ETA® International

Certification Catalog

ETA® International
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ICAC
International Certification Accreditation Council

About ETA International

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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

ICAC
International Certification Accreditation Council

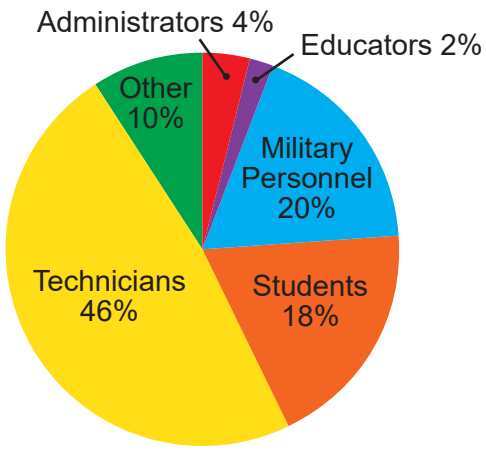
In 1996, a group of association executives chartered the ICAC as a not-for-profit organization with the purpose of evaluating certification programs at an affordable rate that smaller organizations can afford. Over the years, the ICAC has developed a comprehensive process to evaluate certification programs 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 shapshot of professionals and students who have taken an ETA exam during the previous year. You can see the results from 2017 on the right.



careeronestop

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 examinees can take their certificaiton 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

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

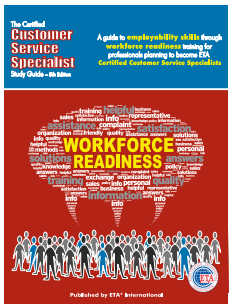
ETA has certification administrators (CAs) around the world. Each examination must be proctored by a CA. To find a CA, either visit the ETA website or contact ETA. If a test site is not near the examinee's location, then please call ETA at (765) 653-8262, or email at eta@etai.org for more information.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

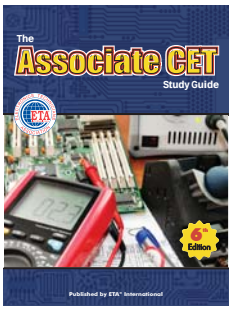
When preparing for an ETA certification examination, examinees are encouraged to use suggested study materials listed on the available competencies. In addition to the many offerings in the ETA online store, ETA offers study materials developed exclusively for the ETA Customer Service and Associate CET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

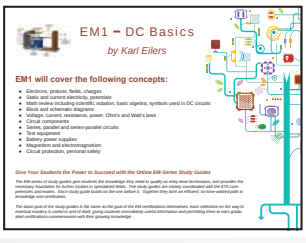
The information contained in this guide is applicable to anyone who works with the public: helpdesk, sales, educators, business owners, nurses, repair technicians, and coworkers!



