topics include assessing pipeline damage and risk, corrosion control, regulations, safety, non-destructive testing, design, and integrity management.

Faculty use a variety of learning approaches, including lecture and lab experiences. Students work individually and in teams using realistic laboratory environments and current technology to solve challenging "real world" problems. This multi-disciplinary program produces graduates who become highly productive team members in their industry, often bridging the gap between engineers and the laypeople who implement their designs.

This program of study requires special program fees beyond OSUIT's current tuition and mandatory fees.

For current program information – including required industry PPE – please contact a Pipeline Integrity Technology program advisor at 918-293-4742 or visit <u>osuit.edu/pipeline</u>.

PROGRAM REQUIREMENTS: 50 CREDIT HOURS	GENERAL EDUCATION REQUIREMENTS: 21 CREDIT HOURS
PIPELINE INTEGRITY TECHNOLOGY (44 CREDIT HOURS)   SEPL 1113 Introduction to Pipelines & Facilities   SEPL 1113 Processing & Product Handling   SEPL 2112 Pipeline Integrity Internship <sup>[P]</sup> (12 credit hours)   SEPL 2313 Introduction to PLCs or   ETDE 2113 Introduction to PLCs or   ETDE 2113 Introduction to PLCs or   ETDE 2113 Introduction to PLCs or   SEPL 243   Regulations & Compliance   SEPL 2423 Integrity Management Concepts I   SEPL 2523 Pipeline Maintenance & Repair   SEPL 2553 Pipeline Integrity Capstone   SEPL 2553 Pipeline Integrity Capstone   SEPL 2553 Pipeline Integrity Capstone   SEPL 2563 Project Management <b>TECHNICAL SUPPORT COURSES (6 CREDIT HOURS)</b> EHST 1113 General Industry Regulations & Standards   SEIM 1123 AC/DC Circuit Analysis or   SEPP 1113 Introduction to Electrical/Electronics	AMERICAN HISTORY & GOVERNMENT (6 CREDIT HOURS) HIST 1483 US History to 1865 or HIST 1493 US History since 1865 POLS 1113 US Government COMMUNICATIONS (6 CREDIT HOURS) Select from courses listed below or others as approved by program advisor. ENGL 1113 Freshman Composition I or ENGL 1033 Technical Writing I SPCH 1113 Introduction to Speech Communications or SPCH 2313 Small Group Communications COMPUTER LITERACY (3 CREDIT HOURS) CS 1013 Computer Literacy & Applications HUMANITIES (3 CREDIT HOURS) Select from courses designated with an "H" as approved by program advisor, including, but not limited to, course(s) listed below. PHIL 1213 Ethics (H, S) MATHEMATICS (3 CREDIT HOURS) Select from courses designated with an "A" as approved by program advisor, including, but not limited to, courses listed below. MATH 1493 Math for Critical Thinking (A) MATH 1513 Pre-Calculus (A) INTERDEPARTMENTAL REQUIREMENTS: 1 CREDIT HOURS ORIENTATION (1 CREDIT HOUR)

ORIE 1011 College Strategies