



ETA[®] International

Certification Catalog

ETA[®] International

5 Depot Street
Greencastle, IN 46135
Toll Free: (800) 288-3824
Phone: (765) 653-8262
Fax: (765) 653-4287
eta@etai.org
www.etai.org



ABOUT ETA INTERNATIONAL

Table of Contents

| | |
|---|----|
| About ETA International..... | 3 |
| Preparing for an ETA Certification Exam..... | 6 |
| Taking an ETA Exam..... | 7 |
| ETA Certifications..... | 8 |
| FCC Commercial Radio Operator Licenses..... | 21 |
| ETA Membership..... | 22 |
| Where are ETA-Certified Individuals?..... | 23 |
| Military Reimbursement & Digital Badging..... | 26 |

Dear Certification Seeker,

For more than 40 years, ETA® International has represented the individual technician. While the representation has broadened over the years to include educators, business leaders, and military personnel, the mission is the same - fostering excellence in certification by providing industry-accepted credentials that are accredited, technical, and vendor-neutral. ETA does this through its members, who are the backbone of the association. Without their dedication and expertise, ETA would not be able to accomplish its goal of providing these valued credentials. From technical and workforce readiness certifications to lobbying, local chapters and hosting educational opportunities, ETA is *your* association.

ETA offers a career path from a student with little or no experience to a master level for those who have dedicated years to improving and expanding their skill set. By becoming certified, individuals prove their knowledge and skills with an industry-accepted credential that has been vetted by their peers. Contact ETA for ways in which we can help you achieve your goals.

For an individual, certifications:

- Are a quantifiable milestone of achievement.
- Are a way to benchmark skills sets.
- Can link competency to compensation.
- Enable advancement or flexibility in conditions of job change.
- Create industry visibility of one of the highly recognized electronics certifications.
- Are personal and portable certifications.
- Show levels of certification progression and disciplines to continued skills development.
- Are proof of mastery of the technologies in the industry.

For a business/organization, certifications:

- Show workmanship that results in both internal and external customer satisfaction.
- Enhance credibility within the organization and with external customers.
- Identify employees who are qualified to provide leadership to team members.
- Maximize investment by accurately determining individual and organizational training needs.
- Support decisions of appropriate skill level when hiring or promoting.
- Support employee retention plans - present new challenges and career path choices to employees.
- Provide the company with confidence that contracted vendors are technically qualified.

For a school/training facility, certifications:

- Increase curriculum value by providing industry-recognized credentials.
- Increase marketability of programs.
- Provide end of course assessments.
- Satisfy Perkins and other federal requirements.
- Allow participating states to give students verified credits.

Sincerely,



Bryan Allen, CSM, CSS
President

ABOUT ETA INTERNATIONAL

History



ETA[®] International (Electronics Technicians Association, International), founded in 1978, is a not-for-profit, professional association promoting excellence in electronics technologies through certification.

The association's initiatives are to provide prominent certification programs of competency criteria and testing benchmarks that include international electronics standards and provide renowned professional electronics credentials.

The organization began with leaders like Richard "Dick" Glass, CETsr, Ron Crow, CETma, D.C. "Snow" Larson, CET and others who had earned respect in the electronics industry. In the late 1970s, the founders decided never to affiliate too closely with any manufacturer. ETA was to be truly a group of technicians by technicians for technicians. Today, ETA is a strong and well-known organization with over 10,000 members and over 200,000 certifications and licenses delivered to date. ETA's focus is to help new and upcoming technicians and the technical schools they attend achieve their career goals.

Although certification, specifically, was not an original goal, it occurred naturally as ETA grew with over 80 certification programs available today. As a non-vendor-specific, independent third-party certifying organization, ETA receives inquiries each month from schools asking for assistance in either recommending and/or certifying curriculums or texts. In addition, the U.S. military, through their individual education offices, works with ETA for both ETA and FCC Commercial License testing at all U.S. military facilities worldwide.

ETA is not only strong in the certification field, but it provides many other services for technicians and electronics service firms. ETA has participated in governmental law and rule-making by commenting on behalf of technicians regarding pending local, state, or national actions of governments. The association works closely with other organizations such as the Army, Navy, Marine Corps, Coast Guard, and Air Force COOL programs, National Technical Honor Society, U.S. Department of Labor's Career One Stop, the FCC as one of 12 authorized COLEMs, and Certified Service Centers as well as other local, state, national, and international groups.



While ETA membership is also available to service dealerships and other institutions, the typical member is an electronics technician. By having a membership composed of technicians from every conceivable area of electronics, communications and networking technology, the interchange of information and the broad viewpoint members are exposed to creates a unique and valuable entity.

Hundreds of members have taken an active role in the association by participating as area representatives, becoming certification administrators, writing for the publications and journals or by teaching a class at seminars and conventions. ETA is not just an association that collects your dues and then issues an occasional report. It is a fellowship of technicians who love their jobs and see ETA as the adhesive that binds real professional technicians together for the greater good. ETA is a platform for members to share their expertise, revitalizing knowledge for all.

Benefits of ETA Certification

ETA certification signifies that the holder has demonstrated professional proficiency and has the technical knowledge and hands-on skills to meet international electronics industry standards.

Earning an ETA certification:

- Gives U.S. Armed Forces personnel validation of their Military Occupational Skill (MOS) training for meeting active duty responsibilities and transitioning to civilian careers as veterans
- Allows high school and postsecondary students, as well as working adults seeking new employment opportunities, to demonstrate and validate their technical electronics knowledge and skill with recognized industry credentials
- Assists experienced industry professionals in advancing their knowledge and excelling in their careers
- Provides employers with clear criteria for hiring and promotion that can lead to enhanced productivity and customer satisfaction

ETA certification exams are administered by ETA Certification Administrators, which ensures quality control. ETA testing sites are easily accessible with exam administrators at colleges, businesses, trade schools, and military bases worldwide as well as virtually.

ABOUT ETA INTERNATIONAL

Industry-Recognized Standards

An ETA certification signifies that the holder demonstrates professional proficiency within a certain discipline. Certification holders are recognized as having the necessary knowledge and technical skill to design, install, service, or repair electronic equipment according to industry standards—not specific to a manufacturer, vendor, or product.

Since 1965, the program has been proven effective. Aligning with the ISO 17024 standard, and collaborating with education providers and industry professionals, ETA provides the criteria which tests the knowledge and/or hands-on skills needed in today's electronics industries. However, ETA constantly seeks information from employers, schools, and individuals verifying the validity and current relevance of its assessments.

Global Skills X-Change's (formerly National Skills Standards Board) feasibility study concluded the ETA program was among the best industry certification programs available.

Accreditation

ETA's industry-based examinations are modeled after international competency standards. Each discipline utilizes its own group of educators and practitioners, plus industry-wide reviews, to align with the industry standards. The standards clearly articulate the skills and knowledge relevant to specific segments of the industry. ETA certifications are personal, portable worldwide, and are accredited by the International Certification Accreditation Council (ICAC) under ISO 17024 standards for accrediting bodies. 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.

About ICAC



In 1996, a group of association executives chartered the ICAC as a not-for-profit organization with the purpose of evaluating certification programs at an affordable rate that smaller organizations can afford. Over the years, the ICAC has developed a comprehensive process to evaluate certification programs against international standards. In this way, accredited organizations can both improve existing certification programs as well as demonstrate to the public that their programs comply with industry best practices.

By accrediting certification programs, the public and the industries represented have an additional level of assurance, knowing that the program has been reviewed by a neutral third party and been found to meet or exceed reasonable levels of record keeping, security, objectivity, and professionalism.

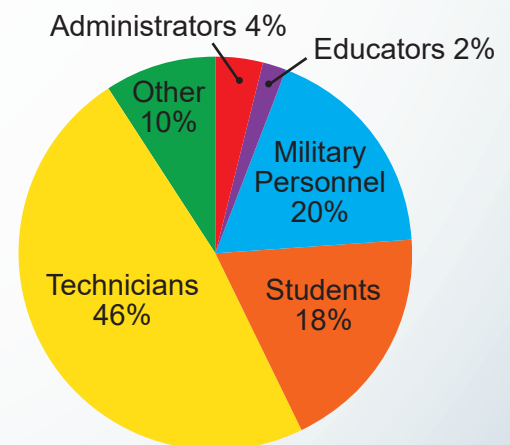
The ICAC itself operates under the international guidelines established as a quality assurance regime for accreditation bodies (ISO/IEC 17011 – Conformity Assessment: General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies), and has established assessment tools and processes that assure certification bodies are in compliance with ISO/IEC 17024 (2012): Conformity Assessment – General Requirements for Bodies Operating Certification of Persons.

Who Takes ETA Certification Exams?

ETA certifies professionals from many different areas and industries. Whether it's a military fiber installer, RF wireless technician, biomedical technician, service manager, or student, ETA has you covered! Every year ETA creates a snapshot of professionals and students who have taken an ETA exam during the previous year. You can see the results from 2017 on the right.



ETA certifications are listed on the Career One Stop website. Career One Stop is sponsored by the U.S. Department of Labor, and is a partner of the American Job Center network. The website provides tools to help job seekers, students, businesses, and career professionals find their pathway to success. Please visit www.careeronestop.org for more information.



ABOUT ETA INTERNATIONAL

ETA Certification Administrators



ETA believes that legitimate third parties, such as experts, practitioners, and instructors in the field, rather than those who may have a direct interest in the outcome of the programs, should administer and approve certified electronics technicians exams. ETA serves as that third party administrator to technical education, providing a way for school systems to validate their electronics courses.

ETA continually strives to make its exam testing sites easily accessible for examinees who wish to take one of the more than 80 different ETA certification exams. We currently have exam administrators at college electronics programs, community colleges, trade schools, military bases, proprietary trainers, and vocational-technical schools throughout the world. If your accredited institution/school or training facility is interested in becoming an ETA-approved examination site, please complete the online Certification Administrator application.

In addition to physical locations, ETA has partnered with ExamRoom.AI, a leading remote proctoring service. For a small fee, an examinee can take their certification exam virtually from the comfort of their own home or business. A webcam, microphone, and capable internet and computer are required. Please use the Remote Proctoring Examinee registration form to register. Initial scheduling takes up to 72 hours and registration is available Monday-Friday from 8am-5pm EDT. Registering for same or next day testing is not guaranteed.

Authorization to administer ETA certification exams is given to the individual. By gaining approval, a Certification Administrator's location is listed for the public to contact using the CA Locator. CAs are given the option to have their location listed or remain private. Upon approval, a CA may proctor all ETA certification exams that do not require hands-on skills assessments and FCC commercial operator licensing exams. If a certification program requires hands-on training, then the proctor/school must have an ETA Course Approval.

ETA Course Approvals

Approval of training for technicians is not something that should be done solely by educators who work mostly with the theoretical side of the field being critiqued. It should also not be done by those with a direct interest in the course providers. It should be done by a legitimate third party - composed of experts in the field; practitioners and educators at all levels. ETA has a network of more than 600 Subject Matter Experts (SMEs) in place to assist with course and text reviews. ETA's Subject Matter Experts span all of the fields of certification available through ETA.

Today, with many governmental agencies (at all levels) looking to validate their educational processes, and authorities having jurisdiction scrutinizing validation, the need for recognition has become a mandate. Some states now use ETA certification as 3rd party final exams for electronics course students, but the process is not yet complete. A more formal program of validation is still needed. School systems are requiring the educational institutions to prove that their training actually is giving the student his or her money's worth. They want proof that the time and money spent in learning this profession will pay off with a good career after graduation.

