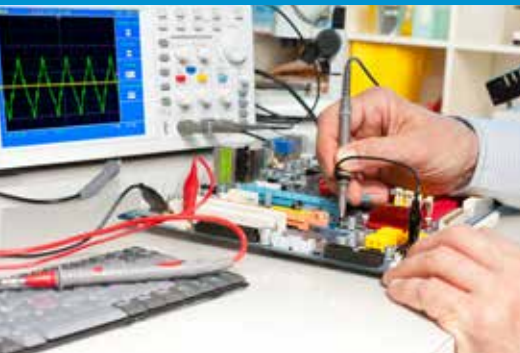


CIE Bookstore

2017 Course Catalog

55
NEW
Courses

Electronics



iPhone Repair



Mobile Apps



IT Security



HVAC



Programming



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Buy a lesson \$14⁹⁵

CIE made some of its most popular lesson books available individually for \$14.95. Each lesson is straight out of a CIE course and comes with a lesson book and a discussion sheet with hints and answers to the examination.



Associate-Level CET Study Guide

CET Test, Basic Electronics Components, Capacitors, Inductors and Transformers
03-3700 \$14.95

Pointers and Practice for Passing FCC General Class Exam Part I

Element 3A Operating Procedures, Element 3B Radio Wave Propagation, Element 3C Radio Practice, Element 3D Electrical Principles, Element 3E Circuit Components
03-3705A \$14.95

Pointers and Practice for Passing FCC General Class Exam Part II

Element 3F Practical Circuits, Element 3G Signals and Emissions, Element 3H Antennas and Feed Lines, Practice Examination
03-3705B \$14.95

The Short Report: A Planning Formula

Learn how to create a short report.
03-8004 \$14.95

Overview of Technical Reports

Learn how to create a technical report.
03-8000 \$14.95

The Memo: Handling Writing Tasks

Learn how to create a memo.
03-8002 \$14.95

AC Circuit Analysis

Duality, AC Voltage and Current Sources, Series-Parallel Equivalent & more!
03-5232 \$14.95

Antennas and Wave Propagation

Learn the components of a Antennas and Wave Propagation and how they are used.
03-2307 \$14.95

Basic Circuit Principles Applied to Practical Design

Equivalent Circuits, Their Meaning, and Derivation, Power in Electronic Circuits + more!
03-5213 \$14.95

Batteries, Control Motors & Power Sources

Mercury Cell, Fuel Cell, DC and AC Motors and Generators Used in Servo-Systems and Automation
03-2502 \$14.95

Network Theorems

03-5217 \$14.95

PC Board Layout

03-6442 \$14.95

Decibels

Learn what decibels are and why they are used. 03-4201 \$14.95

Detection and Frequency Conversion

Demodulation of AM & FM Waves
03-2409 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part I: Performance Testing

03-2605 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part II: Inside two-Way Receivers

03-2620 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part III: Receiver Audio Circuitry

03-2621 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part IV: Frequency Control and Transmitter Testing

03-2622 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part V: Inside Two-Way Transmitters

03-2623 \$14.95

Installing, Troubleshooting and Maintaining Two-Way Mobile Equipment Part VI: Tone Squelch & Control Circuits

03-2624 \$14.95

Introduction to Robotics

Non-Servo, Servo-Controller, Point-to-Point and Continuous path Robots
03-3220 \$14.95

