

Degree Programs

Nuclear Engineering Technology



The nuclear engineering technology program will prepare students for employment in selected areas within a nuclear power plant. The technical course curriculum is designed around direct specifications from the nuclear power industry. A summer paid field experience is provided in cooperation with the Perry Nuclear Power Plant. To be qualified for employment in the nuclear power industry, one must pass a background check and drug test. The testing and background check are coordinated through FirstEnergy Nuclear Operating Company (FENOC). Based on a student's grades, skills and attitude, employment opportunities may exist with FirstEnergy upon graduation. There are specific admission requirements for this program and interested students should contact the director of admissions or the Counseling Office.

Opportunity starts HERE

Associate of Technical Studies Degree Electrical Construction Technology

The electrical construction technology program is a five-year associate of technical studies degree program offered in collaboration with the International Brotherhood of Electrical Workers (IBEW Local #673). The program combines traditional coursework in communications, mathematics, physics, economics, and computers with technical courses and work experience. Graduates may work in resident, commercial and industrial construction as skilled wiremen and in all aspects of the electrical and teledata industry. Admission is by application, competitive testing, and interviews with IBEW Local #673.

Associate of Science Degree

The associate of science degree is normally pursued by students intending to transfer to a senior institution for the completion of a bachelor of science degree. Typical areas of study may include mathematics or engineering. Students who complete this degree will also satisfy all requirements for the State of Ohio Transfer Module.



Opportunity starts HERE

Quality Education

- Over 130 degree and certificate programs
- Small classes taught by dedicated faculty with real world experience
- 96% of graduates find employment or continue their education

Credits Transfer

- Credits transfer easily to four-year colleges and universities
- Complete a bachelor's degree from several four-year schools entirely online or on Lakeland's campus
- Earn a bachelor's degree in popular programs from Cleveland State University on Lakeland's campus

Affordable Tuition

- Save thousands on your college education
- Lakeland's tuition is about one-third the cost of most four-year schools
- Financial aid is available to those who qualify

Flexible Scheduling

- Convenient locations in Kirtland, Madison, Painesville, and Willowick
- Day, evening, weekend, online, and accelerated classes
- Weekend College - earn an associate's degree in two years by taking classes on Saturdays

Mathematics and Engineering Technologies Division

Room E-2022
Lakeland Community College
7700 Clocktower Drive
Kirtland, OH 44094
440.525.7095
lakelandcc.edu/academic/engineer



LAKELAND
COMMUNITY COLLEGE



Engineering Technologies



- Applied Electric Utility Technology
- Civil Engineering Technology
- Computer Integrated Manufacturing Technology
- Construction Management
- Electronic Engineering Technology
- Mechanical Engineering Technology
- Network Infrastructure Engineering Technology
- Nuclear Engineering Technology



LAKELAND
COMMUNITY COLLEGE

800.589.8520
www.lakelandcc.edu

Opportunity starts HERE



Engineering Technologies

The **Mathematics and Engineering Technologies Division** provides a learning-oriented environment that stresses individual attention and student-faculty interaction. Courses prepare students for immediate employability or transfer to a four-year college or university. Lakeland graduates are in demand by employers who recognize the relationship between an educated, highly trained work force and corporate productivity and profit.

Faculty members have years of experience working for local industries and many take an active role in assisting the placement of their students. Lakeland's engineering technology programs are reviewed annually by special advisory committees to ensure that programs are current and of the highest quality. As the needs of local industry change, new courses and equipment are added to technology programs.

Accreditation

The Higher Learning Commission of the North Central Association of Colleges and Schools

Degree & Certificate Programs

Associate of Applied Science Degree

- Applied Electric Utility Technology
- Civil Engineering Technology
- Computer Integrated Manufacturing Technology
 - Automation Concentration
 - General Manufacturing Major
- Construction Management
- Electronic Engineering Technology
 - Computer Concentration
- Mechanical Engineering Technology
 - Computer Assisted Product Design Concentration
 - Machine Design
- Network Infrastructure Engineering Technology
 - Cisco Network Infrastructure Concentration
 - Microsoft Network Infrastructure Concentration
 - Network Infrastructure Security Concentration
- Nuclear Engineering Technology

Certificates

- Civil Engineering
 - Architectural Technology
 - Construction Management
 - Facility Management
 - Surveying Technology
- Computer Integrated Manufacturing
 - Automation Technician Apprentice
 - CNC Operator Mini Certificate
 - CNC Set-Up and Programming Technology

- Computer Integrated Manufacturing Technology
- Industrial Computer Hardware Technician
- Production Shift Leader Manufacturing Management
- Tool and Die Technology
- Tool Room/Maintenance Machinist Apprentice
- Electronic Engineering Technology
 - A+ Computer Maintenance and Repair
 - Electrical Technology
 - Electronics Technology
 - Industrial Computers
 - Robots and Autonomous Machines
- Mechanical Engineering
 - AutoCAD Operator
 - CAD Design
- Network Infrastructure Engineering Technology
 - Microsoft Networking Certificate
 - Network Infrastructure Security Specialist

