2020 TECHNICAL FORMATTING & NETWORKING

CEU's are being offered with this course from Brandman University School of Extended Education.

This 40 hour training course is specially designed as a building block for future expanded technology training. Some of the course highlights are:

- Understanding the Basics of the “Cloud”
- Commercial Switches & Router Basics w/Screen Shots
- Networking basics, WAN, LAN
- Analog vs Digital Signaling
- What is Modulation & Multiplexing and Why Needed
- Telecomm Foundation/Backbone & Broadband
- Network Interconnection Devices
- Mac Addressing, What & Why
- Routing Protocols
- Networking System Functions and Display Results
- Building a Small Office Network
- How To Example Field problems with “Print Screen” pics in section on troubleshooting Networks

**TWELVE (12) SKILLS CODES APPROVED**

Price: $1,950
20% CWA Discount $1,560

800.710.7595 | FAX 888.778.8230
SIGN UP NOW AT WWW.AMERISKILLSTECH.COM
This 40 hour course provides the technicians the means to increase their skill sets and knowledge for benefit and use by technicians. This course will build the foundation of functionality of the new and advanced equipment that is presently being used in small business, VPN Cloud and residences today with the new routers.

This course is for the technician wishing to advance in their positions and prepare for the modernization process of the telecommunication industry. Also, this class provides a brief review of the 2020 Technical Formatting & Networking basics and will provide the skills necessary to understand the two most common Security Networks (Cisco and Juniper).

**Topics and benefits to the technician are:**

- First is to insure basic understanding by the technician of the CO Hierarchy, POTS, OSP, Local Loop, NID/SNI & Dmarc, splicing cases and service Area Interfaces function within the entire telecom system.
- How routers and switches work is covered the first day.
- Basic knowledge of two Hacking and Security intrusion Scripts Linux & Python.
- Learn basic theory behind Firewall Network Security.
- Tools used by Cisco and Juniper.
- How to Install and deploy basic configuration for Cisco ASA 5500 series.
- How to Install and deploy basic configuration for Juniper SSg 5 Firewalls.
- Train the technician on initial networking Security & IT skills needed in the field today.
- Each student will have questions answered on how to “Think On Their Feet” to resolve problems in the field with various security and network problems experienced each day.
- The various protocols & equipment necessary for the control of Secure data transfer from one location to another.
- The real major tools provides the technician with the ability to assist in installation and basic support of Firewalls and VPN (Virtual Private Networks) that is the backbone of Security of the 2020 Cloud!

**Price:** $1,950

**20% CWA Discount $1,560**

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This 40 hour electricity and electronics fundamentals (EEF) course is designed for individuals who want to gain entry level knowledge of basic electricity and electronics concepts. (This includes individuals who have no prior electricity or electronics background or experience.) After this course, students can earn Skill Code: #C1756.

The course reviews the following:

- Fundamentals of series and parallel circuit theory
- Introduction of Ohm's Law relationships
- Identification and characteristics and AC and DC signals
- Identification of common circuit component symbols and functions
- Concepts in Gain and Loss and the use of decibels
- Understanding “Truth Tables” and Digital Logic gates
- Number System and Number System Conversion
- Digital Line Codes and Signaling Types
- Digital Systems and Voice to Digital Conversion

Price: $1,950  
20% CWA Discount $1,560

New skills added for Telecom Industry!

800.710.7595 | FAX 888.778.8230
SIGN UP NOW AT WWW.AMERISKILLSTECH.COM
This 40 hour course provides an in-depth review of electrical theory; electronic components; soldering techniques; block diagrams; cabling; power supplies; test equipment and measurement; electrical safety; electronics formulas; radio communications technology; Series/parallel circuits; amplifiers; digital concepts; computer electronics and applications; optical electronics; telecommunications; and electronics work procedures. It is designed around the ETA competencies for the Associate Certified Electronics Technician Certification, (CETa).

The CETa exam provides a valuable certification that serves as an industry acknowledgement of knowledge and skills required to qualify for jobs in the electrical/electronics industry. This course provides a foundation of electrical knowledge that prepares you for additional training and experience with electric and electronic industry companies.

Founded in 1978, ETA has issued over 100,000 technical certifications covering more than 50 certification programs in a variety of electronic fields. Please visit www.eta-i.org for more information on ETA Certification Programs, including Alternative Energy Certifications.