Introduction to Solid-State Design Part I

03-5403 \$14.95

Introduction to Solid-State Design Part II

03-5409 \$14.95

Introduction to Solid-State Design Part III

03-5412 \$14.95

Modern Modulation Methods

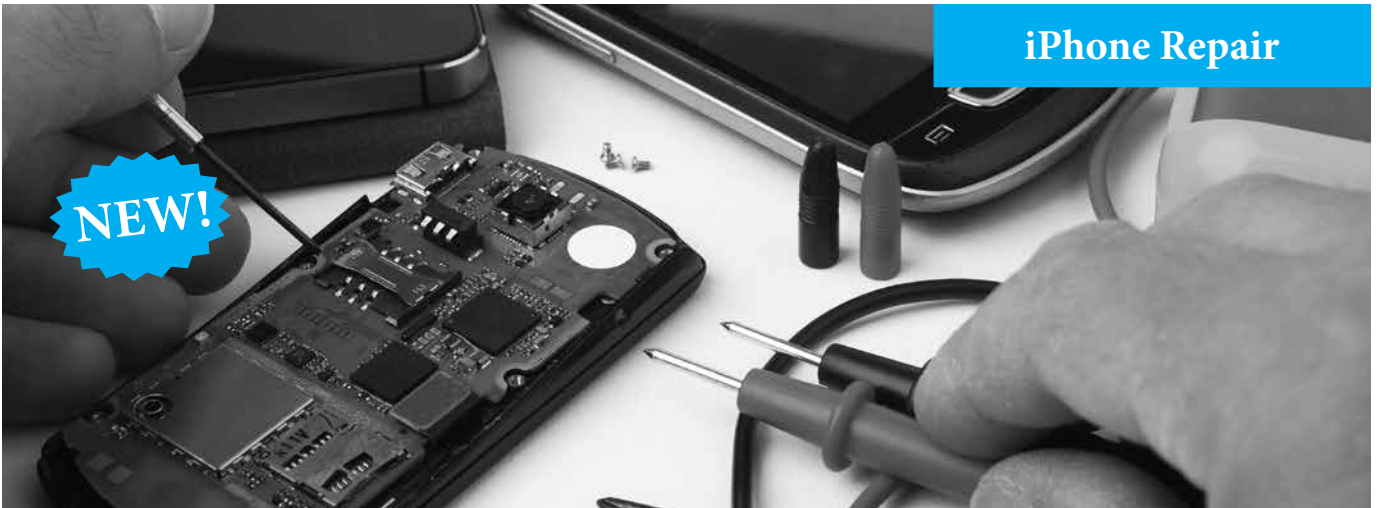
03-2408 \$14.95

Ohm's & Kirchhoff's Laws Applied to AC Circuits

03-5231 \$14.95

Resonant Circuits

03-5234 \$14.95



NEW!

iPhone Repair Course

This course will prepare students with no iPhone repair experience for careers in the rapidly-growing cell phone repair field.

Learn to fix iPhones and other iDevices and start your own business.

It comes with 10 lessons, course textbook, study guide, a 16 piece tool kit, instructor support, certificate of completion upon completion and online exams.

Learn to replace LCD screens, touch screens, charge ports, headset jacks, speakers, treat liquid damage, replace crystal chips, unlock phones, and how to recover data from a broken device.

Course Objectives:

Upon the completion of this course the student will be able to:

Replace all these iDevice components:

- Battery
- Display
- SIM card
- Logic board
- Dock connector

Take Apart, Fix, and Reassemble:

- iPod nano
- iPod touch
- iPhone
- iPad

Fix Common Software-Related Failures:

- Emergency data recovery
- Jailbreaking
- Carrier unlocking

Do What Apple Never Intended:

- Resurrect a waterlogged iDevice
- Prepare an iDevice for resale
- Install non-Apple Store apps
- Perform out-of-warranty repairs

Course Tool Kit

Use this kit to repair Apple products like the iPhone, iPad, and iPod.



16 tools allows you to take apart your mobile devices without damage to the tablet or phone cover. Rubberized, anti-slip handle allows for a firm grip to prevent slippage during repairs.

- SIM card tray ejection tool
- 12 fastener bits
- 2 Polyoxymethylene (POM) opening levers to access parts inside the housing
- Suction Cup - use to remove Apple touch screens without leaving marks on device
- Prying Paddle - use to open case without scratching the cover

Instructor Support

If you ever need help with your course you can call or e-mail our staff of highly trained instructors for immediate attention or you can join the chat room and ask a question.

Learn from the comfort of your own home and study when it's convenient for you - there are no time limits. Take your exams online on our e-grade web site anytime.

What do I get?

- Certificate upon finishing
- Textbook and study guide
- 16 piece iDevice tool kit
- Instructor support
- 10 lessons with online exams

02-iPhonb \$125

Industry Overview

According to IBISWorld - the largest provider of industry information in the U.S. - the Cell Phone Repair industry has experienced strong growth during the past decade as smartphone and tablet usage have increased.