ETA has instituted a program to answer this call for help. We currently have over 600 Subject Matter Experts. Because of this extensive network, ETA is in a position of being accountable to industry for reliable test results. ETA serves in its capacity as a 3rd party to technical education, providing a way for school systems to validate their courses. ETA is meeting these industry and educational needs.

ETA provides third-party reviews that many schools require of electronics courses, evaluating the instructor credentials, lab and classroom equipment, course outlines, etc. The reviews have been used by all levels of education, both public and commercial, as well as military.



ETA'S ANNUAL EDUCATION FORUM



ETA's Education Forum, a world-class technical education conference, is held annually at various sites in the United States. It is the ideal venue for both professional and curriculum development, regardless of skill level, focusing on hands-on training. The Education Forum is the focal point for technical and educational professionals to discover emerging technologies, network and collaborate with fellow technicians and educators, have access to training and speaking sessions with industry experts, sit for certification examinations, gain continuing education credits, and discuss classroom implementation strategies. Visit the the ETA website for the current schedule at www.educationforum.info.

PREPARING FOR AN EXAM

ETA Certification Administration

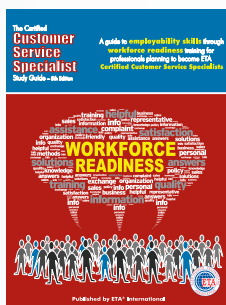
ETA has certification administrators (CAs) around the world. Each examination must be proctored by a CA. To find a CA, either visit the ETA website or contact ETA. If a test site is not near the examinee's location, then please call ETA at (765) 653-8262, or email at eta@etai.org for more information. ETA also offers a remote proctoring option through a partner. All ETA exams must be proctored by an independent third party.

ETA Certification Examination Materials

Certification competencies are a well-ordered categorized structural listing of knowledge, standards reference, industry best practices, testing, and troubleshooting subject items necessary to be proficient in a given technology. Certification examination questions are derived from their respective competencies. ETA subject matter experts (SMEs) are vital proponents developing and improving each competency.

ETA aligns with individual professional goals, vocational and education curriculums, and businesses' resource initiatives through certification programs, conferences, speaking engagements, books, and journal publications. ETA actively supports training and education through the development of study guides and seminars, as well as working with a large number of ETA-approved schools and courses. ETA also works with high schools, vocational schools, colleges, universities, educators, corporate trainers, correctional facilities, and electronics industry professionals to find proper and sufficient training resources in their area.

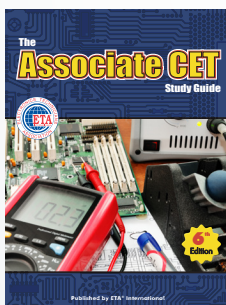
When preparing for an ETA certification examination, examinees are encouraged to use suggested study materials listed on the available competencies. In addition to the many offerings in the ETA online store, ETA offers study materials developed exclusively for the ETA Customer Service and Associate CET examinations. These were written by ETA professionals for ETA professionals.



The Customer Service Specialist Study Guide, 5th Edition **\$25 Members / \$30 Non-Members**

The CSS Study Guide contains all of the workforce readiness and soft skills information in previous editions plus new chapters such as Social Media. The best way to prepare for the popular Customer Service Specialist exam also prepares you for working with other technicians and service personnel at your place of employment and at the other firms your company may deal with. It contains chapter quizzes and an overall practice exam quiz similar to the actual CSS exam.

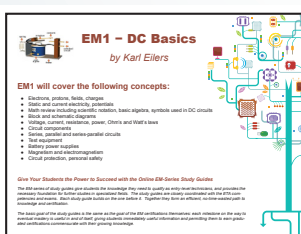
The information contained in this guide is applicable to anyone who works with the public: helpdesk, sales, educators, business owners, nurses, repair technicians, and coworkers!



The Associate CET Study Guide, 6th Edition **\$50 Members / \$60 Non-Members**

The latest Associate CET Study Guide features 22 chapters authored by 16 practicing technicians and instructors from around the world, as well as new practice exams and test site locator access.

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. Each chapter is followed by a practice quiz and the entire guide is covered in a final Online Practice Examination, which will further prepare an individual for the Associate CET examination. It also comes with a link to a complete online listing of current Certification Administrator locations. With this, an exam candidate can easily find a location for testing.



ETA's store also offers study materials created by ETA members for ETA certifications. These materials are tailored to their specific certification exams. The EM-series of digital study guides gives students the knowledge they need to qualify as entry-level technicians, and provides the necessary foundation for further studies in specialized fields. The study guides are closely coordinated with the ETA competencies and exams. Each study guide builds on the one before it. Together they form an efficient, no-time wasted path to knowledge and certification.

There are five EM study guides covering: DC Basics, AC Basics, Analog Basics, Digital Basics, and Comprehensive. Please visit www.etai.org to order.

TAKING AN ETA EXAM

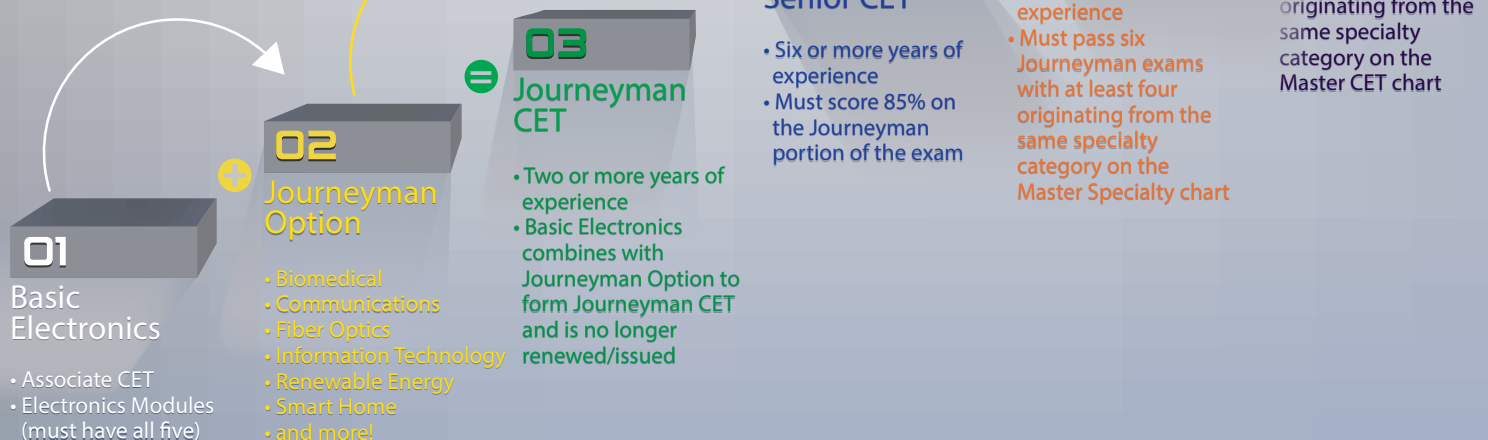
Taking an ETA Certification Examination

1. Decide which ETA certification(s) you would like to take and review the free objectives/competencies provided by ETA. Call to see if additional study materials are available.
2. Find an ETA certification administrator (CA) close to you to proctor the exam. You can search ETA's online database of test sites at www.etai.org/test_sites.html, or contact ETA at (765) 653-8262 or toll-free at (800) 288-3824.
3. Decide whether to take the exam online with Trapeza or paper/pencil. Note: A certification administrator must be present regardless of which test format is chosen.
4. Arrange a time to take the exam with the chosen certification administrator.
5. Arrive early with the proper materials to take the exam. You may bring scratch paper and a non-programmable calculator to the exam. For most exams, you will be given two hours if needed. Photo ID and #2 pencils required. No electronic devices are permitted.
6. Once completed, the certification administrator will submit your exam and information along with payment. If you test online with ETA, then you will be able to view your score(s) immediately.
8. Examinations are processed within 7-10 business days of arrival at ETA headquarters. However, scores may be requested online through the ETA website (www.etai.org/results_reviews.html).

****As provided for under the ADA (American's with Disabilities Act), if you require special needs accommodation in order to complete the certification process, then please notify your Certification Administrator when scheduling your exam.**

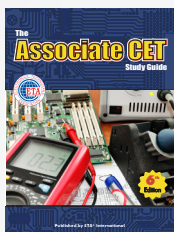
Certification Pathway:

ETA provides a stackable, latticed path for career advancement. Basic entry levels for Student (SET), Basic Systems Technician (BST), and Associate Electronics (CETa); Journeyman (CET), Senior (CETsr), Master Specialty (CETms), and Master (CETma); Basic, endorsements, and master Smart Technology Systems professional (STS); Certified Satellite Installer and endorsements; Fiber Optics Installer (FOI), Fiber Optics Technician (FOT), Fiber Optics Technician-Outside Plant (FOT-OSP), and Fiber Optics Designer (FOD), and more, or other specific certification disciplines have been designed into the ETA program as the need occurs.



ETA CERTIFICATIONS

BASIC ELECTRONICS



Associate Certified Electronics Technician (CETa)

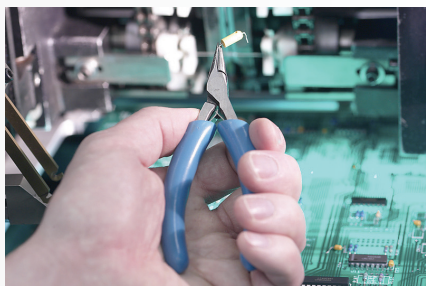
**The Associate exam is HALF PRICE if taken with a Journeyman certification at the same time!*

The Associate certification is designed for technicians who have less than two years experience or trade school training for electronics technicians. The CETa is more in-depth than the Student Electronics Technician (SET) as it expands on all of the topics listed within the SET. Every Certified Electronics Technician (CET) candidate must pass the Associate exam before they can qualify to sit for the full Journeyman certification. Once a technician has completed the four year term, they should specialize and take a Journeyman option. A hands-on skills test is available.

Basic Systems Technician (BST)

The Basic Systems Technician (BST) stand-alone certification is for individuals trained in the basic foundational levels of electronics used in troubleshooting systems and their functions without the need for component circuit analysis. The intent is to introduce a foundation of skills (in a wide variety of electronic industries) needed by technical personnel to advance their competency and efficiency with their work endeavor. If not specifically stated, the most recent technical standard revision is referenced. The BST is the foundational electronics systems certification and the next concentration up in knowledge is the Associate CET or the Systems Level Technician.

Electronics Modules (EM1-5)



The EM program is based on ETA's Associate level certification (CETa). The CETa 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 CETa) 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 CETa credential, the five BASIC modules of the CETa can be acquired individually. Once a technician attains all five module certifications, ETA will issue an official CETa certification (all five must be passed within a two-year period). Hands-on skills exam components are available. The technician may also choose to gain only those modules needed in order to be employable.

The five basic Electronics Modules are:

- Direct Current (DC)
- Alternating Current (AC)
- Analog
- Digital
- Comprehensive

Student Electronics Technician (SET)

The SET allows high school students and entry-level technicians the opportunity to earn a basic beginner's 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.

