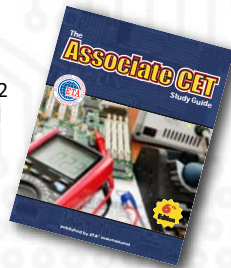# Basic/Entry Level Electronics

Associate Certified Electronics Technician (CETa)

The Associate certification is designed for technicians who have less than two years experience or trade school training for electronics technicians. The Associate certification is valid for 4 years. It is also the foundation for the Journeyman certification program. The CETa is a more in-depth examination expanding on all of the topics listed within the Student Electronics Technician description. The Associate CET is now a renewable certification.

The Associate CET Study Guide
$50 Members / $60 Non-Members

The Associate CET Study Guide features features 22 chapters authored by 16 practicing technicians and instructors from around the world. Technical topics range from Electronic Components, DC Circuits, Microprocessors and Transmitters to essential skills every Certified Electronics Technician needs such as Record Keeping and Technical Writing.

Student Electronics Technician (SET)

The SET allows high school students and entry-level technicians the opportunity to earn a basic beginners certification. The examination covers a variety of topics including: Electrical Theory; Electronic Components; Soldering-Desoldering and Tools; Block Diagrams-Schematics-Wiring Diagrams; Cabling; Power Supplies; Test Equipment and Measurements; Safety Precautions; Mathematics and Formulas; Electronic Circuits; Series and Parallel; Amplifiers; Interfacing of Electronics Products, Digital Concepts and Circuitry; Computer Electronics; Computer Applications; Audio & Video Systems; Optical Electronics; Basic Telecommunications; and Technician Work Procedures. The SET also has an optional Hands-On component that can be used as a part of the training process and will be noted upon completion and passing of the SET examination.

Through a partnership with ETA, the Student Electronics Technician is administered by NOCTI. Please visit www.nocti.org for information on taking the SET as well as costs for the exam and optional hands-on component.

Electronics Modules (EM1-5)

The EM5 program is based on ETA's Associate level certification, in which the AST Competencies have been divided into five sections called "modules." The purpose of this is to align with a growing portion of the electronics education industry that is charged with providing electronics training that does not include the total content of traditional Basic Electronics courses. In some instances, technical institutions are asked to provide training in only certain portions of electronics. This is so that companies that need only narrower skills and knowledge (than one expects of a complete Associate CET) can employ workers who have required knowledge and skills for only the technology and processes they currently use at that company.

To provide a path for the technician leading to the Associate CET credential (CETa), the five BASIC modules of the AST can be acquired individually. Once a technician attains all five module certifications, ETA will issue an official Associate (AST) certification (all five must be passed within a two-year period). The technician may also choose to gain only those modules needed in order to be employable.

The five basic Electronics Modules are:

1. DC
2. AC
3. Analog
4. Digital
5. Comprehensive

Apprentice Electronics Technician (APP)

The telecommunication Apprentice certification program (APP) is designed to only measure the knowledge of basic direct and alternating current theory as well as basic technical mathematics necessary to begin a training program in this field. Knowledge of cabling, power supplies, test equipment, as well as safety are also measured. This program is primarily targeted towards those who wish to pursue a technical career in the telecommunications industry and want to demonstrate their ability and knowledge to benefit from an in-company or company sponsored technical training program. (This exam does not replace the Associate Certified Electronics Technician (CETa) certification.)