

Digital Electronics

28 unit certificate • 60 unit degree

The Digital Electronics program prepares students with the fundamental theories of DC and AC electronic components, circuits & behaviors before continuing on with digital integrated circuit logic & culminating with Printed Circuit Board (PCB) design.

Required Courses (to earn certificate)

ELC/ELE-11 DC Electronics (4 Units)*
Basic electrical theory.

ELC/ELE-13 AC Electronics (4 Units)*
Prerequisite: ELE-10, 11, 21 or 23
Alternating Current (AC) theory, devices, circuits and applications.

ELE-25 Digital Techniques (4 Units)*
Mathematics, number systems, and logic circuits as they relate to modern electronic computers and digital systems.

ELE-26 Microcontrollers (3 Units)*
Advisory: ELE-25
Computer number systems, codes, and arithmetic functions; microcontroller functions, architecture, instruction sets, addressing modes, and I/O operations.

DFT/ENE/ELE-27 Technical Communications (3 Units)*
Procedures for organizing and presenting data through informal and formal documents and presentations.

ELE-28 MultiSim CAD & PCB Design/Fab (3 Units)*
Basic Computer-aided Design (CAD) drafting, block diagrams, printed circuit board design-layout.

Plus, an additional 7 units from the following courses:

ELE-10 Survey of Electronics (4 Units)*

ELE-23 Electronics Devices & Circuits (4 Units)*

ELE/MAN-61 Robotics for Manufacturing (3 Units)*

ELE/MAN-63 LabVIEW Visual Programming for Automated Systems (3 Units)*

ELE/MAN-64 Programmable Logic Controllers (3 Units)*

ELC/ELE-91 Fundamentals of Solar Energy (3 Units)*

ELE-200 Electronics Work Experience (1-4 Units)*

MAN-55 Occupational Safety and Health Administration (OSHA) Standards for General Industry (1 unit)

Some of these courses have prerequisites or advisories. Refer to College Catalog for more information.

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

Digital Electronics

Tuition \$46/unit • Duration of Study: 16 months

An Association of Science Degree in Digital Electronics will be awarded upon completion of the required courses (28 units) plus the General Education requirements. Please refer to the Norco College Catalog or visit the Counseling Center.

Job & Wage Information

- Electronics Engineering Technician
Wage Range*: \$29.06-41.99
2% increase in employment expected in CA 2019-2029; 2,330 openings annually
More info: <http://bit.ly/ElectronicsEngineeringTechNC>
- Electrical & Electronics Installer & Repair
Wage Range*: \$27.33-32.15
2% increase expected in CA 2019-2029; 200 openings annually
More info: <http://bit.ly/ElectricalInstallerNC>
- Quality Control Technician/Analyst
Wage Range*: \$23.60-30.84
7% increase expected in CA 2019-2029; 1,120 openings annually
More info: <http://bit.ly/QualityControlNC>

*2020, Riverside/Ontario/San Bernardino Metro Area

What type of interests might be a good fit for this career choice?



Realistic

People who have athletic or mechanical ability and prefer to work with objects, machines and tools. Preference for working with things over people.

For more information on careers that fit this category of interests, visit the Career Center in the Center for Student Success.

What's Your School?



Visit www.norcocollege.edu/STEM for more information about this program.