We are affiliated with Brandman University and are members of Communication Workers of America Local 9503. Our instructors have over 55 combined years of teaching and course development experience in various fields; specializing in Alternative Energy and Telecommunications. At Ameri-Skills, we provide technology training for tomorrow’s “Green Energy” and Broadband Telecommunications Jobs.

Please call or check our website for schedule & Location Information. Day and Evening Classes are available to Unions, Professional Work Groups, non-profits, and other groups at Locals & work sites.

Price: $2,250
20% CWA Discount $1,800
Price includes $60 ETA Exam Fee

800.710.7595 | FAX 888.778.8230
Sign up now at www.ameriskillsTech.com
The GROL is required to operate and maintain radio communications equipment for aircraft, marine vessels and in the telephone, TV and radio broadcast environments. This **40 hour** course provides students with working knowledge of Element 1 and Element 3 for the GROL License. **Skill Code C1257** is earned when FCC GROL Element 1 and Element 3 is **PASSED**.

**Element 1** portion of the class covers materials one must know to obtain the FCC GROL license:
- Covers the terminology and equipment used in this field.
- Learn the operating procedures and regulations for maritime applications.
- Distress calls, use of VHF, Global satellites systems how used in this field.
- Equipment testing and inspection requirements, call frequency use, distress call signals, order and priority of calls, station log responsibilities, identification of phonetic alphabet, and all terminology and definitions related to these items.

**Element 3** portion of the class will dive into the basics of electricity and electronic principles with the components applicable GROL license and operation.
- Types of Radio Waves and radio propagation.
- Practical communication circuits, decibel power calculations, frequencies.
- Antennas types, batteries, amplifiers, FM Phone signal, Radar basics.
- Terminology and definitions related to this field.
- Basic aircraft Distance Measuring Equipment, frequency range uses.

The GROL allows the holder to operate, maintain or install certain classes of United States licensed radio and television transmitters under authority of the Federal Communications Commission. The license also conveys all of the operating authority of the Marine Radio Operator Permit. The GROL is issued for the lifetime of the licensee.

**Price:** $2,250
20% CWA Discount $1,800
Price does NOT include $50 FCC Exam Fee

800.710.7595  |  FAX 888.778.8230
SIGN UP NOW AT WWW.AMERISKILLSSTECH.COM
Fiber Optics Installer
ETA Fiber Optics Installer Certification Exam in Class
CEU's are being offered with this course from Brandman University School of Extended Education.

This 40 hour course provides students with working knowledge and skills in fiber optics communications theory and hands-on installation techniques. (SKILL CODES: C1259, C1309, C2014, C2038 & C2055)

- The students will emerge from this course with a practical understanding of how voice, video, and text data are converted in light pulse energy, and then multiplexed and transmitted over optical fiber links.
- A short history of fiber optics and principals of fiber optics transmission.
- Learn the basic principles of light, fiber optics construction and optical fiber characteristics.
- Areas of knowledge taught are light sources, receivers, system design in short distance applications and long-haul trunk applications. Fiber-to-the-Home and Fiber-to-the Node.
- Broadband applications and future of Fiber Optics in the telecommunication world.
- Understand safety concerns and apply them during the “Hands On” portion of the class.
- Learn HOW TO “Fusion Splice”, “Polish” and “Test” fiber optics. Installation skills are taught via connector terminating of optical fiber, and splicing exercises in our “Hands On” lab. This is NOT a class room demonstration and each tech performs various fiber optic splicing and polishing techniques! All lab skill tasks meet requirements for the ETA Fiber Optics Installer Certification. Satisfactory completion of the lab and passing the FOI certification is earned by passing the ETA FOI exam.

We are affiliated with Brandman University and our Fiber Optics instructors have over 40 years experience in teaching Fiber to students. Our “Hands On” instruction is in the classroom!

ETA FOI certification is the best in the industry, Internationally recognized and less expensive to secure and maintain. Visit www.eta-i.org for ETA Certification info. $150 Exam Fee paid by student.

Price: $1,950
20% CWA Discount $1,560

800.710.7595 | FAX 888.778.8230
SIGN UP NOW AT WWW.AMERISKILLSTECH.COM
This 40 hour course provides students with a hands-on learning experience in HVAC disciplines, job techniques, various HVAC systems, the components in each and how the systems function. This course will advance the student’s knowledge of the many HVAC motors, troubleshooting techniques and how to service/charge AC units in the “Hands On” labs.