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

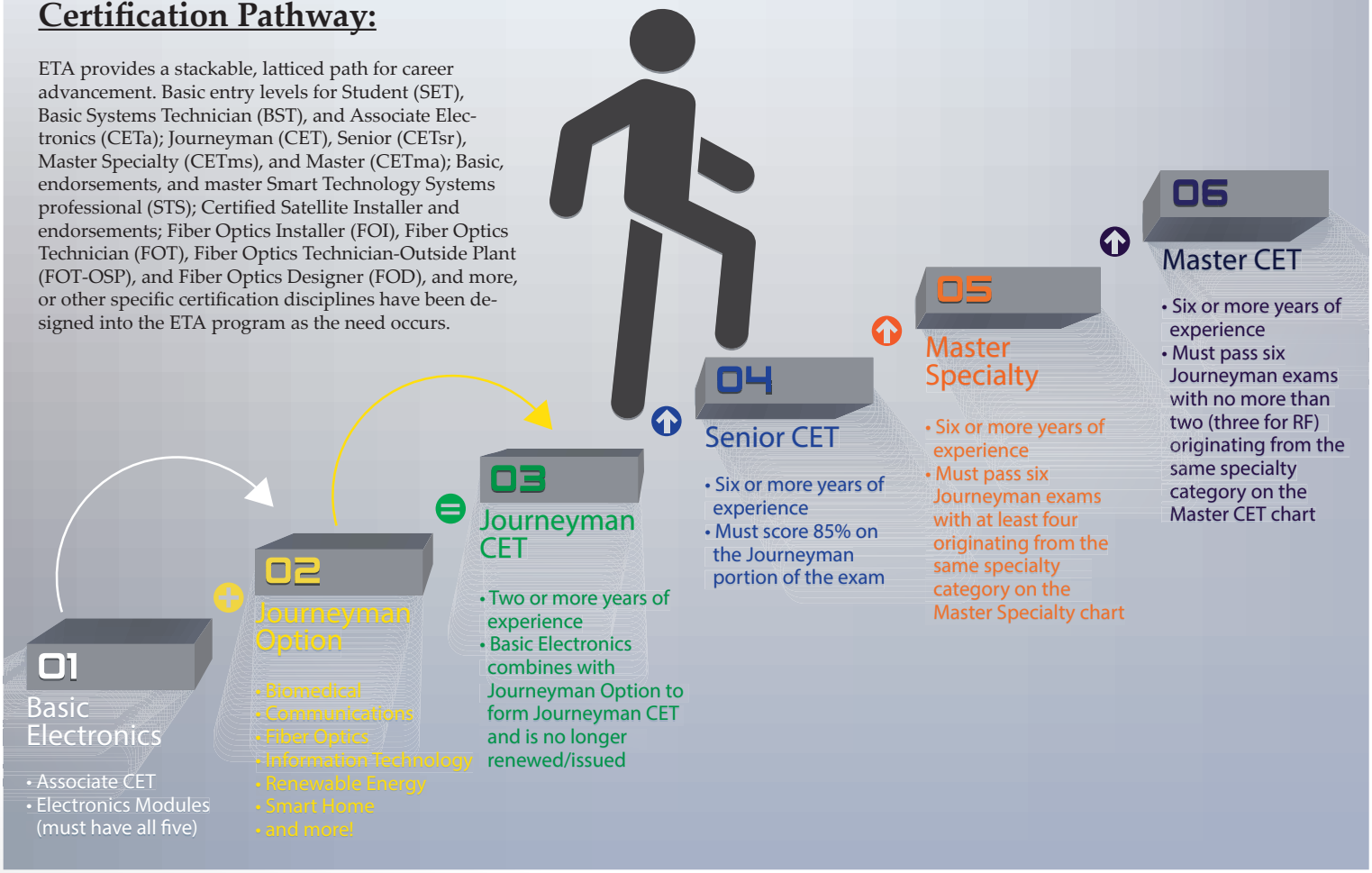
Taking an ETA Certification Examination

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.

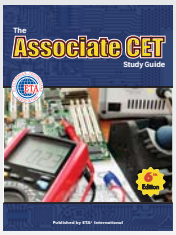
Certification Pathway:

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.

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

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.

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

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.

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

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.

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.

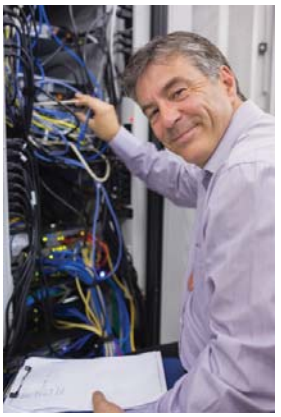
BMD Exam Info	
Price:	$80
Type of Certification:	Journeyman
Renewal/Maintenance Required:	Yes
Certification Term:	4 Yrs
Hands-On Required:	No
Questions on Exam:	75
Passing Score:	75%
Time Allowed to Test:	2 hours

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.

"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

"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

"Achieving an ETA certification brought a higher level of knowledge & skills to the Northwest Central (911) Dispatch System. ETA helped me advance my career.Thanks ETA!"

Jason Hunt, CET
Sr. Radio System Technician,
Northwest Central (911) Dispatch System
Arlington Heights, IL

"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
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.

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

Certified Satellite Installer (CSI)
**The Certified Satellite Installer exam is HALF PRICE if taken wiht 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

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

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.

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

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.