The rising popularity of expensive but fragile smartphones has given the industry a significant boost since 2010.

Industry Analysis

The Cell Phone Repair industry expanded over the past five years, with revenue rising at an annualized rate of 3.0% to \$3.6 billion, including expected revenue growth of 5.0% in 2016.

The industry has benefited from the widespread popularity of smartphones. These internet-enabled, feature-rich phones are usually too expensive to simply replace without a warranty and typically have fragile screens and hard-to-replace components.

These characteristics have encouraged consumers to more frequently turn to professional repair shops to salvage devices that are still operable.

HVAC Training



Industry Overview

According to the *Bureau of Labor Statistics*, employment of heating, air conditioning, and refrigeration mechanics and installers is projected to grow 14 percent from 2014 to 2024, much faster than the average for all occupations.

Commercial and residential building construction will drive employment growth.

The growing number of sophisticated climate-control systems is also expected to increase demand for qualified HVACR technicians.

Job Prospects

Job opportunities for HVACR technicians are expected to be excellent.

Candidates familiar with computer tablets and electronics, as well as those who have developed troubleshooting skills, will have the best job opportunities as employers continue to have difficulty finding qualified technicians to install, maintain, and repair complex new systems.

HVAC & Refrigeration Training Course

The main focus of the course is to provide an understanding of the procedures for installing, servicing, and troubleshooting all residential and light commercial HVAC systems.

Systems covered include forced-air, forced-air split, hydronic, steam, air and water heat pumps, geothermal heat pumps, packaged rooftop units, and chillers.

The online videos provide an in-depth look at the operation and troubleshooting of all residential and light commercial HVAC systems.

Step-by-step procedures using 3D graphics provide a clear understanding of the skills required to install, service, and troubleshoot all residential and light commercial systems.

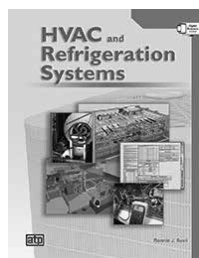
The Quizzes provide an interactive review of topics covered in the chapters.

Lesson Topics

- HVAC and Refrigeration Principles
- HVAC & Refrigeration Electrical Systems
- Heating Systems & Refrigeration Systems
- HVAC System Load Calculations
- Design and Balancing
- Building Automation Systems
- Plus much more

This is an entry level self-paced course with a textbook (1328 pages with 1433 illustrations) and online videos and quizzes.

02-603\$150



Building Automation Control

Learn building automation control with this self-paced course that comes with a textbook, videos and online quizzes.

It will provide you with a comprehensive foundation for the integration of commercial building systems, such as HVAC, lighting, and security systems.

A building automation system is a network of “intelligent” control devices used in one or more building systems. Building automation systems operate cooperatively to share building information and control system devices automatically according to programmed logic.

This introductory course lets you master the fundamentals and quickly move on to more advanced topics.

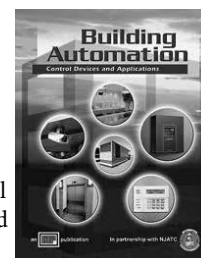
Learn about the operation, signals, and functions of sensors, actuators, and other control equipment used in automated systems in commercial buildings.

Open Enrollment

You can start this program at anytime and there are no time limits - so study when it's convenient for you.

This comprehensive self-paced course includes a full color textbook (407 pages, 325 illustrations), online videos, quizzes, flash cards and provides a solid foundation in building automation control.

02-714\$112



HVAC Schematics DVD Course



This HVAC technician training course presents an overview of the fundamentals of schematic diagrams.

With an understanding of the fundamentals of wiring diagrams and how symbols serve as a map of the electrical circuits in refrigeration and air conditioning systems, technicians can develop their troubleshooting skills.

This DVD course includes information on the basics of current flow and that knowledge helps technicians master the concept of tracing circuits and how switches operate in series with the loads the control.