CETa Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$65 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

BST Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$80 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

EM1-5 Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$30 each |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

SET Exam Info

| | |
|-------------------------------|---------|
| Price: | \$35 |
| Type of Certification: | N/A |
| Renewal/Maintenance Required: | No |
| Certification Term: | 2 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

BIOMEDICAL

Biomedical Electronics Technician (BMD)



Biomedical electronics technicians are expected to obtain knowledge of the principles of modern biomedical techniques, the proper procedure in the care, handling, and maintenance of biomedical equipment and to display an attitude/behavior expected of an electronics technician who works in a hospital or healthcare environment.

BMD Exam Info

| | |
|-------------------------------|------------|
| Price: | \$80 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Biomedical Imaging Equipment Technician (BIET)

A BIET should be familiar with the following topics: Anatomy, Medical Terminology, Computer, Electro/Mechanical Safety, Picture Archive Communication System, Diagnostic Ultrasound Equipment, Building Wiring, Basic Radiographic Equipment, Film Processing, Test Equipment, Magnetic Resonance Imaging, Computed Tomography, Nuclear Medicine, Codes and Regulations, Troubleshooting, Radiation Safety, Radiation Physics, and Linear Accelerators.

BIET Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA SUBJECT MATTER EXPERTS

ETA's certification committees, specific for each certification, are composed of subject matter experts (SMEs) who are demographically, professionally, and educationally diverse with a broad range of experience. Certification committees require decisions on updating competencies; accommodating advances in technologies and best practices; when current exams should be replaced, edited, added to, and/or revised with the updated terminology and graphics. Continual awareness, review editing, vetting, and placing new exams into Beta formats for feedback are all thoroughly 'gone over with a fine toothed comb' to ensure the best positive understanding of the certification knowledge is tested and errors are kept at a minimum. Task analysis by educators, employers, and practitioners is an important part of the process of developing industry-based competencies, upon which the certification exams are based. Both internal and external judgments are included in development.

ETA's panels of experts are second to none. Strong educator input by committees of SMEs, multiple reviews by the ETA Advisory Board, many national associations, and technicians currently working in the field provide a level of review unprecedented in the electronics industry. Educators, practitioners, students, and employers have subjected ETA's assessments to critical scrutiny. Reliability, Validity, and Consistency are hallmarks of ETA certifications. ETA examinations are reviewed for updating each year. If you would like to volunteer as a SME, then please visit www.eta-i.org/subject_matter_experts.html and contact ETA's test development department.



"Obtaining an ETA certification brought a level of certification to the City of Fort Worth that it never had before. It opened new doors to customers that we previously were not able to obtain."

Chris Dusseau, CETsr
Communications Technician, IT – Radio Services
City of Fort Worth, TX

"Culminating an educational program with a world-class ETA certification can boost employee performance and advancement potential. We have requests to provide training with an ETA certification option from companies all over the world. The demand is there for employees with this knowledge and skill set."

Lee Kellett
General Manager, Light Brigade
Tukwila, WA

"Here I am on my new job at the City of Eugene that only an ETA certification would allow me to acquire. ETA helped transform my skills into an awesome career. Thank you ETA!"

Brian Greig, CETsr
Radio Communications Technician
City of Eugene, OR

ETA CERTIFICATIONS

COMMUNICATIONS

5G Technician (5GT)

The 5G Technician standalone certification is aimed at cellular technicians and engineers with knowledge of the wireless industry. The certification serves as an introduction to 5th Generation (5G) communications technologies and gives cellular technicians the opportunity to earn a certification that has valuable industry application. Aspiring 5G Technician competencies will give first-hand looks at industry standards, real world examples and case studies provided by a committee of subject matter experts with backgrounds in engineering, construction, cell carriers, broadcasting and entertainment.

5G Technicians are expected to learn in preparation for the ETA® International 5GT certification written examination, which covers a variety of topics including: 5G industry terminology, uses of 5G (enterprise, consumers and government systems), 5G equipment upgrading specifications, 5G networks, 5G construction best practices, 5G infrastructure design and general design thinking principles and concepts.

Certified Satellite Installer (CSI)

**The Certified Satellite Installer exam is HALF PRICE if taken with one or more endorsements at the same time!*

The exams are practical and cover a broad range of hardware and broadcast technology, but are not limited to specific brands of products. The CSI covers: Satellite Communications History & Theory, Satellite Dish Reflectors, Cabling, Amplifiers, Satellite Dish Feed – horns – LNBS & LNBFs, Satellite System Installation – Site Surveys, Satellite Receivers – Digital Technology, Interfacing With Other Consumer Electronics Equipment, Transmission – Internet Systems, Troubleshooting, Repairs, Sun Outage, and Safety.

Available CSI Endorsements:

- Antenna - \$65
- C and KU Band - \$65
- Commercial - \$65
- S-MATV - \$65

Distributed Antenna Systems (DAS)



Distributed Antenna Systems technicians and installers cover basic knowledge concepts of distributed antenna systems and antenna/cell installation. This also includes service and skills applicable to all of the functions required to safely and completely install, maintain, troubleshoot and provide support of in-building distributed antenna systems, communications and electronic equipment. Carrier, Public Safety, and mission critical aspects of boosting signal transmission and reception are discussed.

General Communications Technician – Level 1 (GCT1)

The General Communications Technician certification is a program that is modeled after communication systems fundamentals, basic electronics, and the U.S. Department of Homeland Security (DHS) guidelines covering many of the disciplines in the COMT program. The purpose of the GCT is to provide a study guide and training program, along with the appropriate certification testing that covers all of the areas a radio communications technician and engineer will encounter in the public safety communications or business/commercial radio field.

General Communications Technician – Level 2 (GCT2)

**Prerequisite is the Associate CET (CETa) or General Communications Technician – Level 1 certification*

The General Communications Technician Level 2 (GCT2) certification is a program modeled after wide-ranging private wireless industry communication systems encompassing more than the basics along with the U.S. Department of Homeland Security (DHS) guidelines covering many of the disciplines in the COMT program. The GCT2 competency comprises more complex areas which a radio communications technician and/or engineer will encounter in the public safety communications or business / commercial radio fields. This GCT2 certification will involve more knowledge of intricate skills and troubleshooting. The GCT2 certification technician candidate must hold the GCT1 or the Associate CETa as the minimum pre-requisite certification. Prior RF experience in industry and public safety best practices is highly suggested. The GCT program certifications are maintainable for all Levels.

5GT Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

CSI Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 50 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

DAS Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

GCT1 Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

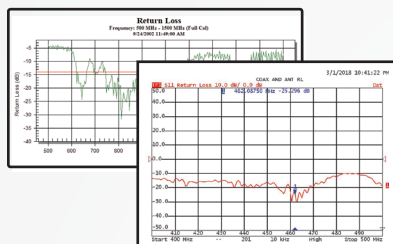
GCT2 Exam Info

| | |
|-------------------------------|------------|
| Price: | \$105 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

COMMUNICATIONS CONT.

Line & Antenna Sweep (LAS)



This Frequency Domain Reflectometer (FDR) certification includes hands-on testing and verification of line and antenna sweeping skills using modern FDR equipment, as well as a written exam. The LAS is a stand-alone certification, but it can be used as a Journeyman CET option when the Associate, or basic electronics, is also passed.

LAS Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Microwave Radio Technician (MRT)

Microwave radio still plays a major role in radio and data transmission systems. Wireless carriers continue to deploy microwave systems for data backhaul, and with the advancement of LTE for public safety, the need for microwave communications continues to grow. This certification includes basic knowledge concepts technicians need to know to install, align, maintain, and operate point-to-point microwave radio systems. Prior experience with radio systems and equipment is suggested. This includes core concepts of radio frequency (RF) energy, including how to identify it and safety requirements when working in an RF environment.

MRT Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Mobile Communications and Electronics Installer (MCEI)

This certification includes basic knowledge concepts of land mobile radio (LMR) and associated electronics equipment installation. This also incorporates required skills applicable to all of the functions required to safely and completely install mobile communications and associated electronic equipment, including removal and reinstallation.



MCEI Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Passive Intermodulation Testing (PIM)

Passive Intermodulation (PIM) is a form of interference where intermodulation mixing occurs within the confines of the transmission line and antenna network of a radio system. The ETA PIM certification assures site managers that quality antenna installation has taken place and meets the desired engineering and propagation standard for that site. The PIM test set operator knows how to use the testing equipment hardware, and can do so in a safe and harmless manner. Additionally, the ETA certification is based on the IEC 60237 standard covering the installation of antennas, connectors, jumpers, and related antenna network elements, allowing the holder of that certification to use any manufacturer's test set at any frequency range. An ETA certified technician has a clear understanding of antenna theory and interference testing and will be well positioned to help resolve site PIM issues, so resolving these interference issues will be easier for the ETA-certified technician.

PIM Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$130 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 50 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Practical Antenna Basics (PAB)



This certification includes the fundamental principles of basic antenna theory, including basic electromagnetic wave propagation with sound practical comprehension of antenna operational characteristics and common configurations found in modern RF communication systems. The PAB covers the basic areas in which an RF propagation technician will encounter in the critical role an antenna has in wireless communications systems, radio fields and other applications.

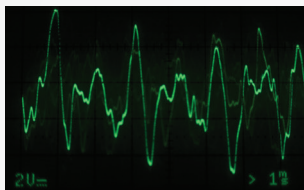
PAB Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

COMMUNICATIONS CONT.

RF Interference Mitigation (RFIM)



RF interference mitigation technicians are expected to obtain knowledge of radio frequencies, how they interact in the environment and within equipment, how to identify and to correct interference problems. Prior experience with radio systems and equipment is strongly suggested (or taking a RF Interference hunting course) before taking this certification exam.

Advanced Interference Mitigation (AIM)

Advanced RF Interference Mitigation technicians are expected to obtain knowledge of radio frequencies, how they interact in the environment and within equipment, how to identify and to correct complex interference problems using advanced troubleshooting procedures and technology. Prior advanced RF experience with radio systems and radio equipment, such as spectrum analyzer utilization/techniques, OR taking the available two-day Advanced RF Interference Mitigation course with the optional Hands-On, is strongly suggested before comprehending the AIM competencies and sitting for this certification examination.

Radar (RAD)

Radar electronics technicians are expected to obtain knowledge of radar basics and concepts, which are then applicable to various types of avionics, maritime, and land radar systems. Radar electronics technicians must be knowledgeable and have abilities in the following technical areas: Block Diagrams and Schematics, Components, Cabling and Antennas, Hand Tools & Soldering, Mathematics, Amplifiers, Radar Transceivers, Interfacing, Satellite, Wireless, Data Communications, Computers and Digital Concepts, Software-Programming, and Troubleshooting.



Telecommunications (TCM)



Telecommunications electronics technicians are expected to obtain knowledge focused on wired and wireline communications basic concepts, which are then applicable to various types of voice, data and video systems. Telecommunications Electronics Technicians must be knowledgeable and have abilities in technical areas such as: Cabling, Analog Telephony, Equipment, Telecom Safety and Mathematics, Transmission Service Providers and Protocols, Distribution Methods, Digital Telephony, Interfacing, and Troubleshooting.