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

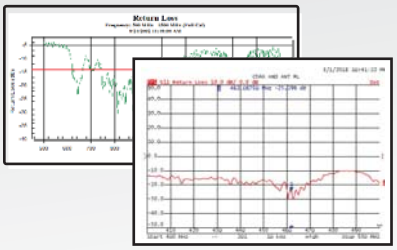
General Communications Technician — Level 2 (GCT2)
**Prerequisite is the Associate CET (CETa) or General Communications Technician — Level 1 certification*
The General Communications Technician Level 2 (GCT2) certification is a program modeled after wide-ranging private wireless industry communication 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.

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)

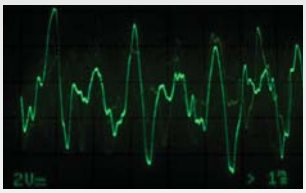
This certification includes the fundamental principles of basic antenna theory, including basic electromagnetic wave propagation with sound practical comprehension of antenna operational characteristics and common configurations found in modern RF communication systems. The PAB covers the basic areas 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.

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

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.

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

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.

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

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.

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

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.

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.

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

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.

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

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.

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

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.

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

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-.

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.

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

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.

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

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.

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

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.

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

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.

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.

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

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.

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

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).

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

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.

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

Wireless Network Technician (WNT)

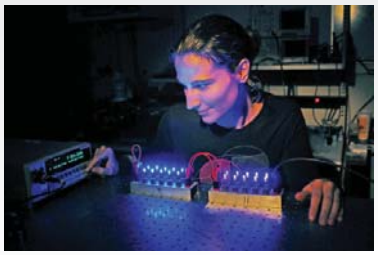
The Certified Wireless Network Technician is a network professional who is expected to obtain knowledge of the operation and maintenance of wireless networking concepts, RF and IR propagation and modulation technologies, applicable to all the specialty areas of the wireless networking industry. Once 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.

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.

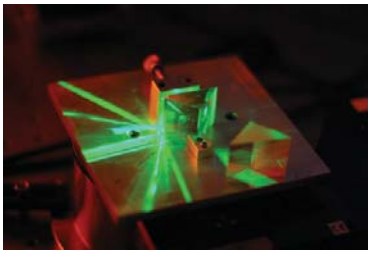


PTO Exam Info	
Price:	$205
Type of Certification:	Stand-Alone
Renewal/Maintenance Required:	Yes
Certification Term:	4 Yrs
Hands-On Required:	Yes
Questions on Exam:	233
Passing Score:	75%
Time Allowed to Test:	2 hours

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, EVTs 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

SPECIALTY 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

Additional Certifications cont.

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

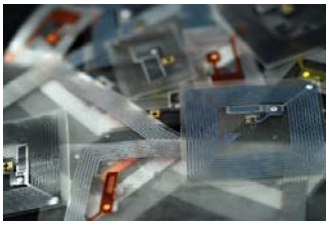
Gaming and Vending Technician (GVT)
The Gaming and Vending Technician (GVT) certification is intended for entry-level technicians with a sound background in electronics. Technicians will work in the field to troubleshoot, repair and calibrate gaming and vending type equipment. Money handling, basic electrical, 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 Commerical 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.

BENEFITS	Member Benefit	Non-Member
High Tech News, 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 2023, students and professionals at the following schools and companies chose to become certified through ETA® International. This list is by no means exhaustive as ETA does not require examinees to note their school or employer. By choosing to become certified from this accredited association, these individuals are closer to achieving their career goals.

