

Electronic Systems Technician

SYSTEMS TECHNICIAN



Curriculum Notes

- 145 Hours
- Revised: 2021, Fourth Edition
- Downloadable instructor resources are available.

PAPERBACK

Trainee Guide: \$99.99

ISBN

978-0-13-684451-8

DIGITAL

NCCERconnect Access Card: \$99.99

NCCERconnect +

Trainee Guide: \$129.99

ISBN

978-0-13-684435-8

978-0-13-768322-2

MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Limited-Energy Cabling (20 Hours)

ISBN 978-0-13-689799-6

(Module ID 33108) Covers the makeup, identification, and applications of conductors and cables used in limited-energy applications. Describes the tools, materials, and procedures for pulling limited-energy cabling through conduit and raceways.

Limited-Energy Cable Selection (10 Hours)

ISBN 978-0-13-690840-1

(Module ID 33208) Provides an overview of the types of cable used for limited-energy installations. Also covers methods used to select the proper size and type of cable for a typical low-voltage installations.

Limited-Energy Cable Termination (25 Hours)

ISBN 978-0-13-690834-0

(Module ID 33209) Provides information and instructions for selecting, installing, and testing connectors and other terminating devices on cables used in limited-energy work, including telecommunications, video, audio, and fiber optic installations.

Limited-Energy Network Installations (25 Hours)

ISBN 978-0-13-681283-8

(Module ID 33301) Details procedures for connecting computers and other devices using both wired and wireless network connections. Describes components and architecture of ethernet, LAN, and powerline carrier networks.

Wireless Communication (15 Hours)

ISBN 978-0-13-684443-3

(Module ID 33303) Introduces wireless communications and discusses current technologies transforming the market to include 5G, various residential and wireless networks, and a variety of mobile devices. Covers updated technologies and their implications. Emphasizes growing relevance of network security.

Site Survey, Project Planning, and Documentation (15 Hours)

ISBN 978-0-13-681282-1

ISBN 978-0-13-681282-1

(Module ID 33304) Explains planning a job from start to finish, including how to perform site surveys for new and retrofit construction projects. Covers drawings, specifications, and current software applications used on the construction site.

Maintenance and Repair (20 Hours)

ISBN 978-0-13-681276-0

(Module ID 33307) Introduces tasks involved in the maintenance and repair of limited-energy systems and equipment. Presents a systematic approach to system and component-level troubleshooting and methods of identifying common repair types.

Residential and Commercial Networks (15 Hours)

ISBN 978-0-13-684372-6

(Module ID 33406) Explains the integration of current and diverse low-voltage systems and the trend toward their singular hub control (or start topology connectivity). Covers implications of user-interfacing technologies. Updated to 2020 NEC® codes as well as future outlook of building networks.

Electronic Systems Technician (EST) has been combined with NCCER's Electrical series to provide additional career pathways. After completing Electrical Levels 1 and 2, trainees can choose to advance into Electrical Levels 3-4 or EST Levels 3-4.