Wireless Communications (WCM)

The following are some of the topics considered necessary for those workers performing installation, maintenance and repair of mobile and fixed radio communications systems: Radio Theory, Components, Basic Analog Circuits, Antennas/Towers, Cabling and Connectors, Block Diagrams, Grounding – Lightning Protection, Radio Mathematics and Formulas, Interfacing, Computer and Digital Circuits, Mobile Systems, Frequency Bands for Mobile Communications, Troubleshooting, Commercial Radio Networks, Modulations Schemes, Control Systems, RF Interference/RF Coverage Analysis, Testing, and Diagnosis.

RFIM Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

AIM Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

RAD Exam Info

| | |
|-------------------------------|------------|
| Price: | \$80 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 50 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

TCM Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

WCM Exam Info

| | |
|-------------------------------|------------|
| Price: | \$80 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

FIBER OPTICS AND DATA CABLING

ARINC Installer and Technician (AFI, AFT)

ARINC is a division of the SAE Group along with SAE International. ARINC organizes aviation industry committees and participates in related industry activities that benefit aviation at large by providing technical leadership and guidance. These activities directly support aviation industry goals: promote safety, efficiency, regularity, and cost-effectiveness in aircraft operations. ARINC recognizes ETA International as the industry trained fiber optics certification entity in regards to the aerospace industry. The ARINC certifications are based on the ARINC 807-3 report and SAE International-recognized standards. The ARINC Installer is the aerospace fiber and connector installation certification, while the ARINC technician includes the more advanced aerospace troubleshooting and repairing.

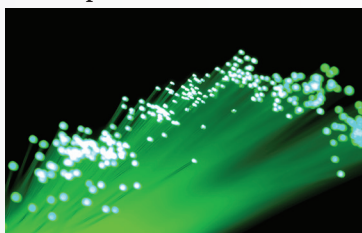
Data Cabling Installer (DCI)

ETA data cabling installers are expected to know the basic concepts of copper cabling installation and service—which are then applicable to all the procedures required to safely and competently install communications cabling. Basic electricity and safety; data communications basics; definitions, symbols and abbreviations; cable construction and types; cable performance characteristics; cabling standards; basic network topologies; basic network architectures; National Electrical Code (NEC®); cabling system components; DCI installation tools; connectors and outlets; cabling system design; cabling installation; connector installation; cabling testing and certification; cabling troubleshooting; documentation.

Fiber Optics Designer (FOD)

The ETA 40 hour Fiber Optics Designer training program is an optical designer certification that will provide an in-depth knowledge of optical local area networks. This certification covers all aspects of a successful fiber optic system design from network protocols, network configurations, optical cabling, industry communications standards, determination of fiber count, hardware selection, splicing/termination methods, and cable system testing and documentation. All that is learned in class is put into practice through multiple and intensive case studies. The ETA-certified Fiber Optics Designer program provides detailed instruction and practice of Local Area Network fiber optic design.

Fiber Optics Installer (FOI)



A fiber optics installer has a general understanding of optical fiber installation, connectorization, splicing, and testing. An FOI is also familiar with optical fiber, connector, and splice performance characteristics described in TIA-568-, TIA-569-, TIA-758-, ITU-T G.671, ITU-T G.652, Telcordia GR-326, and Telcordia GR-20. A fiber optic installer can perform connector endface evaluation as described in TIA-455-57B and is proficient in optical loss testing, as described in TIA-526-14A. He or she also understands the installation requirements described in articles 770 and 250 of the National Electrical

Code (NEC®). A fiber optic installer is proficient at the installation of connectors on various types of fiber optic cables, using various types of epoxies, and performing mechanical and fusion splicing.

Fiber Optics Technician (FOT)

**Prerequisite is the Fiber Optics Installer*

A fiber optics technician has a full understanding of inside plant optical fiber, connector, and splice performance characteristics as described in TIA-568 and can use these performance characteristics to create a worst-case power budget for a fiber optic cable plant. An FOT can proficiently perform optical loss testing as described in TIA/EIA-526-14A and perform connector endface evaluation as described in TIA-455-57B. Using an OTDR, an FOT can effectively locate faults in a fiber optic cable, mated connector pair, or splice as well as evaluate optical fiber performance, mated connector pair performance, or splice performance for compliance with TIA-568-.

AFI and AFT Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$180 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 1 Yr |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

DCI Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

FOD Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 80 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

FOI Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

FOT Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$155 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

FIBER OPTICS AND DATA CABLING CONT.

A Fiber Optics Technician – Inside Plant (FOT-ISP)

A fiber optics inside plant technician must be able to accurately install, terminate, test, and troubleshoot fiber optic communication systems used in premises, LANs, enterprise and data center installations. Included are various techniques applicable to gigabit multimode and single-mode systems consisting of unique test requirements in Ethernet and Fibre Channel, but also pertinent to FTTx, security systems, and CATV networks. As many inside plant installations use multimode fiber, the FOT-ISP technician must recognize the various types - IEC defined OM2, 3, 4 & 5 multimode - and OS2 single-mode fibers along with the various proper launch conditions used when testing fiber spans as also defined by the TIA-568 and TIA-942 standards. Technicians must similarly comprehend various fiber optic cable connector types and termination used in these networks, using best practices for installing and testing fiber links.

Fiber Optics Technician—Outside Plant (FOT-OSP)

A fiber optics outside plant technician must be able to properly terminate, test and troubleshoot single mode fiber optic communication systems. This includes various types of termination techniques applicable to high-speed laser-based systems including SONET, DWDM, FTTx, and CATV networks using ITU-T G.652 and G.655 single mode fibers. Disciplines include mechanical and fusion splicing per the TIA-758 standard and the preparation of fiber optic cables and cable management products. Technicians must also know testing and troubleshooting of each element of the fiber optic communication systems along with unique test requirements of SONET, DWDM, FTTx, and CATV networks.

Fiber To Any Antenna (FTAA)



The Fiber To Any Antenna standalone certification is for individuals who have been trained in the practice of installing fiber optic cabling at wireless and cellular facilities. These disciplines are applicable to all the functions required to safely and competently install pre-terminated fiber optic transmission cable assemblies and connection devices onto equipment and antenna(s), wherever the antenna system may be located. Included are how to inspect, clean and test the fiber plant along with how to identify and troubleshoot problems during and after installation.

SAE Fiber Optics Fabricator (SFF) and SAE-ARINC Fiber Optics Fabricator (SAFF)

For individuals involved in the manufacturing, installation, support, integration and testing of fiber optics systems. Intended for managers, engineers, technicians, trainers/instructors, third party maintenance organizations, quality assurance and personal production. Both the SAE and ARINC certifications are based on SAE International standards. The Aerospace industry has always required the highest standards of workmanship to be maintained. This certification is universally recognized for competency, ability, and knowledge as an Aerospace Fiber Optics Fabricator (FAB). ETA worked with the SAE International's Fiber Optics and Applied Photonics Committee to develop this certification. To be recognized for this honor, practicing fabricators must demonstrate the necessary skills and knowledge verifying their proficiency in Aerospace Fiber Optics Fabrication procedures and technology as defined in the SAE International Aerospace ARP5602/3 and ARP5602/4 competencies.

Termination and Testing Technician (TTT)

This certification covers knowledge to properly, terminate, connect, test, and troubleshoot IP-enabled voice/data/video cable and devices to each other. One of the key advantages to using Cat 5e/6/6_A and fiber-optic cables and connectors for electronic security and voice/video/data installations is that these cable connections can be readily built using the proper tools and techniques, which are taught in the required course. This part of the training will emphasize the ETA challenge of being vendor-neutral and applying industry standards for terminations and cable performance. The knowledge gained by the examinees will be applicable to any vendor's products within the scope of the technology studied. One of the primary principles of the network cabling standard is that if a cable is properly terminated and tests satisfactory, that cable can be used to connect any proper device from any manufacturer. Vendors are making thousands of different devices, all of which can be readily connected to a network if the fiber, coax, and/or copper cable to be used is properly terminated and tested.

FOT-ISP Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$155 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

FOT-OSP Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$155 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

FTTA Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

SFF Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$180 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 2 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

TTT Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

INFORMATION TECHNOLOGY

Computer Service Technician (CST)



The Computer Service Technician performs hardware servicing and provides systems software skills for personal computers. The knowledge used includes Computer Assembly/Disassembly; Motherboards; Buses; System Resources, Processor Characteristics; Physical and Electronic Memory Characteristics; Secondary Storage Devices; Peripheral Devices; Ports; Power Concepts and Supplies; Basic Networking; Portables; Digital Concepts; Troubleshooting/ Preventive Maintenance; Operating Systems; File Management; Safety, Security and Workplace Practices.

Information Technology Security (ITS)

The Information Technology Security certification covers all areas of cybersecurity for information technology. ITS-certified specialists are expected to have the major knowledge, skills, and abilities in order to perform the professional tasks associated with the development of security plans and processes for information technology and cybersecurity. This certification identifies a specialist's knowledge of computer hardware and software security measures as well as wireless communications security, device security, cryptography, social engineering, virus detection/mitigation, troubleshooting, disaster prevention/recovery and site risk analysis. It is highly suggested that an ITS have prior computer systems and computer networking experience.

Network Computer Technician (NCT)

Network Computer Technicians are expected to obtain knowledge of computer electronics basic concepts, Internet and networking technology applicable to various areas of the computer industry. More specifically, NCTs must be able to function, structure, operate, file manage, install, configure/upgrade, manage memory, diagnose and troubleshoot operating systems and hardware (including motherboard and processors and printers).



Network Systems Technician (NST)

A Network Systems Technician is a network professional who is expected to obtain knowledge of computer network basic concepts, applicable to the various specialty areas of the computer industry. The NST must be familiar with the following: Computer Network Terminology, Network Administration, Wide Area Networks and Devices Used to Extend Networks, Network Architectures, Computer Network Topologies and Classifications, Network Services, Network Operations, Network Standards, Troubleshooting LAN/WAN Test Equipment, Network Server and Workstation Computer System Hardware, Network Operating Systems, and Disaster and Security Planning for Networks.

Wireless Network Technician (WNT)

The Certified Wireless Network Technician is a network professional who is expected to obtain knowledge of the operation and maintenance of wireless networking concepts, RF and IR propagation and modulation technologies, applicable to all the specialty areas of the wireless networking industry. Once the WNT has acquired these skills and knowledge, the technician will be able to enter employment in any part of the wireless networking industry. With minimal training in areas unique to the specific products and protocols, the WNT should become a productive member of computer industry workforce.

CST Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ITS Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

NCT Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

NST Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

WNT Exam Info

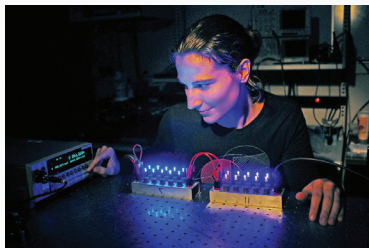
| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

PHOTONICS AND PRECISION OPTICS

Photonics Technician Operator (PTO)

Photonics Technician Operators work in jobs where they assemble, measure, test, and repair optical components such as lenses, mirrors, filters, fiber optics, and electro-optic or other photonics devices plus optical sources such as lasers and light-emitting diodes (LEDs). Technicians typically work in applications where photonics is an “enabling technology” — manufacturing/materials processing, Internet/communications, biomedical equipment, and defense/homeland security systems development/integration. Due to the high technical standards and safety issues involved, technicians will receive specialized training in both knowledge and hands-on skill items.



