Electrician

31-32 UNIT CERTIFICATE 60 UNIT ASSOCIATE DEGREE



Career & Technical Education www.norcocollege.edu/CTE

The Electrician program prepares students to

become an entry-level electrician

trainee, and along with California State

requirements prepares for careers as electricians. Courses are aligned with the

California state standards to prepare students

to earn their Electrician Training card.

Required Courses

ELE-71 Residential Electrical Wiring (4 units)

The course introduces students to wiring methods commonly used in residential electrical wiring.

ELE/MAN-72 Commercial and Industrial Electrical Wiring (4 units)

Wiring of commercial and industrial buildings.

ELE/MAN-73 Electric Motors and Transformers (4 units)

Enables electricians to understand and effectively wire most standard DC motors, servos and steppers, as well as many AC motors.

ELE/MAN-74 Industrial Wiring and Controls (4 units)

Industrial controls and electrical wiring of modern facilities, manufacturing, or warehousing.

ELE-75 Solid State Devices and Lighting Controls (3 units)

Students will learn about solid state devices (electronics), sensors, SCR (silicone control rectifier), transistors, and proximity and light sensors used in most industrial and commercial installations.

ELE-76 Low Voltage Wiring and Alternate Energy Generation (3 units)

Introduces electricians to the specialized needs and requirements of institutional, educational and government entities.

ELE/MAN-77 Electrical Theory (3 units)

This course introduces students to electrical theory, Ohm's Law, magnetism, voltage inductance, capacitance, units of electric measurement, and proper usage of electrical test equipment (meters).

ENE-60 Math for Engineering Technology (3 units) -OR- MAT-36 Trigonometry (4 units)

A course in mathematical problems frequently used by students enrolled in the trade, industrial and engineering programs.

CON-66 National Electrical Code (3 units)

Review of electrical codes including discussion and analysis of the application of physical laws in development of the code requirements.

*This class transfers towards one or more CSUSB or CalPoly majors. Visit www.assist.org or the Counseling office for details.

SUGGESTED SEMESTER SEQUENCE

FALL 1 CON - 66 ELE-77

SPRING 1 ELE-72 ELE-74 FALL 2 ELE-71 ELE-73 SPRING 2 ELE-75 ELE-76 ENE-60 or MAT-36

For more information regarding certificate program, course sequencing or scheduling: Glen Graham, Electronics & Electrician Instructor (951) 372-7166 glen.graham@norcocollege.edu

Norco College Counseling Department (951) 372-7101

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NORCO COLLEGE

Career & Technical Education

Jobs & Wages

Electronics Engineering Technician

\$18.87 - \$45.68

Electronics Engineering Technologist

\$17.78 - \$47.26

Electrical & Electronics Installer & Repairer,

Transportation Equipment

\$22.26 - \$36.93

Electronics Technician

\$18.87 - \$45.68

Electronics Assembler

\$9.03 - \$25.16

Quality Control Technician

\$13.89 - \$38.74

Automation Specialist

\$15.97 - \$45.01

Safety Engineer

\$26.38 - \$63.11

Tuition \$1,472

Books & Supplies \$1,149

Duration of Study 16 months

Total Estimated
Certificate Cost

\$2,621 as of 2016. Subject to change.

> 2016 NAS766/NAS766B/ NAS766C/NCE766

An Association of Science Degree in Electrician will be awarded upon completion of the required courses (31-32 units) plus the General Education requirements. Please refer to the Norco College Catalog or visit the Counseling Center.

This project was funded fully or in part by Carl D. Perkins CTE Act of 2006 grant no. 16-C01-045 awarded to Riverside Community College District (RCCD) and administered by the California Community Colleges Chancellor's Office. RCCD complies with all federal and state rules and regulations. RCCD does not discriminate, and harassment of any employee or student is strictly prohibited, on the basis of ethnic group identification, national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, ancestry, genetic information, sexual orientation, physical or mental disability, pregnancy, military or veteran status, or any characteristic listed or defined in Section 11135 of the Government Code or contained in the prohibition of hate crimes of Section 422.6 of the California Penal Code, or any other status protected by law. This holds true for all students interested in participating in any educational and/or extracurricular program. Limited English speaking skills will not be a barrier to admission or participation in any programs. For alternate formats of this material for individuals requiring disability accommodation, contact Career & Technical Education at (951) 739-7811. For inquiries regarding compliance or grievance procedures, contact the District's Title IX Officer/Section 504/ADA Coordinator, 3801 Market St., Riverside, CA 92501, (951) 222-8039.