Program Overview

Engineering, Math and Physical Sciences division, Room T302, (847) 543-2044

Students are prepared to work in electrical or electronic research, electronic layout, instrumentation, design, field service, communication and service laboratories, as an electrical or electronics engineering technician, installer and repairer, or maintenance.

The degree also prepares for students for telecommunications, biomedical, broadcast and sound engineering, and sustainable energies, such as solar, wind and geothermal.

To complete an A.A.S., students must meet General Requirements* detailed in the current CLC catalog. Visit www.cliclinois.edu/catalog (select Associate in Applied Science and Career Certificates). All course prerequisites must be met.

ELECTRICAL ENGINEERING TECHNOLOGY (Associate in Applied Science) Plan 24ED

First Semester ........................................ 15-17
EET 170 DC Circuit Fundamentals .......... 2
EET 115 Electronic Laboratory Techniques ............................................... 2
EET 174 AC Fundamentals ................. 2
MTH 123 Trigonometry or
MTH 144 Precalculus ................. 3-5
ENG 120 Technical Composition .......... 3
SOC 121 Introduction to Sociology ..... 3

Second Semester ........................................ 17
EET 176 Circuit Analysis and Network Theorems .......... 4
EET 223 Introduction to Digital Electronics ............................................... 4
CMM 121 Fundamentals of Speech ........ 3
PHY 121 General Physics I ............. 5
SOC 121 Introduction to Sociology ...... 3

Third Semester ........................................ 18
EET 113 Solid State Electronics .......... 4
EET 230 Electrical Machinery ......... 3
MTH 145 Calculus and Analytic Geometry I ........................................... 5
PHI 122 Logic ............................................. 3
PSY 122 Industrial/Organizational Psychology ........................................ 3

Fourth Semester ........................................ 17-19
EET 211 Advanced Solid State Electronics ..................................... 4
EET 216 Microprocessors I ............... 4
ECO 221 Principles of Macroeconomics or
ECO 222 Principles of Microeconomics ................. 3
Approved Technical Electives ........ 6-8

Technical Electives 6-8 hours
MTH 146 Calculus and Analytic Geometry II ........................................ 4
EET 212 Electronic Communications Systems ........................................... 3
EET 130 Introduction to Renewable Energy Sources ................. 4
EIT 210 Data and Network Communication ........................................... 4
ELC 171 Programmable Logic Controllers ........................................... 3
ELC 271 Advanced Programmable Controls ........................................... 3
MTH 122 College Algebra ............. 4
Departmentally Approved Elective ........................................ 3-5

Total Hours for A.A.S. Degree ................. 66-70

WIRELESS NETWORKING SECURITY (Certificate) Plan 24EU

This certificate provides the hands-on and theoretical experiences a network administrator needs to be able to design, test and maintain secure wireless and mixed media networks.

This program also prepares students to pursue certifications in the field of wireless networking.

EIT 111 Digital and Network Fundamentals ..................................... 4
EIT 210 Data and Network Communication ........................................... 4
EIT 230 Secure Wireless Networking .................................................. 3
EIT 250 Wireless Data Communications ........................................... 3

Total Hours for Certificate ........................................ 14

What Does an EET Do?

Electrical Engineering Technicians focus on implementation, application and applied design in an extremely broad range of electrical engineering sub-disciplines including electronics, embedded systems, control systems, instrumentation, telecommunications, and power systems. Graduates from EET work in a wide range of career fields including aerospace and avionics, biomedical, advanced manufacturing, automotive, telecommunications and tech companies, utilities, pharmaceutical and defense industries.

Typical Jobs

• Electronics Engineering Technician
• Electrical Engineering Technician
• Electronics Test Technician
• Failure Analysis Technician
• Field Engineer
• Electro-mechanical Technician
• Electrical/Electronics Engineer

Salary and Job Outlook

For the latest information, visit www.mynextmove.org or the Bureau of Labor Statistics online at www.bls.gov. Gainful employment data is available at www.cliclinois.edu/gainfulemployment.