PTO Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$205 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 233 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

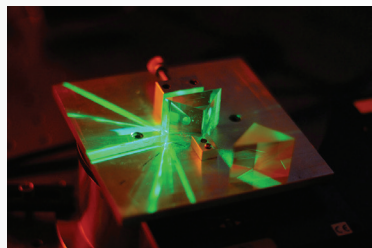
Photonics Technician Specialist (PTS)

Photonics Technician Specialists work in areas that utilize the skills and knowledge of the operator level, but also an additional higher level of optics, photonics physics, and technology and that require a greater variety of hands-on competencies in laser and optical components and systems. They typically work in applications such as the following: research and development laboratory; product development, test, and production specialists who are team members for original equipment manufacturers (OEMs) of lasers, optics, and photonics components and systems; field service specialists for OEMs or companies that manufacture and/or utilize lasers, optics, and photonics components and systems. They are graduates of AAS degree programs that focus specifically on optics, lasers and photonics.

PTS Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$205 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 297 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Specialist in Precision Optics (SPO)



Precision Optics Specialists produce, test, and handle optical (infrared, visible, and ultraviolet) components that are used in lasers and sophisticated electro-optical systems for defense, homeland security, aerospace, biomedical equipment, digital displays, renewable energy production, and nanotechnology. SPOs also integrate precision optical components into these electro-optical systems and maintain them, including handling, storage and transport. SPOs will also have experience in shaping, polishing, and coating precision optics; using optical instruments; understanding procedures and guidelines for verifying optical component dimensions and

tolerances. These technicians have a greater range of hands-on competencies and experience with fabrication and test a wider range of types of optics and optical coatings.

SPO Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 225 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Technician in Precision Optics (TPO)

Precision Optics Technicians work in optical component fabrication technical areas in optical shops, optics manufacturers and in quality control departments (incoming and/or outgoing inspection) for organizations that incorporate precision optics into various systems. They must be able to examine the properties and uses of a variety of bulk materials; have experience in the use of equipment and procedures for shaping, polishing, and coating precision optics; and be able to use optical instruments, procedures and guidelines for verifying optical component dimensions and tolerances. They can also handle, store, and ship precision optical components. Precision optics technicians have the minimum required hands-on competencies and experience with fabrication and tests of fewer types of optics. Due to the high technical standards and safety issues involved, technicians will receive specialized training in both knowledge and hands-on skill items.

TPO Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 98 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |



CHECK OUT ETA ON:



ETA CERTIFICATIONS

RENEWABLE ENERGY

Electric Vehicle Technician (EVT)

Electric Vehicle Technicians (EVTs) work on vehicles powered solely by electricity. They perform routine maintenance like other mechanics; however, EVT's must have extensive knowledge of how lithium-ion batteries and automotive systems interact. In addition, they may replace hydraulically assisted systems with electric-powered systems, such as power-steering pumps or air-conditioning compressors, to improve fuel economy.

Certification is for individuals interested in attaining training from an ETA® International-approved EV school. In this program students will develop skills in safety, troubleshooting and repairing of Electric Vehicles. Due to the high voltage (300 VDC and above) and safety issues involved, technicians are required to receive specialized training in both knowledge and hands-on skill items.

EVT Exam Info

| | |
|-----------------------------------|-------------|
| Price: | \$205 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Passing Score for Safety Portion: | 100% |
| Time Allowed to Test: | 2 hours |

Photovoltaic Installer – Level 1 (PVI1)



The Photovoltaics (PV) Level 1 certification is designed for individuals seeking an entry-level position in the solar electric industry. Individuals must have hands-on training from an ETA-approved school and be knowledgeable in topics such as solar resources and principles; proper product identification and selection criteria; system design options; system sizing and design for residential scale systems; proper installation techniques; safe installation practices; as well as maintenance and troubleshooting methods.

PVI1 Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Photovoltaic Installer/Designer – Level 2 (PV2)

**Prerequisite is the CSS certification, 60 verified hours of PVI training (PVI1 certification or equivalent), OSHA 10 (or equivalent), and PV2 checklist.*

The Photovoltaics (PV) Level 2 certification is designed for individuals with existing field experience in the solar electric industry. Individuals will demonstrate experience in the installation of a number of system options, as well as receive training from an ETA-approved program. Current OSHA 10 certification is also a requirement. In addition to the subject matter covered in PV Level 1, successful applications must demonstrate knowledge in commercial-scale system design and installation; project management; site and crew management; economic considerations for various design options; permitting processes; and various paperwork requirements for large-scale systems.

PV2 Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Photovoltaic Solar Selling (PVSS)

This Photovoltaic (PV) Solar Selling certification is designed to prepare participants to market solar technology for any company with a focus on renewable energy. The competency and the PV Solar Selling Instruction self-study course is provided to ensure administrative, marketing, sales personnel and customers all have the appropriate knowledge necessary to discuss, evaluate and market a Photovoltaic (PV) system. The PV Solar Selling Instruction self-study course content informs participants how to approach educated and non-educated customers when conversing about PV solar systems and their many benefits. Although the course does not contain the technical hands-on aspects that a solar installer, technician, or designer would require, it does provide the competencies and insights into system benefits and limitations, how to overcome objections to buying a solar systems and how to show the customer their return on asset or investment (ROI).

PVSS Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Small Wind Installer (SWI)

The ETA International Small Wind Installer Certification provides practical assessments in wind power energy generation under 100 kW. Hands-on training from an ETA-approved school is necessary and individuals should be educated in the following topics including the theory of wind energy and electrical generation; site evaluation; design and selection of wind systems; proper installation, components and troubleshooting methods; safety; finance; and environmental assessment and management.

SWI Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | Yes |
| Questions on Exam: | 86 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

SMART HOME

Certified Alarm Security Technician (CAST)

Alarm-Security technicians must be able to identify and describe the operations of alarms and have basic understanding of technology and its configuration, fiber optics – telecommunications, software, and computers and locks. The CAST will be able to explain, understand, and use block diagrams and schematics, digital concepts, software, hand tools—soldering, data communications, and cameras and intercoms.



CAST Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Electronic Security Networking Technician (ESNT)



The ESNT was developed for technicians who have gained knowledge and skills needed to properly cable, connect, install, program, and troubleshoot IP-enabled security devices onto local area networks and the Internet. This certification is an acknowledgement of the examinee's familiarization and understanding of the hardware and theory of operation of this medium. It is a stand-alone certification that can also be used as a Journeyman option.

ESNT Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 80 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Smart Technology Systems (STS)

**The Smart Technology Systems exam is HALF PRICE if taken with one or more endorsements at the same time!*

Smart Technology Systems is a professional certification for those who design and oversee the installation and integration of electronics systems in residences and light commercial buildings. The objective of the STS is to produce a residential or light commercial electronics systems package that will allow all data, control, and communication signals to be integrated at the premise controller and converged into one secure cohesive communication stream, to either be used within the premise or to be passed back and forth through the gateway. A STS should be proficient in the many IoT protocols used over diverse media to communicate with and control residential and light commercial electronics systems.



STS Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75-80 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Available STS Endorsements:

- Audio-Video - \$80
- Computer Networking - \$80
- Security-Surveillance - \$80
- Environmental Control - \$80

Smart Technology Systems Master Integrator (STSmI)



The STS Master Integrator will be proficient in all of the core STS skills and knowledge and in planning and designing electronics and communications equipment systems and layout for new and existing construction. The STS Master Integrator is capable of designing the entire system and network for audio, video, data and control of security and environment to function in one IP bit stream converged at the home controller. He/she is also capable of troubleshooting and debugging the system and planning installation or modifications. The STS Master Integrator has extensive knowledge of the operation and technology and is proficient in each of the basic five subcategories of smart technology electronics.

STSmI Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$80 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

WORKFORCE READINESS CERTIFICATIONS

Certified Service Manager (CSM)

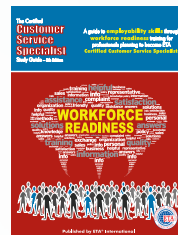
This is a valuable examination for those who serve as managers, owners or department heads of service businesses such as electronics, computer, communications and appliance repair facilities. Several of the topics covered in this examination include: Manager Responsibilities and Objectives, Personnel Profiles and Job Descriptions, Team Building, Training, Hiring and Employment Laws, Employee Compensation Systems, Customer Relations Policies and Skills, Service Policies, Service/Production Area Development, Test Equipment Needs and Procurement, Financial and Parts Department Management, Warranties and Risk of Liability, Contract Negotiation, Vehicle Procurement and Maintenance, Association Memberships/Involvement, Quality Systems, Security, Safety/OSHA, and Project Management.

CSM Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$155 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | No |
| Certification Term: | Lifetime |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Customer Service Specialist (CSS)

The Customer Service Specialist (CSS) is a soft skills certification that validates one's work readiness skills through employability concepts. Though developed to meet the role of an evolving service oriented electronics technician, CSS is relevant to every industry, employer and employee. Topics included are Safety, Ethics, Respect, Teamwork, Communication, Telephone and E-mail Techniques, Social Media, Problem Solving, Interpersonal Relationships, and Sales and Marketing.



CSS Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$80 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | No |
| Certification Term: | Lifetime |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ADDITIONAL CERTIFICATIONS

Audio-Video Forensic Analyst (AVFA)

An Audio Video Forensic Analyst's task is to improve the perceived audio or visual clarity of a digital recording. An AVFA also comprehends the limitations of technology and the opinions that can be formed. However, AVFA work will also include measurements, cross referencing data, and handling everything in accordance with the highest ethics in preparation of your expert testimony in the service of justice. An AVFA will be expected to understand industry best practices, stay up-to-date on innovative peer-reviewed technologies and methods, maintain data integrity through the use of hash values and/or chain-of-custody control, keep detailed notes of activity, adapt existing knowledge to unexpected circumstances, and follow the procedures of the rules of evidence applicable to the jurisdiction of the case working solely for the evidence.

AVFA Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Avionics (AVN)

The avionics specialty is designed to assess the knowledge and skills of individuals who install, maintain and adjust electronics equipment, cabling and the accessories used in aviation communications and control equipment. Several of the topics covered in this examination include: Avionics Systems, Cabling, Computers and Digital Concepts, Amplifiers, Interfacing, Antennas and Transmission Lines Components, Mathematics, Network Topologies and Infrastructures, Optical Cabling, Safety, Test Equipment and Tools and Satellite Communications.

AVN Exam Info

| | |
|-------------------------------|---------------------------|
| Price: | \$80 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Commercial Audio Technician (CAT)



The Commercial Audio Technician (CAT) is a certification for sound system technicians who need to design, install and troubleshoot speech and music sound systems in commercial and institutional environments. Commercial Audio Technicians must be knowledgeable in Acoustics, Microphones, Speakers, Sound & Measurements, Wiring, 70-Volt Systems, Troubleshooting, Safety, and Codes and Standards.

CAT Exam Info

| | |
|-------------------------------|------------|
| Price: | \$80 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 100 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

ETA CERTIFICATIONS

Digital Video Editor (DVE)

Digital video editing is experiencing an unprecedented boom with a worldwide increase of not only professional digital editing, but the melding of amateur and professional video into a product available through the Internet and many social media venues. ETA is proud to announce a new vendor-neutral exam and certification for Digital Video Editor (DVE), created for all media professionals working with digital videos. Many video editor positions may not require a degree or extensive training, however professional video editors will need the knowledge of industry standards and the skills necessary to meet the demands of this growing field. Examinees will be required to know both audio and video fundamentals, screen formats, digital video formats and fundamentals, digital data rates, and fundamental video editing processes. Customer service basics are also covered in regards to schedule requirements, progress reporting, production and transmission costs, and hardware and software requirements for video editing.

