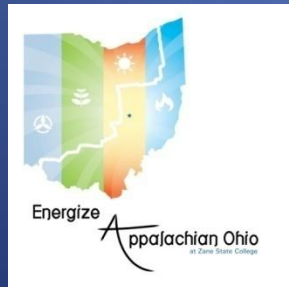


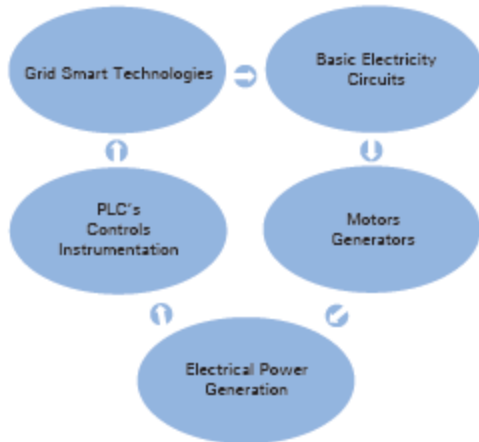
Overview of Natural Gas Engineering Technology Associate's Degree and Related Training

CTE Educators
December 5, 2011

Daniel Durfee
Professor - Energy and Engineering
Program Manager - Energize Appalachian Ohio Project



Electrical/Electronics Engineering Technology Programs



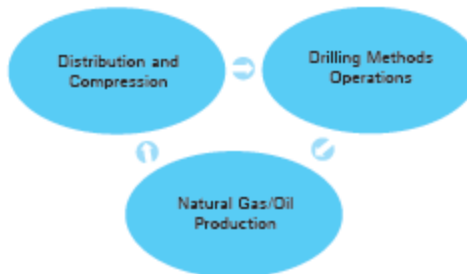
Basic Engineering Programs Mechanical/Civil/Construction



Zane State College has offered green/energy-related programs since the College was chartered in 1969 and is recognized as a critical resource for training workers in a variety of energy careers.

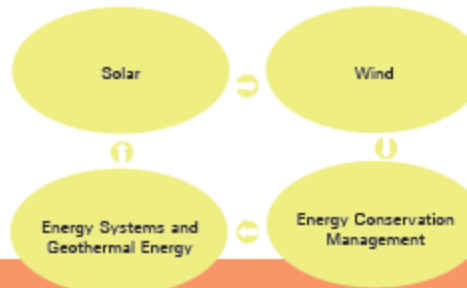
The College's energy programs form an "Energy Web," with a comprehensive curriculum that is interconnected. This interconnectivity provides more options for students as they explore career opportunities and enables the College to easily expand into new energy areas.

Natural Gas & Engineering Technology

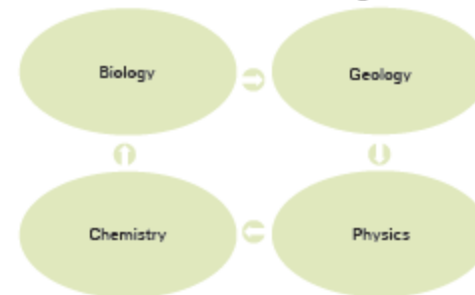


Zane State College's Energy-Related Programs and Job Training

Alternative Energy Technology



Natural Sciences Programs



Environmental Programs



Business/Paralegal Programs



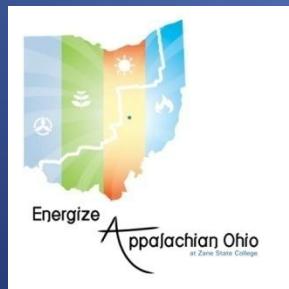
For more information, visit ZaneState.edu/energyprograms.pdf or contact Dan Durfee at (740) 588-1282.



Energize Appalachian Ohio

Grant Summary

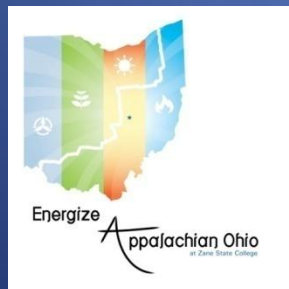
- **\$2.9 million U.S. Department of Labor Community-Based Job Training Grant**
- **Grant period runs from July 1, 2010 – June 30, 2013**
- **Targets unemployed, dislocated, and incumbent workers**



Natural Gas Engineering Technology

Why Now?

- Industry Request
- New Targets—Utica and Marcellus
- Applying New Technology to Existing Targets
- New Markets for Natural Gas



Natural Gas Training

➤ PEC Safeland

❖ Basic One Day Industry Recognized Safety Awareness Training

- ✓ API RP 75 & API RP T-1 requirements
- ✓ Hazardous communications
- ✓ Personal Protective Equipment
- ✓ Electrical Safety
- ✓ Hydrogen Sulfide (H_2S)



Natural Gas Training

➤ Retrain America

- ❖ 80 hours of Comprehensive Introduction to Fundamentals of the Drilling Process and Operations + 40 hours of Employability/Job Search
- ❖ Industry Certifications
 - ✓ IADC RIG PASS
 - ✓ IADC Introductory Level WellCAP



Natural Gas Engineering Technology

Certificate Programs

- **Natural Gas Engineering One Year General Certificate**
- **Lease Operator Certificate**
- **Natural Gas Compression/Distribution Certificate**



Natural Gas Engineering Technology

Program Approved By OBR May, 2011

Course Began September, 2011

Sample Courses

- Petroleum Geology
- Mineral Rights and Leases(including Ohio Oil and Gas Law)
- Drilling Methods and Operations
- Formation Evaluation
- Field Services
- Natural Gas and Oil Production
- Natural Gas Distribution/Compression
- Natural Gas/Oil Capstone Experience



Natural Gas/Oil Programming

Future Plans

- Develop articulation agreements with CTE system and BS level programs
- Develop energy related options in areas such as business, environmental, and related engineering programs
- Expand training, certificate, and AAS offerings in energy career areas as needed
 - ✓ Instrumentation, Measurement, and Controls
 - ✓ Advanced Natural Gas/Oil Production
 - ✓ Well Control

E²PIC

*Energy Exploration
Production and Innovation
Collaborative*

www.EpicOhio.org



Thank You

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