

ENERGY**ENER-110 Oil & Gas Employee Immersion 4 cr.**

Classroom and hands-on learning experience designed for newly-hired technicians, and specialized technicians moving to multi-skilled positions. Covers an introduction to the industry, the basics of oil and gas production operations from the reservoir to the sales point, and common terminology for equipment, maintenance, and troubleshooting. Promotes an understanding of roles, accountabilities, and expectations; enhances employees' ability to work safely and effectively. Offered: On Demand.

ENER-111 Introduction to Oil and Gas 1 cr.

This course introduces students who have little or no knowledge of oil and gas industry to the basics of oil and gas discovery and production. Including locating and extracting the oil and gas; basic oil and gas field concepts; terminology of the oil and gas industries; the transmission of, and processing of oil and gas into consumable products. Offered: All.

ENER-112 Introduction to the Wellhead .5 cr.

Course presents basic principles of wellbore, wellhead, and Christmas tree design and operation for lease operators, field technicians, and pumps. Instruction provides students with standard terminology to promote effective communication regarding maintenance issues and potential malfunctions. By understanding and correctly identifying these designs and functions, students will be able to perform basic troubleshooting. Offered: On Demand.

ENER-113 Introduction to Separators & Tanks .5 cr.

Course presents basic principles of separator and tank design for production operations. Students will learn standard terminology for effective communication regarding: principles of separation, separator components, preventive maintenance, and operational efficiencies. Offered: On Demand.

ENER-116 Introduction to Plunger Lift Systems .5 cr.

Basic principles of the design and operation of the plunger lift system and its relationship to the wellhead separator. Instruction provides students with standard terminology to promote effective communication regarding incremental deliquification for maximum uplift, maintenance issues, and potential malfunctions. By understanding and correctly identifying plunger lift system design and function, students will be able to perform basic operations and troubleshooting tasks. Offered: On Demand.

ENER-117 Introduction to Pumping Unit .5 cr.

Basic principles of the design and operation of a pumping unit, aka beam lift, and its relationship to the wellhead separator. Instruction provides students with standard terminology to promote effective communication regarding maintenance issues and potential malfunctions. By understanding and correctly identifying pumping unit (surface equipment and downhole insert pump) design and function, students will be able to perform basic operations and troubleshooting tasks. Offered: On Demand.

ENER-118 Introduction to Gas Lift .5 cr.

Course presents basic principles of the design and operation of

gas lift. Instruction provides students with standard terminology to promote effective communication regarding maintenance issues and potential malfunctions. By correctly identifying gas lift design and function, students will be able to understand how to operate and perform basic troubleshooting for gas lift wells. Offered: On Demand.

ENER-119 Intro to Gas Measurement .5 cr.

Basic principles of gas measurement design and operation, particularly the orifice meter. Students will learn standard terminology for effective communication regarding maintenance and potential malfunctions. By understanding and gas measurement equipment and techniques, students will be able to perform basic troubleshooting. Course will include natural gas composition; types of meters; auxiliary equipment; sampling; inspection of measurement equipment; and gas sales contracts. Offered: On Demand.

ENER-120 Introduction to Dehydration .5 cr.

Basic principles of dehydration, including standard terminology to promote effective communication regarding equipment maintenance and potential malfunctions. Offers an overview of generic automation components including the solar panel, RTU, host, end devices, etc. and includes rationale for and economic value of automation. Introduces digital multimeter. Offered: On Demand.

ENER-121 Introduction to Automation .5 cr.

This course presents basic principles of the design and operation of automation. Students will learn to identify automation equipment and its location on the well site. Provides students with terminology to promote effective communication regarding troubleshooting and potential malfunctions. Offers an overview of generic automation components. Offered: On Demand.

ENER-122 Introduction to Compression .5 cr.

Course presents basic principles of the natural gas compression process and compressor skid design for production operations. Covers standard terminology of skid components to promote effective communication for identifying maintenance issues and potential malfunctions. By understanding and correctly identifying compressor skid components, design, and function, students will be able to perform basic troubleshooting. Offered: On Demand.

ENGLISH**ENGL-050 English Skills 3 cr.**

Helps students build competence in sentence mechanics, grammar, and usage through active learning. May be taken either with a companion English course or on its own. Offered: Fall & Spring.

ENGL-095 Basic Writing Workshop 6 cr.

Helps students improve writing and reading skills. Introduces students to college culture, including academic literacy, campus resources, computer skills, and college success strategies. Prerequisites: ENGL-050 and RDNG-050 or appropriate English and Reading Accuplacer scores. Corequisites: RDNG-095. Offered: All.