DVE Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Gaming and Vending Technician (GVT)

The Gaming and Vending Technician (GVT) certification is intended for entry-level technicians with a sound background in electronics. Technicians will work in the field to troubleshoot, repair and calibrate gaming and vending type equipment. Money handling, basic electrical, circuitry, computer hardware and software, and safety are topics included in this certification. The GVT is a stand-alone certification and must be maintained every four years.



GVT Exam Info

| | |
|-------------------------------|-------------|
| Price: | \$105 |
| Type of Certification: | Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

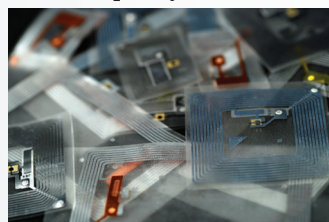
Industrial (IND)

Industrial journeyman-level electronics technicians are expected to obtain knowledge of industrial electronics basic concepts, which are then applicable to all the various specialty areas of industry. Industrial Electronics Technicians must be knowledgeable and have abilities in the following technical areas: Amplifiers, Optical Wiring, Block Diagrams-Schematics, Robotics, Hydraulics, Power Supplies, Test Equipment-Tools, Mathematics, Computers-Digital Concepts, Safety, Satellite-Wireless-Data, Communications, Cabling, Troubleshooting, Motors, Programmable Logic Controllers, and Software.

IND Exam Info

| | |
|-------------------------------|------------|
| Price: | \$80 |
| Type of Certification: | Journeyman |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

Radio Frequency Identification Technical Specialist (RFID)



This certification is intended for an electronics technician with an understanding of RFID. The technician should have a basic understanding of the hardware and theory of operation of radio communications as it applies to RFID radio transceiver technology. RFID is a stand-alone but can be used as a Journeyman option when the Associate exam is also taken and passed.

RFID Exam Info

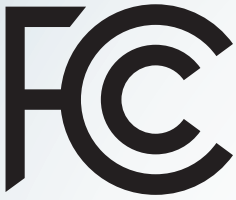
| | |
|-------------------------------|---------------------------|
| Price: | \$105 |
| Type of Certification: | Journeyman or Stand-Alone |
| Renewal/Maintenance Required: | Yes |
| Certification Term: | 4 Yrs |
| Hands-On Required: | No |
| Questions on Exam: | 75 |
| Passing Score: | 75% |
| Time Allowed to Test: | 2 hours |

UPGRADE YOUR CERTIFICATION!

Many ETA Standalone certifications in certification maintenance can be upgraded to a Journeyman Certified Electronics Technician (CET). If the certification holder successfully completes the Associate CET (CETa) certification examination, then the maintained original standalone is combined with the CETa to upgrade to a CET. To apply for the Journeyman CET, you must have two or more years of combined work and electronics training. To upgrade, please fill out the Journeyman CET upgrade form. Journeyman upgrades are \$50.

ETA also offers rollovers for popular industry certifications that are comparable to an ETA equivalent certification. Some examples are CompTIA A+ (ce) Rollover to CST, CertTEC BEE to Associate CET, CompTIA Network+ (ce) Rollover to NST, FCC Element 8 + Associate CET/GCT1/Journeyman CET to RADAR, CEA MCEP to MCEI, Anritsu PIM to ETA PIM, and FCC GROL + Associate CET/GCT1/Journeyman CET to WCM.

FCC Commercial Radio Operator Licenses



Commercial Radio Operator Licenses

FCC Licenses are required by law to operate and maintain many types of communications equipment. The broadcast, aeronautics, and maritime industries are the primary employers of commercial license holders, although many other fields now require FCC licenses. ETA has proudly served as an FCC COLEM (Commercial Operator License Examination Manager) since 1993. You can read more about the FCC and its programs at www.fcc.gov.

| FCC Exam Info | |
|--|------|
| One element | \$50 |
| Any two elements taken together | \$50 |
| Additional elements taken at the same time | \$25 |
| License renewals | \$80 |

Marine Radio Operator Permit (MP) – Element 1

MPs, or MROPs, are required to operate radiotelephone stations aboard certain vessels that sail the Great Lakes. They are also required to operate radiotelephone stations aboard vessels of more than 300 gross tons and vessels which carry more than six passengers for hire in the open sea or any tidewater area of the United States. They are also required to operate certain aviation radiotelephone stations and certain coast radiotelephone stations.

General Radiotelephone Operator License (PG) – Elements 1 & 3

A PG, or GROL, is required to adjust, maintain, or internally repair FCC licensed radiotelephone transmitters in the aviation, maritime, and international fixed public radio services. It conveys all of the operating authority of the MP.

Global Maritime Distress and Safety System Operator (DO) – Elements 1 & 7

The DO, or GMDSS Operator, qualifies the holder to operate, and make some basic equipment adjustments to, Global Maritime Distress and Safety System (GMDSS) radio installations. It also confers the operating authority of the MP.

Global Maritime Distress and Safety System Operator - Restricted (RG) – Elements 1 & 7R

The RG, or GMDSS Restricted, qualifies the holder to operate, and make some basic equipment adjustments to, Global Maritime Distress and Safety System (GMDSS) radio installations, but only on voyages that remain within twenty (20) nautical miles of shore. It also confers the operating authority of the MP.

Global Maritime Distress and Safety System Maintainer (DM) – Elements 1, 3, & 9

The DM, or GMDSS Maintainer, qualifies personnel as GMDSS radio maintainers to perform at sea repair and maintenance of GMDSS equipment. It also confers the operating authority of the PG and MP. NOTE: In instances where an applicant qualifies for both a DO and a DM, the applicant qualifies to hold a GMDSS Radio Operator/Maintainer License (DB).

Radiotelegraph Operator (T)

The T authorizes the holder to operate, repair, and maintain ship stations, and to repair and maintain coast radiotelegraph stations in the maritime services. It also confers all of the operating authority of a T2.

Ship Radar Endorsement – Element 8

Only persons whose commercial radio operator license bears this endorsement may repair, maintain, or internally adjust ship radar equipment.

ETA Supports STEM Education

“STEM education is an interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering, and mathematics in a context that makes connections between school, community, work and the global enterprise enabling the development of STEM literacy and with it the ability to compete in the new economy.” (Tsupros, 2009) ETA International supports the movement to keep the United States at the forefront of research, innovation, and technology.

As the need for STEM occupations continues to grow, tech-savvy skills are critical. Studies have proven that STEM workers are less likely to experience joblessness than non-STEM workers. (STEM: Good Jobs Now and for the Future, U.S. Department of Commerce, July 2011) As an association for the technician and educator, both can be assured that ETA has always integrated STEM into all of its technical certifications. This allows those who earn ETA certifications the benefit of holding valuable tools as they enter into exciting, rewarding, and innovative careers.

ETA MEMBERSHIP

Association membership is voluntary—a fundamental premise of ETA’s member eligibility requirements that sets us apart from most certification associations. If you plan to or are currently working in any technical or related business area, then you are eligible to join ETA. Students, instructors, technicians, trainers, distributors, company owners, military personnel, and certified technicians all hold membership in ETA. YOU can too!

Members receive benefits such as the *High Tech News* (ETA’s bi-monthly digital publication) and association voting privileges, as well as discounts on various industry publications, merchandise, and services. ETA International offers six types of membership: individual, student, institutional, master, retiree, and lifetime. All memberships are good for one year with the exception of the lifetime and two-year individual options. Each will receive a wall certificate. You can view more information at www.etai.org/membership.html.

Individual:

Price: \$40.00 per year or \$75.00 for two years

Members of ETA receive a digital subscription to the *High Tech News (HTN)*, ETA’s bi-monthly publication and discounts on certain ETA study materials. Members also have access to the “Members Only” site that includes free practice exams, HTN archives, and other exclusive materials. ETA offers a two year individual membership (USA only) for \$75.00.

Student:

Price: \$20.00 per year

***Current student ID or course schedule is required.**

Student memberships apply to those who are enrolled at state and commercial electronics training institutes or in correspondence and military courses. Students also receive the same benefits as those who are individual members of ETA in addition to assistance in developing a successful career.

Institutional (includes four Individual memberships):

Price: \$250.00 per year

Hardware manufacturers, public and private educational institutions, service providers, and affiliated groups can have a voice as an institutional member with ETA. Institutional memberships enjoy the same benefits as individual memberships plus additional advertising opportunities.

Master CET:

Price: \$25.00 per year

You’ve earned distinction within the industry by becoming a Master Certified Electronics Technician (CETma). ETA can help you connect with other professionals from around the world to discuss issues, share experiences, and learn from one another. In addition, your membership gives you access to our members-only technical publications, seminars, workshops, newsletters and special services, in the same way as the individual membership.

Retiree:

Price: \$10.00 per year

If you have retired, and would like to stay involved in your industry, then an ETA retiree membership might be right for you. These memberships offer the same benefits of an individual membership, but at a reduced cost.

Lifetime:

Price: \$500

If you would like a lifetime membership with no annual renewals at a great discount, then this is the option for you! Included are all of the perks of the individual membership plus the satisfaction of knowing you are supporting your industry with a lifetime commitment to ETA.

| <u>BENEFITS</u> | <u>Member Benefit</u> | <u>Non-Member</u> |
|---|-------------------------------|-------------------|
| <i>High Tech News</i> , ETA’s bi-monthly magazine | FREE | \$20.00 annually |
| Online Practice Exams | FREE | Members Only |
| Association Voting Privileges | FREE | Members Only |
| Study Materials | Discounts on selected texts | Members Only |
| Discounted rates for ETA’s annual convention | Discount on registration fees | Members Only |

Where are ETA-Certified Individuals?

In 2021, students and professionals at the following schools and companies chose to become certified through ETA® International. By choosing to become certified from this accredited association, these individuals are closer to achieving their career goals.