In addition, this package includes a self-print CD containing an interactive, read-along resource guide, and a course exam consisting of multiple-choice questions and exercises that require the isolation and identification of specific circuits on a schematic diagram.

02-780 \$40

Soldering and Brazing Refrigeration System Tubing DVD Course

Learn the different types of tubing used in HVACR installations, cutting, swaging and fitting tubing, and see how to use both low-temp 95/5 solder and high temp silver solder.

The use of air-acetylene, MAPP gas and oxy/acetylene torches, and using nitrogen during brazing are also covered. 25-minute video training program.

02-782 \$30

Using Test Instruments to Service Equipment DVD Course

Learn how to use test instruments to service equipment. This DVD shows the proper use of analog and digital meters to make necessary electrical checks when troubleshooting and servicing HVACR equipment and checking components and circuits.

Test equipment from several different manufacturers (Fluke, Fieldpiece, MA Line and UEI) are used. AC and DC voltage, capacitance, current, temperature and pressure measurements are covered along with Ohm's Law in a practical application.

02-781 \$40

HVAC Simulation Online Training



The HVAC online training simulation offers more than 150 scenarios which allow students to troubleshoot and build diagnostic and critical thinking skills.

Each scenario starts with a customer-stated service call. The scenario addresses a simulated fault or multiple faults on an appliance and requires students to use the correct tool and a structured diagnostic process to deliver a repair scope of work and bill.

Includes interactive color wiring diagrams linked to diagnostic testing of equipment.

Students learn how to master diagnostic and troubleshooting skills across six pieces of HVAC equipment found in industry:

- Gas Furnace & Gas Boiler
- Oil Furnace
- Small Commercial Air Conditioner
- Central Air Conditioners
- Heat Pump

Students learn to diagnose a fault or faults and perform the repair successfully while materials and labor costs are tracked.

02-812 \$54



IT Skills for HVAC Technicians



This book is an introduction to Ethernet networking concepts, hardware, configuration and troubleshooting.

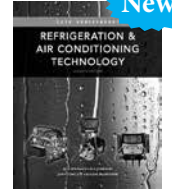
Designed for HVAC technicians servicing automated control systems that are based on networked controllers. Several chapters cover the basic operation of an Ethernet-based network, servers, and software tools.

The final chapter consists of examples of the 19 most common causes of network problems, including their symptoms, diagnosis, and remedies.

- HVAC Control System Networks
- Client Computers & Servers
- Wireless Networking
- Diagnostic & Troubleshooting Tools
- Troubleshooting Scenarios

02-813 \$32

Refrigeration and Air Conditioning Technology Text and 6 DVD set!



Get the skills needed to maintain and troubleshoot today's complex heating, air conditioning and refrigeration systems.

This 1,536 page text and 6 DVDs give hands-on guidance, practical applications, latest technology, and solid foundation to fully understand today's HVAC service and repair, its environmental challenges, and their solutions.

Focused on sustainable technology in today's HVAC/R industry with an emphasis on new technologies and the latest advancements in the industry, it includes more on Green Awareness and LEED accreditation.

The 6 DVDs feature theory-related topics as well as practical, step-by-step skills for successful maintenance and troubleshooting. Videos emphasize all aspects of HVAC-R with a focus on safety.