Course includes:

- The students will emerge from this course with a practical understanding of how HVAC systems work, their component parts and the basics of heating and refrigeration.
- “Hands On” labs
- How to perform Recovery, Evacuation and Charging of AC units in sequential steps.
- Learn the basic electronics of HVAC systems and theory of air flow.
- Become familiar with the various motors, controls and circuits.
- Learn the basics in Copper, PVC, Galvanized Pipe, Black steel pipe various schedules (20,40,80) and various values, Fit-Ups and preparation.
- Basics of HVAC system problem diagnosis and troubleshooting.
- Provides for review of EPA Section #608 Certification (one class) so Students can take and pass the required EPA exam required to purchase R-22 gas for AC units.

You can perform HVAC jobs without a Contractors license if job is $499.00 or less.

This class will set up a Tech for Intermediate HVAC Training and jobs!

Price: $2,150
20% CWA Discount $1,720
Price does include EPA exam Fee

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SIGN UP NOW AT WWW.AMERISKILLSHECH.COM
2020 Technical Formatting & Networking is specially designed as a building block for future expanded technology training. This 40 hour course includes:

- Understanding the “CLOUD”, Switches & Router Basics
- Networking Basics, WAN, LAN
- What is Modulation & Multiplexing and why needed.
- Networking System Functions and Display results
- Building a Small Office Network and “Field Problems”

2020 Network Security - This 40 hour course increases the Technicians “SKILL SETS” and knowledge to work with new and advanced equipment & routers used in business', VPN “Cloud” and residences today. The course includes:

- Insure Tech has basic understanding of POTS, OSP, Local Loop, NID/SNI, DMARC
- Knowledge of two “Hacking & Security” Intrusion scrips Linux & Python
- Learn the basic theory of Firewall Network Security and Tools by Cisco/Juniper
- Train the Tech on initial Network Security and IT Skills
- How to Install and deploy basic configuration in CISCO and Juniper SSG5 Firewalls.

FCC General Radio Operator License (FCC-GROL) - This 40 hour course provides students with working knowledge of Element 1 and Element 3 for the GROL License.

The GROL: (Skill Code C1257 when FCC License Exam is passed)

- Allows the holder to operate, maintain or install certain classes of United States license radio & television transmitters under authority of the Federal Communications Commission.
- Conveys all of the operating authority of the Marine Radio Operator Permit.
- Provides a review of the terminology, operating procedures and regulations for maritime applications.
- Reviews components & types of radio waves, Prepares for the FCC GROL Exam.

HVAC - (Heating Ventilation & Air Conditioning) This 40 hour course provides students with a “Hands-On” learning experience in HVAC disciplines, job techniques, various HVAC systems, the components in each and how the systems function. How to perform Recovery, Evacuation and Charging of AC units in sequential steps. Instructs in the many HVAC motors, troubleshooting techniques units in the “Hands-On” labs.
UAV (Unmanned Aerial Vehicles) Safety and Certification Training - This 20 hour course teaches the person safety, all the rules and regulations necessary for safe operation of UAV (Drones). Included are the FAA Parts 107 & 61, Technicians get “HANDS ON” experience flying the UAV with a FAA UAV Certified instructor (limited time). A full review of all requirements in Part 61 in preparation for a person to pass the UAV exam at FCC Testing facility (exam fee of $150 not included in course).

Electricity and Electronics Fundamentals - This 40 hour course is designed for individuals who want to gain entry level knowledge of basic electricity and electronics concepts. (Skill Code C1756)

- No prior electricity and electronics background or experience required
- Satisfies knowledge and skills requirements needed to pass digital electronics knowledge skills assessment type tests (DT-SAT)
- Pre-course knowledge of basic math concepts used with series/parallel and ohm’s law calculations is helpful

Fiber Optics Installer - This 40 hour course provides students with working knowledge and skills in fiber optics communications theory and hands-on installation techniques. The course includes (Skill Code C1259, C1309, C2014, C2038, C2055)

- Fiber optics communication concepts
- Installation skills (via connector termination & splicing.

Electronics Technician Associate - This 40 hour course is designed around the ETA competencies for the Associate Certified Electronics Technician Certification, (CETa); exam is optionally offered in class. The CETa course includes:

- Review of electrical theory and electronic components
- Review of cabling; power supplies; test equipment and measurement concepts.
- Review of electrical safety, electronics formulas, and radio communications technology
- Review and performance of series/parallel circuit analysis
- Review of amplifiers; digital concepts; computer electronics and applications; optical electronics; telecommunications; and other concepts.