

EMPLOYMENT OPPORTUNITY: Part-time: Nuclear Engineering Technology Faculty

An HLC-AQIP accredited institution, Lakeland Community College is one of Ohio's premier two-year colleges, offering more than 150 degree and certificate programs to prepare students for a high-demand career or transfer to a four-year university. We are located within 25 miles of world-class activities in the Cleveland area. The college attracts over 13,000 credit students annually, yet we maintain an average student-to-faculty ratio of 17:1. Courses are offered at a variety of days and times as well as online. Lakeland opened the Holden University Center in fall, 2011. This state-of-the-art facility provides students with convenient access to complete a bachelor's or graduate degree from a variety of leading colleges and universities, all close to home. Read more at: http://www.lakelandcc.edu/web/about/lakeland.

SPRING SEMESTER – January 14 – May 13, 2017



COURSES AVAILABLE

NUET 1000 Nuclear Industry Fundamental Concepts - (3 Contact hours – 3 units of load)

This course introduces fundamental concepts used throughout the nuclear industry as an integral part of daily operations. Topics include Human Performance Enhancement (HPE) fundamentals, an introduction to the Systematic Approach to Training (SAT), conduct of On-The-Job training (OJT) and Task Performance Evaluation (TPE), Foreign Material Exclusion (FME), radiological concepts, including protective clothing dress-out, and an overview of the FirstEnergy Nuclear Operating Corporation (FENOC) safety manual. In addition, it includes OSHA compliance courses required by the Perry Plant and an overview of the regulatory and licensing aspects of a commercial nuclear power plant. The course also provides an introduction to nuclear power plant systems.

NUET 1100 Radiation Detection and Protection – (4 Contact hours: 2 lecture, 2 lab – 3.78 units of load) This course presents the theory, application detection and shielding of the various types of radiation. It also covers detection devices such as typical survey meters, core power detectors and personnel monitoring devices. The course will also discuss how exposure to radiation can be minimized and the biological impact of radiation.



NUET 1200 Plant Drawings - (4 contact hours: 2 lecture, 2 lab - 3.78 units of load)

This course covers the use of and relationship among typical drawings found at an industrial setting. Topics include using mechanical, electrical, and isometric drawings; the information contained in the lead sheet of a set of drawings; the use of notes and legends; standard symbology used in engineering drawings; and the use of various types of drawings together in order to perform work, locate components, or use for other typical applications.



NUET 1300 Power Plant Components - (3 contact hours - 3 units of load)

This course introduces students to fundamental components and pieces of equipment that are used throughout electrical power generating facilities such as pumps, valves, heat exchangers, motors, and generators. It also includes lubrication principles, fire barriers, hangers and snubbers, HVAC systems, and miscellaneous electrical equipment. In addition, the course covers the purpose, construction, theory of operation, and typical maintenance requirements of these devices.



NUET 2000 Reactor Plant Materials - (4 contact hours: 2 lecture, 2 lab – 3.78 units of load)

This course provides students with an understanding of the various materials used in the operation of a nuclear power plant. Topics include phase equilibrium of materials, mechanical properties and behavior of materials, environmental effects on materials, corrosion and impurities effect on reactor plant materials, and nuclear-specific topics such as fuel pellets, fuel rod cladding, control rods, radiation effects on materials, enrichment of radioactive isotopes, and fuel pellet fabrication.

NUET 2050 Nuclear Field Experience - (2 contact hours - 2 units of load)



This field experience is a planned paid work activity designed to expose the student to the various technical work areas within a nuclear power plant. The course provides the student with the opportunity to experience day-to-day operations and maintenance procedures associated with a nuclear power plant. It will also examine case studies of incidents from other industries. The course will discuss precursors to poor decision making and how the proper use of human performance enhancement (HPE) and event free tools can minimize the risks of accidents.

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Page 2 PART-TIME NUCLEAR ENGINEERING TECHNOLOGY FACULTY

QUALIFICATIONS: Required one of the following: Senior Reactor Operator (SRO), INPO certified instructor, an AS degree or higher in Engineering, Engineering Technology or closely related discipline. And three or more years of relevant engineering work experience in a nuclear power plant; ability to teach the courses listed. Preferred: teaching experience at the college level.



COMPENSATION: Part-time faculty earn \$769/unit of load.

<u>APPLICATION PROCESS</u>: Submit a completed college employment application* and part-time faculty addendum*, resume, and letter of introduction indicating your interest in the courses. Applications will be accepted until positions are filled. Send required materials via e-mail to <u>HRJobs@lakelandcc.edu</u> or via regular mail to: Human Resources Department, Lakeland Community College, 7700 Clocktower Dr., Kirtland, Ohio 44094.



*Both of these documents are available on our website at <u>http://www.lakelandcc.edu/positions</u>.

Lakeland Community College is an equal access and equal opportunity employer. We have a strong commitment to the principle of diversity and, in that spirit, seek a broad spectrum of candidates including women, minorities, people with disabilities and people over 40. Under-represented groups are encouraged to apply. If your disability requires special accommodations to participate in the application/interview process, contact the Human Resources Office at 440-525-7575.