02-814 \$355



HVAC Control Systems



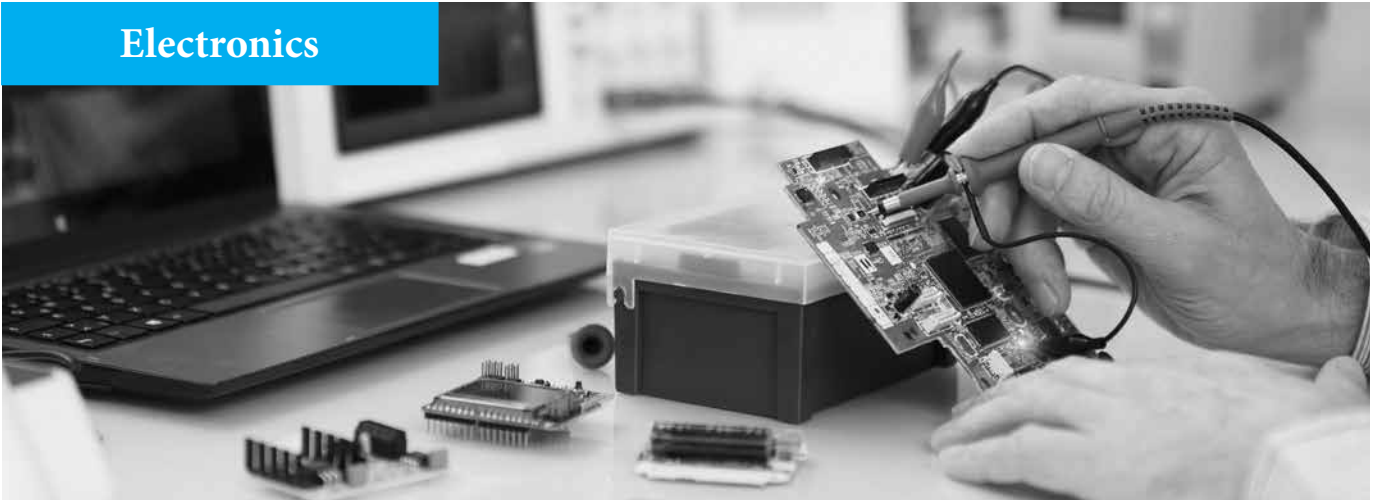
HVAC Control Systems provides an introduction to HVAC fundamentals and control system principles for pneumatic, electromechanical, electronic, and building automation control systems.

This textbook includes in-depth coverage of commercial heating and cooling systems and also covers modern ventilation and indoor air quality requirements.

Learn the latest technology in web-based control, networking, wireless control applications, energy auditing and efficiency, system retrofitting, direct digital control, and maintenance management and includes a new feature: field-based troubleshooting scenarios of control system problems.

Expanded content includes BACnet® and LonWorks® building automation protocols as well as system integration. This textbook is specifically designed for HVAC and building maintenance technicians.

02-815 \$170



Industry Overview

Today's electrical, electronics and computer technicians continue to revolutionize the way we live.

We depend on the hundreds of thousands of these individuals who design, produce operate and maintain a vast array of equipment and services.

Radio, television, telephones, computers, airplanes, automobiles, office machinery and home appliances are a few of the industries in which electronics play an important role.

In our age of satellites and computer networks the challenges and opportunities continue to mushroom. Today's electronic careers continue to have enormous potential.

The implementation of ideas through new products, systems and services is the essence of engineering. The rapid changes in electrical, electronics and computer technology and the diversity of applications require a broad educational background and a life-long commitment to learning new and specialized information.

Basic Electronics

Discover how to troubleshoot electronics with this 39 lesson certificate course with hands-on training lab. Learn electronics troubleshooting at home with real world experiments and online exams.

Designed for the beginner, this course allows you to master the fundamentals and quickly move on to more advanced topics. Quickly learn the basics and then move on to semiconductors, printed circuit boards, identifying components, Ohm's law, relays, robots, reliable soldering techniques and much more!

- Certificate upon finishing
- Instructor support
- 39 lessons with online exams
- Hands-on labs

03-Intro.....\$245

Power Supply

Learn how to test and troubleshoot power supplies. All electronic equipment needs power to operate. Practically every electronics technician must understand power supplies and be able to service and maintain them.

This power supply course will give you with the information needed to understand transformers, capacitors, inductors, how to step up or down a voltage, change AC into DC, pulsations in the rectified output, values and ratings for power-supply components and unregulated power supplies.

- Certificate upon finishing
- Instructor support
- Online exam
- Lesson book with 1 assignment

01-PS01.....\$95

Oscilloscope Fundamentals

Learn the fundamental principles common to all oscilloscopes and familiarize yourself with any oscilloscope in a matter of minutes.

You don't need access to an oscilloscope but you may want to try some of the procedures and techniques described in the later topics on an actual oscilloscope if one is available.