127th B Co ASB
1st Responders LLC
2nd NATO Signal Battalion
307th ESB C Co
3-25 Avn Regt
3rd Marines Reg
40th BEB
591st Military Police
59th Signal BN
702 Communications
725th BSB HHC
910 Telecom
ABcom LLC
ABS Planet Communication
Access Montana
ACDC Electric
Ace Technologies
ACG Systems
Actavo
Ada Co Sheriff's Office
ADCOMM Engineering, LLC
Adman Electric
ADT Fivestar Cleaners
ADT Security Services
Advanced Auto
Advanced Solutions Technical Institute
Advanced Technology Center
Advanced Wireless
Advantage Communications
Advantalink Corp
AECOM
Affinity Solutions
AFL Global
AFL Hyperscale
Aker Solutions
Alaska Power & Telephone
Aldoosi Global
Aldridge Electric
Alexander City Schools
All Native Group
Allcomm Wireless
Allied Telecom Corp
Altech Electronics Inc
Alutiiq LLC
Amentum/Dyncorp
Ameren Union Electric Company
Ancom Technical Center
Anderson Radio Inc
Anoka Co Emergency Comms
Anziva Technologies
Apex Construction
Apex Design PC
APUA Telephones
Arcota Association
Arizona Department of Transportation
Arrow Underground
Artistic Memorial
Arts Handyman Services
Astronics Corporation
AT&T
ATC Communications
Athletico
Atlantic Comm Tech
Augusta Communications
Auravox LLC
AVC Inc dba Arkansas Valley Communication
Avoptics LightWorks LTD
B & C Communications
BAE Systems
Baker Electric
BANC3 Engineering Inc
Bank of Guam
Baycom Inc
BBH Electric
Bear Communications & Electronics/Broken Arrow
Bear Communications & Electronics/Deer Park
Bear Communications & Electronics/EVANS
Bear Communications & Electronics/Marrero
Bear Communications & Electronics/Redmond
Bear Communications & Electronics/Round Rock
Bear Communications & Electronics/Watertown
Bearcom - EMCO
Bearcom Canada/Edmonton
BEK Communications
Bender Communications
Benton Communications
Berkeley Electric Cooperative
Best Quote Construction
Big G Electric and Engineering
Bill's Sound & Security
Bird Technologies
Bluebird Network
Bluewire LLC
Bonds Career Center of Greenville County Schools
Borntan Contracting
Borden Dairy Milk
Brainamics Instituto de Tecnología Aplicada
BranchServ
Brattan Industries
Brazos County
Brooks Berry Haynie and Assoc
Bucks County Technical High School
Bugtossell Wireless
Bureau of Land Management
C Co 40th ESB
C2C Technical Services
Cable Hawk Communications
California Army National Guard
California Pacific Technical Services LLC
CALPIA
CALPIA - HFM
CALPIA Dental
CALPIA Fabrics
CALPIA Laundry
CALPIA MCSP
CALPIA Optical Lab
Calvert County Emergency Communications
Calvert County Government
Capital Area Communications/Harrisburg
Capital Dialtronics Inc
Carbon Career & Technical Institute
Carl Junction School
Caxton Engineering Pte Ltd
CentraCare St Cloud Hospital
CentraCom Interactive
Central Carolina Community College
Central Electrical Systems
Central Montco Technical High School
Centre de Telephone Mobile Ltee/Anjou
CenturyLink
Certified Telecom
Chevron Phillips Chemical Co
Chicago Communications LLC
Chicago Communications LLC/Elmhurst
Chicago Communications LLC/Munster
Choptank Electric Cooperative
Chumash Casino
City of Arlington
City of Bryan Texas
City of Burlington
City of Chattanooga
City of Hope
City of Houston
City of Lancaster
City of Lewiston Police Department
City of Lompoc Radio Shop
City of Longmont
City of Los Angeles
City of Marietta
City of McCall
City of Modesto
City of New Orleans
City of Omaha
City of Pharr
City of Philadelphia
City of Port Arthur Police Department
City of Saint Charles
City of San Ramon
City of Santa Monica
City of Seattle
City of Tipp City Ohio
Clark County Public Works
Clark County School District
Clear Com Inc
Clear Communications & Electronics/Harrisonburg
Clear Talk Comm (IL Coop Assoc. dba Buchanan)
Cleveland County Schools
Coastal Forest Products
Collins Aerospace
Collins Communications Inc
Colorado Department of Transportation
Colorado Springs Utilities
Columbus Communications
Com Net Inc
Combined Wireless
COMMDEX Consulting
Commenco Inc
Commonwealth Electric
CommTech, LLC
Communication Data Link
Communication Service Center/Greenville
Communication Services of WNY & PA dba Eagle Radio
Communication Specialists Inc
Communications Electronics of Maryland
Communications Service - DR Spaulding Inc
Communications Service Co dba Radio One
Community Broadband Network
Comproducts Inc dba B&C Communication / Columbus
Comtech Construction
Connecticut State Department of Education
Continental Divide Electric Cooperative, Inc
Convergent Technologies
Cookson Hills Electric
Cornerstone Detention Products
County of Bergen
County of San Bernardino
Craven and Associates
Creative Security
Crestwood Midstream
Crew & Associates
Crouch Communications
Crown Castle
CRST Telephone Authority
CST Engineering Inc
Cumberland Telephone
Cyber COE NCO Academy, Operations NCOIC
Cyber Communications
Cyber Communications Inc / Woburn
Cyber Communications/Warwick
Cyber Fiber LLC
Dakota Central Telecommunications
Daniel Morgan Technology Center
Danielson Inc
Day Management Corp dba Day Wireless Systems
Day Wireless Systems
Day Wireless Systems/Seatac
DayStarr Communications
DCI Underground
Defense Contract MGT AG
DeKalb County Police
Delaware River and Bay Authority DRBA
Dell Telephone Coop

Where are ETA-Certified Individuals?

Delmarva Communications Inc
Delphinus Engineering
Delta Wireless/Stockton
Dennis Corporation
Denver Health
Department of Defense
Department of Justice
Department of the Army
Department of the Navy
Deschutes County 911
Desert Media Group
DFW Communications/Arlington
Digital Traffic Systems Inc
Diversified Electronics Inc/Marietta
DOE Western Area Power Admin
Donato's Pizza
Douglas County Sheriff
Dracom Inc
Dualnet Inc
Dunne Communications
Duquesne Light Company
Dyncorp International
Eagle Med
East Compass
Eastern Alliance, LLC
ECPI University
Edge Solutions LLC
Electrical Innovations
Electrical Technology Services
Electronic Engineering
Electronic Security Solutions
Electronic Service Solutions
Electronic Service Solutions/Nutley (ESS)
eLeet Computer Solutions Inc
Elenco Inc
Elite Contracting Group
Elmore County Technical Center
EMCR LLC
Emerald Standard
Engineered Structures Inc
Enterprise Products
Envista Forensics
EPS Security
Equix Broadband Inc
ERS Wireless
Erwin Technical College
ESI Construction
ETA International
F & W Electrical
Falcons Landing
FCI Ray Brook
FedEx Corporation
Ferreira Construction
Ferrovia Services
Fiber Optic Pros
FiberLine Communications
Fiberlink
Fibertronics Inc
Fidelity Solutions
Finch Electronics
First Digital
First Step Internet
First Wireless Inc
Fisher Wireless Services Inc/Blythe
Fisher Wireless Services Inc/Yuma
Five 9 Solutions
Five Points Infrastructure Services Inc
Flathead Electric Co-Op
Fletcher Academy Inc
FMCP LLC
Fortress Solutions
Fox Valley Technical College
Francis Tuttle Technology Center-Portland Campus
Franklinton Farms
Frontier Communications
Funai Service Corp
Future Technologies Inc
Fybercom
Garner Holt Productions
GC & E Systems Group Inc
GE Healthcare
Gemellaro Systems Integration
General Dynamics
General Dynamics Mission Systems
Genesis Fiber Optics
Gibson Technical Services Inc
Gillespie Prudhon & Associates
Glen International
Global Medical Response
Global Technical Systems Inc
Glotech Inc
Gonzales Food Market
Google Inc
Grand Mound Construction
Granite Electronics Inc
Gray Tree LLC
Green's Communications Inc
Gresham Smith
Grupo GTD
Gryphon Technologies
GTD Teleductos
Guam Power Authority
Guest Services Inc
Gulfstream Aerospace
Guyana Defence Force
G-Way Solutions
Hankey's Radio Inc
Hargray Communications
Harris Electrical
HCI Inc
Heartland Community College
Hecla Mining Company
HICAPS Inc
Hickory Springs
High-Light Electric Inc
Hmalmagates Security
Holmes Electric
Honeywell International Inc
Hooper Corporation
Huntington Ingalls Industries
Huntsville Police Department
Huntsville Utilities
Hurco Co
Hycroft Resources & Develop
IAMO Communications
IBW Advisors LLC
ICE Services Inc
Idaho Office of Emergency Management (IOEM)
Idaho Transportation Department
Idom Ingenieria SA de CV
IES Residential
Illinois Central Management
Illinois Century Network
Illinois Department of Corrections
Illinois State Toll Highway Authority
Illinois Valley Cellular
Incomms LLC
Independence Power & Light
Industrial Automation & Communications Systems
Industrial C & E Inc-Marshfield
Indyne Inc
Infrastructure Consulting & Engineering
InLine LLC
Integrated Communications Inc-Memphis
Integrated Electronics Solutions
Integrated LLC (Formerly Strategic Comm Inc)
Integrity Networks
IntelliBridge Inc
Intermountain Communications
Intermountain Communications of Southern Idaho Inc
Intermountain Electric
Interweave Technologies
Iron City ITS Services
Irving Materials Inc
IT Tech Solutions
Jacobs Engineering
Janus Global Operations LLC
Jason Electronics
Jensen Cable Construction
Jersey Mikes
JK Communications & Construction Inc DBA Kleven Co
JM Fiber Optics
Joint Task Force North
Josar's Limited
Joule Energy
JSIT Services
JT4 LLC
Junction City Schools
JW Fishers Manufacturing
K & S Technology
K&C Communications
Kelcom Inc
Kenny Electric
Keysight Technologies
Kiamichi Technology Center-McAlester
KIK Technologies LLC
Kirby Electric
Kirkwood Community College
Knight Federal Solutions
Knight Integrated System
Korean Navy
L & K Communications
L3Harris Technologies
LAC - Small Cell Solutions
Lambic Telcom Inc
Lancaster Department of Transportation
Lawrence County Board of Education
Learning Alliance
Leidos
Leonardo Helicopters
Light Tech Inc
Lightspeed Networks LLC
Lincoln Technical Institute
Lockheed Martin
Lockwood LLC
Loenbro I & E
Los Alamos County
Los Alamos National Laboratory
Louisiana Radio Communications
Lowe's
LVS Systems, LLC
Lyncole XIT® Grounding Solutions
Lyondell Basell
M & W Communications
M&T Underground
Macon Communications Inc/Macon
Mako Oilfield Services
Manatee County Florida
ManTech International Group
Martin Brothers Distribution Co
Mass Electronic Construction Co
Massey Energy
MasTec - Network Services
Medallion Midstream
Mellennium Communications
Merit Electric
Metra Railroad
Metro Communications LLC
Metropolitan Communications
MGW Networks
Mid South Communications
Mid State Communications & Electronics Inc
Midco Cable Company
Middle Tennessee Electric Member Corp
Mid-States Wireless Inc/Fargo
Midwest Data Center
Midwest Mobile Radio Service/St Joseph
Mi-Fiber LLC
Miles Telephone Co
Millennium Communications
Miner Electronics Corp/Munster
Ministry of Health
Missouri Department of Transportation
Mitre Corp
Moberly Area Tech Center
MobilComm Inc
Mobile Communication of America

Where are ETA-Certified Individuals?