Associate of Technical Studies Degree

- Electrical Construction Technology
- Electrical Technology
- Tool and Die Technology

Certificates

- Electrical Construction
- Residential Wiring

Associate of Science Degree

- Mathematics

Degree Programs

Applied Electric Utility Technology



The applied electric utility technology program is designed for students who choose to specialize in the power and signal transmission industry. It is intended for those seeking employment in the electric utility, telephone, cable TV, and other data transmission companies. Through a partnership with Lakeland and FirstEnergy, students can achieve a two-year associate of applied science degree in electric utility technology. The program will prepare students for employment in a variety of electrical fields, with emphasis in the line worker/substation worker area. After two semesters, students are required to participate in a 10-week compensated and evaluated field experience with FirstEnergy. Admission is through FirstEnergy.

Civil Engineering Technology



The civil engineering technology program is designed to prepare students for immediate employment with architectural firms; engineering consulting firms; construction management firms; surveyors; contracting firms; residential builders; and with federal, state, county, and city governments. The diverse curriculum allows for students to gain specialized training for careers in architecture, construction, facility management, and surveying. Graduates may also transfer directly to a bachelor's degree program in civil engineering technology, construction technology, surveying, or architecture. The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Computer Integrated Manufacturing Technology



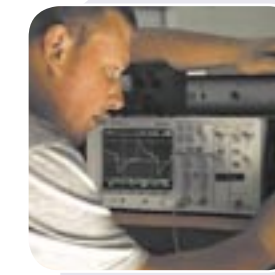
The computer integrated manufacturing technology degree program prepares students for employment in a variety of manufacturing industries. Manufacturing is the largest source of jobs for Lake County. The general manufacturing major prepares students for employment as engineering technicians at the operations level in manufacturing industries having a concentration in computer applications. Technicians assist in the design and implementation of manufacturing process systems that include numerical control equipment, computer aided part programming, computer aided manufacturing, factory automation, and flexible manufacturing cells and systems. The automation option prepares students for employment in manufacturing industries having a concentration in automated assembly. Students will study aspects of automated assembly and process control, including programmable controllers, computer assisted part programming, CAD/CAM systems, computerized instrumentation and robotics.

Construction Management



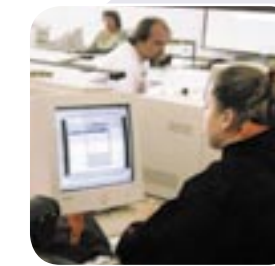
The construction management program prepares students for careers in the construction field with an emphasis on residential and light commercial building construction. The curriculum provides students with a thorough background in site development, building methods and materials, contract documents, plans and specifications, estimating, bidding, scheduling, building codes, legal principles, project administration, inspection, quality assurance, finances, sound business practices, and people skills. Graduates can enter the workforce in management positions with homebuilders, commercial builders, equipment installers, facility managers, general contractors, specialty contractors, building departments, and construction material manufacturers and retailers.

Electronic Engineering Technology



Lakeland's electronic engineering technology degree program prepares students for a wide range of engineering and engineering-related technician employment opportunities. These may include installation and maintenance of electronic equipment; programming and maintenance of computers and computer controlled equipment; assisting engineers in the design, development and testing of new electronic equipment; establishing and performing engineering evaluation tests; and writing reports relating to these activities. Currently, technicians in this field comprise about 43 percent of all engineering technician jobs nationwide. Lakeland's two-year program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Mechanical Engineering Technology



The mechanical engineering technology program is designed to prepare students for immediate employment as a technician or for transfer to a bachelor's degree program in mechanical engineering technology. The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET). The curriculum includes a strong emphasis on the generation of production level computer based documentation; analysis for form, fit and function; and design verification through vigorous testing. Employment in this field is expected to increase as the demand for improved machinery and tools grows. Graduates will be able to apply their skills in the development of production tools, fixtures, automation, and assembly machines.

Network Infrastructure Engineering Technology



The network infrastructure engineering technology degree program is interdisciplinary in nature and offers three concentrations. The network infrastructure security concentration blends networking technology and information systems coursework, emphasizing secure configuration of both operation systems and network infrastructure. The course topics for this concentration include Microsoft Windows together with Linux/Unix management and security, as well as network security via Cisco Academy training. The Cisco network infrastructure concentration combines an in-depth program of networking technology with electric circuits, computer hardware, and applied programming. Major emphasis is placed on professional level Cisco certification. The Microsoft network infrastructure concentration features a combination of operating system instruction and electric circuits, microprocessors, digital systems, and applied programming. Major emphasis is placed on professional level Microsoft certification.