Learn about the different types of scopes, basic operation, horizontal sweep and synchronization, waveform amplification, voltage measurements, time, frequency and phase measurements.

- Certificate upon finishing
- Instructor support & online exam
- Lesson book

01-SCP01.....\$55

Soldering Course

See how easy it is to learn good soldering techniques with this certificate course. It covers everything that the electronic technician needs to know about soldering.

Learn how to inspect and repair solder joints using the included soldering iron. Finish with a Surface Mount Technology learning module with lab.

Students gain experience identifying, soldering and using surface mount devices by physically building an actual working surface mount technology project.

- Certificate upon finishing
- Instructor support
- 3 lesson books with online exams
- Soldering iron, parts kit & lab
- Surface mount technology lab

01-SD01.....\$95

Multimeter Fundamentals

Learn the proper techniques of measuring resistance, voltage and current.

- Certificate upon finishing
- Instructor support with online exams
- Digital & analog meters
- Soldering iron with parts kit
- Lesson books and labs

02-069 \$195

Using Test Instruments to Service Equipment DVD

Learn how to use test instruments to service equipment. This DVD shows the proper use of analog and digital meters to make necessary electrical checks when troubleshooting and servicing HVACR equipment and checking components and circuits.

02-781\$40

Intro to PC Board Design & Lab

Learn how to design and build printed circuit boards with this course. Designing a PC board is not complicated if you follow the basic rules outlined in this program.

Every lesson is presented in a clear easy-to-understand format which makes learning this material fun and easy.

What do I get?

- Certificate upon finishing
- Instructor support with online exams
- Soldering iron with parts kit
- 4 lesson books with experiments

After finishing this course you'll able to:

- Design PCBs
- Avoid the pitfalls which lead to sloppy, unprofessional workmanship
- Solder to Printed Circuit Boards
- Inspect & Repair Solder Joints
- Identify & Test Components
- Trace Circuits
- Build an Electric Siren

02-261 \$150

Motor Control CD Tutorial

This interactive multimedia software uses pictures, sounds, animations and interactive circuits to teach you the basics of motor control. A Certificate of Completion from Koldwater may be printed on your printer if you achieve a passing score on the test.

Learn at home on your own time and master motor control technology with this powerful motor control tutorial.

02-050\$79

CET Exam Review

This course will prepare you to take the Associate-Level Certified Electronics Technician (CET) exam.

Solve math problems like those found in the exam, electronic components, types of circuits used in CET exam questions and how DC and AC circuits are covered. Practice CET exam questions are included that will cover all areas of the Associate-Level CET Test.

- Certificate upon finishing
- Instructor support
- Online exam
- Lesson book

01-CT01\$65

FCC GROL

After completing this course you will be ready to take the FCC examination for a General Radiotelephone Operator License.

The General Radiotelephone Operator License is required to adjust, maintain or repair any FCC licensed radiotelephone transmitters in the aviation, maritime and international fixed public radio services.

It is issued for the lifetime of the holder.

Through the years Cleveland Institute of Electronics (CIE) has been able to compile a great amount of information concerning the types of questions that the FCC include in their GROL examinations.

Because of the extensive FCC GROL sample questions in this course, you can look forward with confidence to passing the FCC GROL exam particularly if you heed the hints given throughout the course.

- Certificate upon finishing
- Instructor support
- Online exams
- CD with 19 lessons

02-FCC02\$50

Troubleshooting Electrical/ Electronic Systems

Covers all aspects of troubleshooting electrical and electronic systems. This text and CD are designed for use in the electrical industry, electrical training programs, and related fields. Each chapter contains electrical and electronic system applications, step-by-step troubleshooting procedures, and hands-on troubleshooting activities that reinforce the concepts presented.

02-606\$89

Automotive Electronic Diagnostic Course Part I Wiring Diagrams



Learn the fundamentals of Automotive Electronic Diagnostics. Includes DVD, Course Book and Certificate of Completion upon passing final exam.

This learn at home course is a great introduction to the automotive electronic diagnostic process.

It covers all the basics of automotive electronic diagnostics, vehicle modules, computers, networks, data path, current, voltage, electronic symbols and more.