1st Responders LLC
311th Signal Command
3C Information Solutions Inc
3rd MDTF Signal Co
5 Star Communications
Actavo Trinidad & Tobago Ltd
Advantalink Corp
Affordable Landscaping & Mowing
AFL Global
Airtower Networks
Airwave Communications Imperial Inc/Commerce
Ajeatt
AJK Communications Inc
Alaska Airlines
Alaska Directional LLC
Alaska Railroad Corporation
Alaska Village Electric Cooperative
Alliance Cabling Inc
Allied Security Ltd
Amazon
Ameren
American Lighting & Signal
American Radio Associations
Anchorage School District
Ancom Communications
Ancom Technical Center
Anderson Inc
Architect of the Capitol
Arcticom LLC
Arkansas Dept of Transportation
Army Airforce Exchange Services
Artesia General Hospital
Artic Slope Telephone
Asrc Communications Ltd
ASRC Federal
Assabet Valley
AT&T
Atlantic Methanol Production Company
Atmos Energy
Augusta Communications
Augusta Utilities
Axis Technical Services
Axxess Data Solutions
B&C Communications
Bank of America
Barrick Goldstrike
BASE4 Security
Bear Communications & Electronics/Heath
Bear Communications & Electronics/Las Vegas
Bear Communications & Electronics/Marietta
Bear Communications & Electronics/Metairie
Bear Communications & Electronics/Oklahoma City
Bear Communications & Electronics/Redondo Beach
Bear Communications/Watertown
Bearcom Canada/Kitchener
Bearcom Canada/Sarnia
BearCom Inc
Beaverhead County Montana
Bender Communications Inc/Marion
Bering Straits Information Technology
Berwick Electric
BHE Low Voltage Solutions
BiHorns Electrical & Mechanical Contracting
Blackwell Public Schools
BLDM
Blue Fin Services
Blue Ridge Electric Cooperative
Blue Ridge Energy
Bluecore Power
Bluefin Energy
Bridge Creek Public Schools
Broadband Technology Group
BroTex Communications
Broward College
BTC Broadband
California Army National Guard
CALPIA Laundry
CALPIA Optical
CALPIA-HFM
Caltrans
Capital Area Communications
Caribbean Cellular Telephone Ltd
Carson City Public Works
CartGIS Pty Ltd
Casca Fire Protection
Casting Solutions
Castle Rock Microwave
CBN
Cenac LLC
Central Bow Works
Central Electric JATC
Central Texas Telephone Cooperative Inc
Century Link
Chattanooga Business Machines
Chevron
Choctawhatchee Electronic Cooperative
Citizens Telephone Cooperative
City of Ammon Idaho
City of Aurora
City of Bakersfield
City of Beaverton
City of Bellingham
City of Bloomington
City of Boise
City of Bryan
City of Coppell
City of Dallas
City of Dothan
City of Fort Worth
City of Glendale
City of Glenwood Springs
City of Hartford
City of Hobbs
City of Hobbs Police Department
City of Houston
City of Lancaster
City of Laramie
City of Los Angeles
City of Los Angeles - ITA ESG
City of Midlothian
City of Montebello
City of Newberry
City of North Las Vegas
City of Omaha
City of Pharr
City of Salem
City of Tacoma
City of Weatherford
City of West Plains
City Utilities
City Utilities of Springfield
Clean NRG Sol Recovery
Clear Communications & Electronics/Charlottesville
Cleco
Cleco Power LLC
C-Link
CNC Technical Services
CNS Pantex
Coeur Mining Inc
College of Micronesia - FSM
Colorado Department of Transportation
Colorado State University
Columbia Public Schools
Comm Tech
Commenco
CommScape Inc
CommTech LLC
ComPros Inc
Comserco Inc/Riverside
Comsource Inc
Comsource of Michigan
Comtech Direct
Connection One
Construction Innovations
Cooperative Energy
County Consolidated Communications Age
County of Mendocino
County of San Diego
Coweta Fayette EMC
Cox Communications
Crouch Communications
Crown Castle
Cruz Association Inc
Cyber Communications
Cyber Communications/East Taunton
Cynergy Professional Systems
D&D Communications Inc
Data Access - Puerto Rico
Day Wireless Systems
Day Wireless Systems/Yakima
DCS Inc
Defense Intelligence Agency
Delmarva Communications
Delmarva Power
Delta Wireless/Stockton
Department of Defense
Department of Enterprise Services
Department of the Army
Department of the Navy
Department of Veteran Affairs
Department of Water Resources
Design Solutions & Integrations Inc
Digicel Ltd
DirecTV
Disney / ABC Television Group
Diversified Electronics
Dixie Power
DMC Utility
Dominion Energy
Douglas County Sheriff
DSC Communications
Dubuque County
Duke Systems
Durham Communications
Dynamic Control Systems Inc
Dynamic Solar Solutions
East Kentucky Power Cooperative
East Valley School District
Eastern Municipal Water District
EC Electric
ECPI Technical College
Electric Coop
Electronic Engineering Co
Electronic Maintenance & Comm Inc
Embry-Riddle Aeronautical University
EMCI Wireless
EMD LLC
EMD-XTOR
Emergency Radio Service
Englewood Hospital and Medical Center
Enterprise Products
ERS Wireless
ERS-OCI Wireless

Where are ETA-Certified Individuals?