Getting Started

Visit www.cliclinois.edu/admission for steps on how to register.
Electrical Engineering Technology

Grayslake · Vernon Hills · Waukegan · Online

**ELECTRONICS TECHNOLOGY (Certificate) Plan 24EF**

This program provides students with the basic background and skills necessary to work with both analog and digital electronics. A minimum of 35 semester hours credit must be completed for the certificate. Courses not listed here may be taken with division approval.

**Core Courses**
- EET 170 DC Circuit Fundamentals .......... 2
- EET 174 AC Fundamentals ................. 2
- EET 115 Electronic Laboratory Techniques ............................................. 2
- EET 223 Introduction to Digital Electronics ............................................. 4

**Additional Required Coursework** .......................... 25

Choose at least 25 credit hours from the following list.
- EET 173 DC Analysis-Network Theorems............... 2
- EET 175 AC Analysis and Circuit Theorems............... 2
- EET 216 Microprocessors ..................... 4
- EET 113 Solid State Electronics ................. 4
- EET 211 Advanced Solid State Electronics .............. 4
- MTH 122 College Algebra or
- MTH 144 Precalculus ........................ 4-5
- EET 212 Electronic Communications Systems ............. 4
- EET 130 Introduction to Renewable Energy Sources .......... 3
- EET 299 Special Topics: Electrical/ Electronics ................. 1-4
- CAD 117 Introduction to AutoCAD .......... 3
- MCS 141 Computer Science I .................... 4
- PHY 120 Practical Aspects of Physics or
- PHY 121 General Physics I .................... 4-5

**Total Hours for Certificate** ................................ 30-32

**FIBER OPTICS TECHNICIAN (Certificate) Plan 24EV**

This certificate program is designed to provide students the hands-on experience and knowledge needed to prepare for industry certification in fiber optics technology and to find entry level employment in network technology and telecommunications.

**Technical Electives 6-8 hours**
- EET 130 Introduction to Renewable Energy Sources .......... 4
- EET 223 Introduction to Digital Electronics ......................... 4
- EET 299 Special Topics: Electrical/ Electronics ......................... 1-4
- EIT 116 Fiber Optic Fundamentals ............... 3
- EIT 210 Data and Network Communication ......................... 4
- ELT 151 PC Hardware Fundamentals or
- ISE 114 National Electrical Code .......... 2
- MET 131 Technical Robotics ......................... 3

**Total Hours for Certificate** ................................ 35

**ELECTRICAL/ELECTRONIC MAINTENANCE (Certificate) Plan 24EH**

This certificate is intended to provide students with the skills necessary to perform electrical and electronic installation, trouble-shooting and maintenance procedures in industry, including practical experience with circuitry, motors and motor controls and programmable logic controllers.

**Required Coursework** ................................ 24
- EET 115 Electronic Laboratory Techniques ............................................. 2
- EET 170 DC Circuit Fundamentals .......... 2
- EET 230 Electrical Machinery .......... 3
- ELC 114 Motor and Machine Controls ... 3
- ELC 171 Programmable Logic Controllers ......................... 3
- ELC 172 Applied AC Circuit Theory .......... 2
- ELC 271 Advanced Programmable Controls ......................... 3
- ENG 120 Technical Composition I or
- ENG 121 English Composition I .......... 3
- MTH 117 Technical Mathematics I ......................... 3

**Student Experiences**

"[The instructors] show a lot of real life work experience; they are very knowledgeable. They balance lab and class time well. This program offers a solid base and preparation for a four year electrical engineering technology degree or a career in the electronics industry."  
- Thomas Strasser

"[Electrical Engineering Technology] is a great career with many possibilities. There is always a new challenge with every job you take on."
- Mitchel Kauppila

"I like using my hands and mind. This field is very demanding of both."
- Annemarie McAloon

**Contact Info**

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CLC is committed to maintaining an environment free from harassment and discrimination for everyone and does not discriminate on the basis of race, sex, national origin, religion, sexual orientation, gender identity or expression, or any other protected status. Responsibility for coordination of compliance efforts and receipt of inquiries has been delegated to the Dean of Student Life, 19351 W. Washington St., Grayslake, IL 60030, (847) 543-3486.