Automotive Electronic Diagnostics Course Part I includes a DVD and course book that will give anyone interested in automotive systems an understanding of what's involved in modern auto electronic repairs.

02-803 \$125

Automotive Electronic Diagnostic Course Part II Advanced Troubleshooting



Learn advanced techniques of Automotive Electronic Diagnostics. Includes DVD, Course Book and Certificate of Completion upon passing final exam. (Part II of II)

This is Part II of the Automotive Electronic Diagnostic program. Part I covered the fundamentals of reading and understanding automotive wiring diagrams and Part II goes deeper into the diagnostic process with troubleshooting equipment and circuit identification and repair.

With the ever increasing electronic content in today's vehicles, the need to be able to read automotive wiring diagrams is as important as knowing how to use the different equipments needed to perform diagnostic work.

Automotive Electronic Diagnostics Course Part II includes a DVD and course book that will give anyone interested in automotive systems an understanding of what's involved in modern auto electronic repairs.

02-804 \$125

Electricity Simulation Training

This course is a collection of interactive simulation activities that will help students understand both basic electrical concepts and practical application of electricity.

02-816 **NEW!**\$54

Electronics: Circuit Design

Electric Circuits with Lab I

Designed to give you hands on training in the field of Electric Circuits.

Learn about the principles of DC circuits, AC circuits, parallel and equivalent circuits, Ohm's law, Kirchoff's laws, series, diodes, transistors, capacitors, transformers, semi-conductors, amplifier configurations and advanced soldering techniques.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electric circuits.



What do I get?



- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 25 assignments
- Personal Training Laboratory
- Multimeter & Soldering Iron
- Parts Package for your experiments

01-EET111..... \$275

Electric Circuits with Lab II

This certificate course is designed to explore the principles of AC circuits with emphasis on steady state AC circuits, along with relationships of frequency and impedance being analyzed and resonance studied.

The laboratory portion of the course elaborates on the behavior of capacitors, inductors, and transformers in a circuit; in addition to the practical experiments with resonance, filters, and optoelectronics.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electric circuits.



What do I get?



- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 21 assignments
- Personal Training Laboratory
- Multimeter & Soldering Iron
- Parts Package for your experiments

01-EET112..... \$275

2 Individual Lessons

1. The Three Basics of Electric Circuits: Voltage, Current, and Resistance
 2. Ohm's Law, Conductors and Insulators
- 03-2339\$29.90

Power Supply Circuits with Lab

This certificate course is designed to explore the application of semiconductors in practical circuits with emphasis on power supplies and amplifier configurations.

The laboratory portion of this course, deals with unregulated power supplies, regulated power supplies, and transistor amplifiers.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electronic circuits.



What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 7 assignments
- Personal Training Laboratory
- Parts Package for your experiments

01-EET116..... \$275

Analog Circuits with Lab

This certificate course is designed to explore the principles of operational amplifiers and other analog circuits and subsystems commonly found in the field of industrial controls and communications.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electronic circuits.



What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 8 assignments
- Personal Training Laboratory
- Parts Package for your experiments

01-EET121 \$275

Computer Aided Circuit Design & Drafting with NI Multisim

Master Multisim quickly and learn how to design and test many different circuits which can be applied to real world applications.

What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 11 assignments
- Multisim circuit design software

04-CET351\$225

Symptoms in Electronics Circuits

This certificate course is designed to explore the principles of system analysis and symptom diagnosis in electronic circuits.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electronics circuits.



What do I get?



- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 18 assignments
- Personal Training Laboratory
- Parts Package for your experiments

02-EET124..... \$275

Solid State Circuit Design

This certificate course is designed to give an in-depth analysis and design of complex solid state circuits. Upon completion of the course, students will understand the steps involved in the analysis and design of solid state circuits.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on solid state circuit design.



What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Lesson Books with 13 assignments
- Personal Training Laboratory
- Parts Package for your experiments

02-EET232..... \$275

Network Analysis I

Explore principles of duality, superposition, Thevenin's and Norton's theorems, Ohm's and Kirchoff's laws applied to AC circuits with emphasis on nonlinear analysis of electronic circuits with active devices.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on network analysis circuits.