Mobile Communication Services Inc/Livonia
Mobile Communications of the Carolinas
Mobile Radio Service/Great Bend
Molibdenos y Metales SA
Mon-Cre Telephone
Montgomery County Department of Transportation
Motorola Solutions Inc
Mount Pleasant City Power
Mountain Consulting Inc
MRC Global
MSI -Pyramid Networks Services, LLC
MTC Technologies
Multicom Inc
Nassau County Sheriff's Office
National Broadband Services
National OnDemand Inc
National Radio Astronomy Observatory
Naval Supply Systems Command
Navigant Builders Inc
NBC Universal
NDI Engineering
Necessity Home Office Solutions
Nelson Cable Inc
Network Controls & Electric
Nevada Gold Mines - Cortez Div.
New Mexico Department of Transportation
New York City Transit
New York Presbyterian
NextLight Internet
Nez Perce Tribe
Niagara Frontier Transportation Authority
NIWC Atlantic
NMSurf Inc
Noble Communications
Norcom CT
North American Cable Equipment
Northeastern Communications Inc/Naugatuck
Northern Illinois University
Northern Nevada Electrical
Northrop Grumman Corporation
Northway Communications Inc
Northwest Central (911) Dispatch System
Northwest Communications Cooperative
NovaComm LLC
NSC Technologies
Nyrstar Corporation
ObjectStream Inc
Oman Fiber Optic
OmniTel Communications
One Stop Cooling
OneVoice Network of New York
Open 5G Inc
Optek Unlimited
OPTK Networks
Orange Technical College - Mid Florida Campus
Ordnance Electronics Maintenance Training Department
Osage Municipal Utilities
OSF Healthcare
Ossipee Mountain Electronics Inc
Outsource Staffing
Ozarks Technical Community College
P & F Engineering and Construction
P & R Communications Service Inc/Dayton
P & R Communications Service Inc/Oregon
Pacific Data Systems
Pacific Wireless Communications LLC/Lihue
Palm Beach County
Paradise Valley High School
Paramount Cable Corp
Patriot Automation
PBS North Carolina
Penasco Valley Telephone Coop
Per Mar Security Services
PES Energize
Phillips Southern Electric
Phoenix Wiring Pros
Pierce County Radio
Pierce County Skills Center

Pierce Transit
Pittsfield Communications Systems Inc
Pittsfield Communications Systems Inc/Pittsfield
Platte Valley Communications/Grand Island
Pleasant Valley State Prison Adult School
Polar Communications
Power and Telephone Supply
Powercom Company Ltd
Precision Fiber Inc
Preformed Line Products
Premier Communications
Principle Forensics Co
PTI Pacifica Inc
PTMW Inc
Puget Sound Naval Shipyard
Pyramid Network Services Inc
Qualcomm
Qwest Communications
R.T.C., Inc
Ra-Comm Inc/Lafayette
Radio Communications Svc Inc/York
Radio Communications Systems
Radio Maintenance Inc
Radio Maintenance Inc/Reading
Radio Solutions Inc
Radiophone Engineering Inc/Springdale
Radiophone Engineering Inc/Springfield
Randstad
Ray's Electric
Raytheon Company
Regional Communications Inc
Regional District of Fraser Fort George
REI Telecom
Remote Imagery Technology Inc
Ridenour Enterprises Inc dba Magnum Electronics
RTI Inc
Ritter Communications
Riviera Utilities
RJ Haynie & Associates Inc
RockSol Consulting Group
Rocky View County
Roe Communications Inc
Roger's Two Way Radio
Roy Walker Communications
Royal Electric
RS Electric
RT Fidelity Solutions
RTC Fiber Communications
Rutherford Contracting
Sabre Industries
Sack Co
Safeway/Albertsons
SAIC
Salem Electric
Salish Networks
Samantrin LLC
Samson Electric
San Antonio Independent School District
San Jacinto River Authority
San Luis Valley Rural Electric
Sarasota Bradenton International
SAS Global
Savannah Comm & Elect
Scallon Controls
School of Practical Accounting
SCI Mahanoy
Screaming Eagle Network Univ
SEACORP
Sellenrick Construction
Severance Electric Co Inc
Sharp Communications Inc
Shoshone County Sheriff
Shreveport Communication Service Inc
Sierra Electronics
Skywave Communications Inc/Rochester
Small Cell Solutions
Solartronics USA
Sound Solutions, Inc
South Carolina Department of Transportation

South East LA Veterans Health Care System
South Plains Communications
Southwest Cyberport
Southwest Tennessee Electric Membership Corp
Spectral Link
Spectrum Communications Ltd
Spectrum Services
Spring Valley High School
Springfield Utility Board
SR Telecom
Staley Technologies/New Philadelphia
Staley Technologies/North Canton
State of Illinois
State of New Hampshire Dept of Safety
Stergeon Electric
STG Communication Services
Stone Electric Co Inc
STRAC Institute
Strata Networks
Strategic Service Solutions
Sumitomo Electric Lightwave
Sunshine Silver Mining & Refining
Superior Essex
Superior Slicing Solutions LLC
Supertech Inc
Supreme Radio Comm/Macom
Supreme Radio Comm/Peoria Heights
Surf Broadband Solutions
Sweig Corp
System Technology Forum
T7 Enterprises LLC
TAB Electronics Inc
Tac Solutions Division of Nucell-Comm Inc/Calgary
Tahoma Broadband
Talus Development
TASC Inc
TASL Inc
TCI Career Institute of Technology
Team Multicom Inc
Tech Electronics
Teksync Communications
Teksync Technologies
Telecommunication Services of T & T
Teledyne Battery
Telefonica Del Sur SA
Telepath Inc
Tele-Rad Inc
Tele-Rad Inc/Holland
Temple College
Tetra Technologies
Texas Communications Of Abilene Inc
Texas Communications Of Bryan Inc
Texas Communications Of San Angelo Inc
Texas Department of Public Safety
TFM Communications
The Bermuda College
The Boring Company LLC
The Colony Fire Department
The Levy Company
The Mitre Corporation
The Newton Group
The Scion Group
The Seimitsu Corporation
Tidewater Communication
Tipmont REMC
Tobyhanna Army Depot
Top Engineers Plus
Toronto Hydro
Town of Apex
Town of Mountain Village
Townsend Services Inc
Traffic Control Devices
Traffic Systems
Traf-Tex Inc
TransCore Company
Tri County Comm Inc
Tri M Group
Triad Electric & Controls
Tri-Co Communications

Where are ETA-Certified Individuals?

Tri-Co Communications Inc/Lecanto
Tri-County Electric Coop
Tridon Communications
Trifactor Technical Sales and Services Ltd
Trinidad Institute of Medical Technology
Tronox Inc
Troy's Electronic Repair Shop
True Net Communication
Truestone LLC
Tusa Consulting Services
Tuway Mobile Communications Inc dba Tuway Wireless
Two-Way Technology
Tyonek Manufacturing Group
Union City Energy Authority
United Communications
United Dairyman of Arizona
United Parcel Service
United States Air Force
United States Army
United States Bureau of Reclamation
United States Coast Guard
United States Marine Corps
United States Marshals Service
United States Navy
United States Space Force
Uniti Fiber
Universidad Ana G Mendez

University of Alaska
University of Texas Southwestern
Urban Network
Utah County Government
Utah County Telecomm
Utility Communications Inc
Utility Lines Construction Service
Utz Quality Foods Inc
Valley Electric
Valley Telephone Co-op Inc
ValleyNet
Value Optical Limited
VanTek Consulting, LLC
VCI Construction LLC
Vector Technology Institute
VEI Communications
Vinco Inc
Vintage Security
Volt Inc
VTX Communications
Walmart Inc
Warrior Signal University
Washington Communications LLC/Day Wireless
Washington Department of Corrections
Washington State Department of Transportation
Washoe County Government
Washoe County Nevada

Wenlight Fiber Optic Services
West River Telephone
Westcan ACS
Western Electrical
Western Technical College
Whidbey Telecom
White Coconut Computer
Windham School District
Windstream Holdings
Winsett & Sons
Wireless Advanced Communications
Wireless Communications Inc
Wireless Communications Inc/Arlington
Wireless Communications Inc/Baltimore
Wireless Communications Inc/Washington
Wireless Communications Inc-NC/Wilmington
Wireless Electronics Inc/Philadelphia
Wireless Electronics Inc/West Berlin
Wireless USA Inc
Wireless USA/Maryland Heights
WoRAD Inc
World Telecom & Surveillance
WSU Tech
WTS Electronics
Xcel Energy

MILITARY REIMBURSEMENT

ETA is committed to working with the government to ensure our certifications match the updated skills and knowledge needed to excel in various government or military positions. If you are a military professional and are looking for an additional way to build life-long skills that you can also carry with you into civilian life, get started with one of ETA's more than 90 certifications. We create all of our certifications with the help of independent professionals from government, military, industry, and academic institutions. Under the G.I. Bill, the Veteran's Administration can now reimburse you or an eligible child or spouse for many of the expenses for taking one of our approved certifications, and obtaining or renewing your FCC Commercial License.



DIGITAL BADGES



ETA has partnered with Credly to offer digital badges that allow ETA International certification achievers to display their hard-earned credentials on social media pages, professional association websites and resumés as a new asset for all ETA certifications. ETA-certified professionals who have up-to-date certifications can request their digital badges by contacting the ETA office. Expired certifications are not eligible for digital badges.

ETA digital badges promote lifelong learning that extends beyond the classroom and brings to light accomplishments that otherwise might not have been visually displayed. ETA digital credentials can easily be searched at www.credly.com/organizations/eta-international/badges, allowing employers looking for specific skills to seek out prospective employees based on a set of competencies, instead of waiting and hoping to find the right candidate.

Benefits associated with ETA digital badges include the ability to capture the complete learning path, "traveling" with the holder wherever they display the badge, symbolizing skills and achievements. Each badge is tethered to ETA to validate achievement and carries with it information about assessment, evidence and other data required by the badge.



CUSTOMER SERVICE SPECIALIST

Employability Skills • Workforce Readiness

*Don't just say you work well with people - let **ETA International's Customer Service Specialist certification** prove it! **ETA's world-class CSS certification** professionally acknowledges your ability to uphold the interpersonal and business standards necessary in today's workplace.*

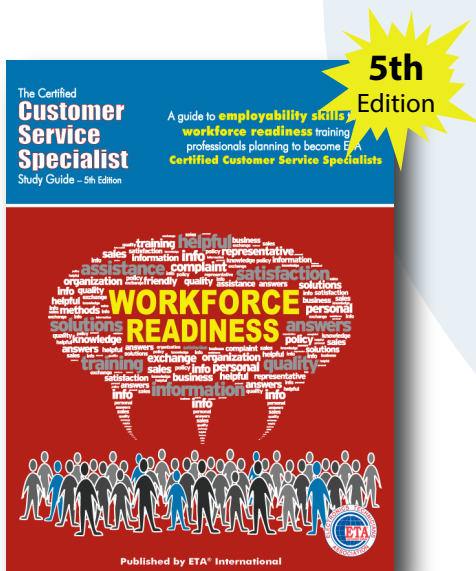
VALIDATE YOUR EMPLOYABILITY SKILLS

The Customer Service Specialist (CSS) is a certification that validates one's interpersonal and business skills. Though developed to meet the role of an evolving service oriented electronics technician, CSS is relevant to every industry, employer and employee. Topics covered include: safety, ethics, respect, teamwork, communication, telephone and email techniques, problem solving, interpersonal relations, and sales and marketing.

STUDY GUIDE

Purchase the CSS study guide (5th edition) through ETA. The study guide covers all of the information necessary to pass the CSS exam, including practice questions.

Price: \$25.00 (members) / \$30.00 (non-members) + S/H (Bulk Pricing Also Available)



- Business Leadership
- Company Policies
- Communicating with Customers
- Evaluating Your Performance
- Ethics
- Handling Emotions
- Customer-Coworker Problems
- Interpersonal Relationships
- Protecting Customer Values and Property
- Time Management
- Employment Rules
- Phone/Fax/Email/Social Media Etiquette



CLOSE THE SKILLS GAP!

ORDER TODAY – CALL ETA OR VISIT WWW.ETAI.ORG



Certifying Today's Technicians in Tomorrow's Technologies