Euless Police Dept
Everstream
Evolutionary Towers Inc
Excel Energy
Faith Based Network
FBN Contracting
FCI Ray Brook
Federal Network System
Fehr & Peers
Fiber Solutions Services
FiberOptic.com
FiberOpto Asia Pte Ltd
First Digital Telecommunications
First Wireless Inc
Fisher Wireless Services Inc/Blythe
Five Star
Flathead Electric Co-Op
Flathead Emergency Communication Center
Florida Institute of Oceanography
Freedom Fiber Support
Frontier
Future Infrastructure
Gabe Ferguson
GCI Telecommunications Corporation
General Dynamics Information Technology
Gibson Technical Services
Glacier National Park Service
Golden Aviation and Electronics Training
Golden West Telecommunications
Google
Google Fiber Inc
Grapeview-Colleyville ISD
Graybar Electric
Groupe CLR
Grupo GTD
H A Sack Company
Hankey's Radio Inc
Heart of Iowa Communications Cooperative
Heartland Community College
Highline Fast Internet
Hilcorp Alaska
Hillcorp Energy
Hi-Tide Manufacturing
Hobbs Group
Holland Independent School District
HollyFrontier Refining & Marketing LLC
Houston Community College - South Campus
HUB
Hubbell Power Systems
IAMO Communications
IBEW #1547
Idaho Office of Emergency Management
Idaho Transportation Department
Ilani Casino Resort
Imperial Irrigation District
Independent Light and Power
Indra USA Inc
Industrial Communications
Ineos Britannia
Infinity
Ingram Professional Services
Inland Engineering Services
Integrated Wireless Technologies
Integrity Networks
IntelliBridge
InterBel Telephone Cooperative Inc
Iron City Fire Protection
IT Tech Direct LLC
ITC Holdings Corporation
Ivy Tech Community College
J Paul Getty Trust
Jacobs Technology
Jamison Electric
Jancorp
Jaye Electric
JB Nasser Inc
JM Fiber Optics
JM Integrators
John Deere Reman Electronics
Jordan Valley Water Conservancy District
JSI
JT4 LLC
K&C Communications
Kalona Cooperative Technology Co
Katz Telecom
KBR Technologies Solutions
Kelcom
KIK Technologies
King County Washington
Kirby Electric
Klein Automation & Electric
Kryonyx Corp
L&K Communications
L&M Aerial and Underground
Lake Louise Ski Area
Legacy Telecommunications
Leidos
LH Connections LLC
Licciardi Radio
Light Brigade
Light It Up Electric
Lincoln Electric
Lingo Networks
Lockheed Martin
Logistics Management Engineering
Lord Electric
Los Alamos National Laboratory
Los Alamos Neutron Science Center
Loss Prevention Systems
LRC Wireless
Lucky Joint Construction Pte Ltd
Luma
Macain Energy
Macon Communications Inc/Macon
MAL Technologies
Man General Engineering
Marine Spill Response Corp
Maryland Stadium Authority
Massive Audio Video
MCM Constulting Group
MDED 3rd MDTF
Mercedes-AMG
Meridian Blue Construction
Metra Rail
Metropolitan Communications
Metropolitan Water District of Southern California
MiBroadband
Midcom Inc
Midwest Data Center
Midwest Mobile Radio Service Inc
Miller Electric Company
Ministry of Defense
Mississippi Department of information Technology Services
Missouri Department of Transportation
Mobile Business Communications Ltd
Mobile Communication Services Inc/Livonia
Mobile Communications America
Mobile Communications of the Carolinas
Modesto Irrigation District
Mohegan Sun Tribe
Mohegan Tribe of Indians of Connecticut
Mon Valley Integration
Montgomery County Hospital District
Morris Feed & Farm Supply
Morristown Utilities FiberNET
Motorola Canada
Motorola Solutions GMBH
Motorola Solutions Inc
Mud Lake Telephone
Multicom Inc
Mundo Pacifico
Murray Electric System
NacSpace
Nath's Telecommunications Services
National Grid Solutions
National Park Service
National Radio Astronomy Observatory
National Tech Transfer Inc
Navajo Tribal Utility Authority
Naval Support Facility Thurmont
Network Building & Consulting
Network Cabling Solutions
Network Comm Tech
Nevada Dept of Wildlife
Nevada Gold Mines
Nevada System of Higher Education
New Mexico Junior College
Next Gen Flo Systems
Next Gen Solutions
Nextera Energy Resources
NGO Transmission
Nicholas Construction Services
NiSource Corporate Services
Noa Network
Noble Drilling Services Inc
NorcomCT
North Davis Sewer District
North Slope Borough School District
North Texas Electric LLC
North Virginia Community College
Northeastern Communications
Northern Virginia Community College
Northrop Grumman
Novacomm LLC
Novatech
NSHE
NST NetUC Solution Technologies
Ockerman Automation & Consulting
OIC of South Florida
Oklahoma State University Institute of Technology
Olin Winchester
OPTK Networks
Orange County Sherriff
Ordnance Electronics Maintenance Training Department
Oregon Department of Corrections
Oregon Department of Transportation
Owens Communications Inc/Bloomington
P&R Communications
Pacific Data Systems
Pacific Gas & Electric
Pacifico Cable Spa
Paducah Power System
Panhandle Telephone Co-Op Inc
Paragon Technologies
Pavlov Media
Peel Regional Police HQ
Penasco Valley Telephone Cooperative Inc
Per Mar Security Services
PetCon LLC
Petro Communications Inc
Phillips 66
Pierce Transit
Pillar Innovations
Pinoleville Pomo Nation
Plumb-Tech
Port Authority of Guam
Port of Tacoma
Power Quality Guys
Prairie Power
Premier Broadband
Pride Enterprises
Pro-Comm Inc
Progressive Communications
Property Reserve Inc
PRTC
PSC
PUD No. 2 of Grant County
Pyramid Network Services
Qualcomm
Qwest - Century Link
R Directional Drilling
R&R Radar Inc

