



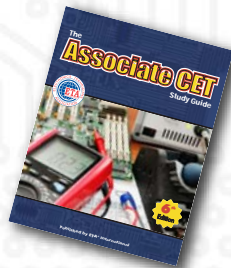
# Basic/Entry Level Electronics

## 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 Study Guide \$50 Members / \$60 Non-Members

The Associate CET Study Guide 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 also available through NOCTI. Please visit [www.nocti.org](http://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



The Associate and Electronics Module certifications are accredited by the International Certification Accreditation Council (ICAC). ICAC is an alliance of organizations dedicated to assuring competency, professional management, and service to the public by encouraging and setting standards for licensing, certification, and credentialing programs.

ICAC itself operates under the international guidelines established as a quality assurance regime for accreditation bodies (ISO/IEC 17011 – Conformity Assessment: General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies), and has established assessment tools and processes that assure certification bodies are in compliance with ISO/IEC 17024 (2012): Conformity Assessment – General Requirements for Bodies Operating Certification of Persons. By having ICAC accreditation, ETA can assure their certifications have been reviewed by a neutral third party and been found to meet or exceed reasonable levels of record keeping, security, objectivity, and professionalism.