Where are ETA-Certified Individuals?

Radio Communications of Virginia/Glen Allen
Radio Maintenance Inc/Reading
Radio Solutions Inc
Radiophone
Raytheon Technologies
Redhawk Solutions LLC
Redi Services LLC
Region of Waterloo
RelyOn Nutec USA
Richmond County School System
Rio Tinto
Robins Air Force Base
Rocky Mountain Fiber Optics
S&P Communications
Saalex Solutions Inc
Sabine Automation LLC
Saint Francis Electric
Salem Electric
Samaritan's Purse
San Bernadino County
San Diego County Water Authority
Sandia National Lab - Hawaii Test Facility
Santo Fire and EMS
Sargent & Lundy
SC Telcom
Sea World
Secure Vision Inc
Security Engineering Inc
Seepco
Seither Cherry
Semaphore
Serco
Servol Advanced Training Center
Sevier Co Sheriff Office
Shell USA Inc
Shreveport Communication Service Inc
Siemens Industries
Sierra Pacific Electrical
Simplot
Sin Chew Alarm Pte Ltd
SiteWise Inc
SJM Industrial Radio
Skywave Communications Inc
Smart Integrators
Smartology Inc
Smithville Communications
South Avionics Training Center
South Central Telephone Association Inc
South Hadley Electric Light Dept
South Plains Communications
Southern Company
Southern Montana Telephone
Southwest TN Electric Membership Corp
Spectrum Management Authority
Springfield Utility Board
Spyder Cable Services Inc
State of Alaska
State of California Department of Water Resources
State of Missouri
State of New Mexico Department of Transportation
State of Utah Department of Transportation
STRAC Institute
Strategic Communications Solutions
Strategic Service Solutions Inc
Stratus Networks
Sturgeon Electric
SubCom
Sumitomo Electric Lightwave
Summit Fire & Security
Sunday River Resort
Sunday River Skiway Corporation
Sunshine Communication
Superior Connections
Surgarloaf Mountain
System One
Talquin Electric
Talus Development
Targar Resources
TBS Electronics
TCC Internet
Team Fishel
TEC Electric
TechNet
Tek Systems
Telcast
Telefonica del sur SA
Telephone Electronics Corp
Tele-Rad Inc
Television Audio Support Activity
Tell Your Friends LLC
Telsur GTD
Terra Contracting
Tesla Inc
Texarkana Water Utilities
Texas Communications of Bryan Inc
Texas Department of Public Safety
Texas Department of Transportation
Texas Division of Emergency Management
Texas Turnpike Authority Division
Textron Systems
The Sack Company
TNT Satellites
Tobyhanna Army Depot
Tohono O'odham Utility Authority
Toronto Police Service
Town of Estes Park
Transtar Electric Security and Technologies
Trek Connect/Heilind
Tri County Communications Coop
Triad Electric & Controls
Tri-Co Communications Inc
Trico Industries Ltd
Tricolink Inc
Tridon Communications Inc/Edmonton
TSI Tower Servies Inc
Tucson Electric Power
TuWay Communications
Ultium Cells LLC
United Fiber Comm Inc
United Fiber Engineering Construction
United Power
United Services
United Stated Marshals Service
United States Air Force
United States Army
United States Army Corps of Engineers
United States Army Corps of Engineers - TN
United States Bureau of Reclamation
United States Capitol Police
United States Department of Defense
United States Marine Corps
United States Navy
United States Postal Inspection Service
United States Senate Sergeant At Arms
United States Space Force
University of Guam - Triton Farm
University of Central Florida
University of Colorado
University of Nevada Reno
Utah County Government
Utility Communications Inc
Valley Communication Association
Varcomm
VCI Construction
Vector Technology Institute
Verizon Federal Network System
Vilchis Communications Services
Vincor Inc
Vlad Technologies Inc
VTG Group
Walker & Associates
Washington County Consolidated Communications
Washington Department of Fish & Wildlife Police
Washington State Department of Transportation
Washington State DES Building & Grounds
Washoe County Government
Washoe County Nevada
Watts Electric Company
Wells Communications
West River Telecom
Westcan Wireless/Edmonton
White Cloud Communications Inc/Garden City
Whitman County
Wireless Communications Inc
Wireless Electronics Inc/West Berlin
Wireless USA/Maryland Heights
Wise County Office of Emergency Management
Wolf Line Construction
WoRAD Inc
WPCS International Inc - Lakewood Operations
Wrice Wireless & Telecom LLC
Wyoming Department of Transportation
Xcel Energy
Yakima Valley Technical Skills Center
Yankee Microwave Inc
Yuma County Water Users' Association
Zane State College

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ETA has partnered with Credly to offer digital badges that allow ETA International certification achievers to display their hard-earned credentials online (e.g. LinkedIn, Facebook, Twitter, and more), via email, and embedded in a website. 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.

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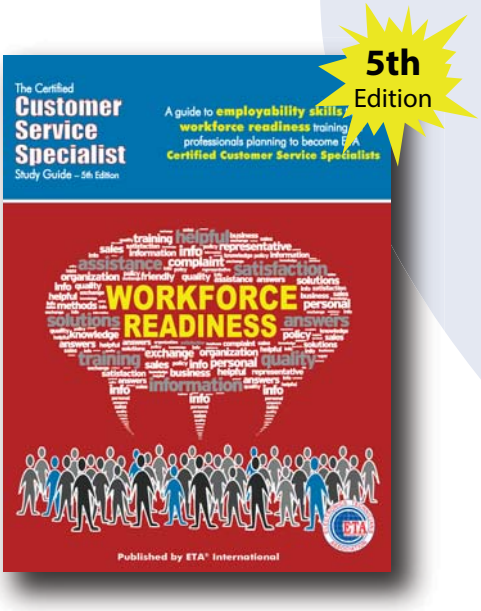

- Business Leadership
- Company Policies
- Communicating with Customers
- Evaluating Your Performance
- Ethics
- Handling Emotions
- Customer-Coworker Problems
- Interpersonal Relationships
- Protecting Customer Values and Property
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