What do I get?

- Certificate upon finishing
- Instructor support & online exams
- 12 lessons with online exams
- Personal Training Lab & Multimeter

01-EET231.....\$275

Digital Electronics

Digital Electronics I with Lab

This certificate course is designed to cover the digital numbering system, logic gates and truth tables, in addition to general coverage of digital devices such as: flip-flops, counters, adders, multiplexers, and demultiplexers.

The laboratory portion of the course elaborates on these subjects with experiments to further explain them.

Course Objectives:

Upon the completion of this course students will be able to build and troubleshoot digital circuits found in digital readouts.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electronics technology.



New!

What do I get?

- Certificate upon finishing
- Instructor support & Online exams
- Lesson Books with 13 assignments
- Personal Training Laboratory
- Parts Package for your experiments

02-CET121 \$275

Digital Electronics II with Lab

This certificate course is designed to give an in depth analysis of digital devices used in microcomputers with emphasis on digital circuits, flip-flops, CMOS digital circuits, counters, shift registers, decoders, ROMs, PROMs, PLAs and A/D and D/A converters.

Hands-on Training Lab

The Personal Training Lab will give you hands on training with experiments on electronics technology.



New!

What do I get?

- Certificate upon finishing
- Instructor support & Online exams
- Lesson Books with 18 assignments
- Personal Training Laboratory
- Parts Package for your Experiments

02-CET231 \$275

Digital Electronics DVD Course with Lab

New!

This course is an introduction to digital electronics that includes a DVD with 12 video lessons and a hands-on digital electronics learning lab.

Learn at home on your own time with over 2 hours of video instruction and experiments.

A hands-on approach is taken in this course through a combination of lecture and experimentation to teach you about the different basic ideas (number systems, boolean algebra and logic gates) used in digital electronics.

02-805\$59

Control Systems

Control Systems I with Lab

This certificate course is designed to give an in-depth look at Industrial controls with emphasis on position, force, motion, fluid and temperature transducers, and signal transmission and conditioners.

The lab portion includes experiments through the use of NI Multisim Circuit Design simulation software.

What do I get?

- Certificate upon finishing
- Instructor support & Online exams
- Multisim circuit design software
- Textbook, Study Guide with 5 assignments

02-EET471 \$275

Control Systems II with Lab

This certificate course is designed to give an in-depth look at control system concepts with emphasis on analog and digital controllers, power interfaces, Laplace transforms and system response.

The lab portion includes experiments through the use of NI Multisim Circuit Design simulation software.

Control Systems I grads can buy this course without the textbook and software as they're the same items found in 02-EET471.

What do I get?

- Certificate upon finishing
- Instructor support & Online exams
- Multisim circuit design software
- Textbook, Study Guide with 5 assignments

02-EET472 \$275

02-EET472B (No book or software) ... \$125

Communications

Electronic Communications I

This certificate course is designed to cover the principles of AM and FM receiving and transmitting with emphasis on noise, single-sideband transmission, amplifiers, oscillators, filters, detectors, AGC, pulse-code modulation, sample rates, DAC and A/D converters.

What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Textbook with 7 assignments

01-EET361\$325

Electronic Communications II

This certificate course is designed to explore principles of modulation and demodulation, telephone networks, wireless systems, computer communications, transmitting, wave propagation, antennas, radar and fiber optics.

Electronic Communications I grads can buy this course without the textbook and software as they're the same items found in 02-EET361.

What do I get?

- Certificate upon finishing
- Instructor support & online exams
- Textbook, Study Guide and 9 assignments

02-EET362 \$325

02-EET362B (No textbook) \$125

Electrical Power and Machines

This course is designed to explore the principles of power generation with emphasis on DC motors and generators, three phase circuits, and single phase and three phase induction motors.

- Certificate upon finishing
- Instructor support
- Online Exams
- Textbook with 7 assignments

01-EET351\$275

Electronics Fundamentals

Electric Motor Drive Installation & Troubleshooting

Covers the latest information on drive theory and applications, as well as installation, testing, and troubleshooting procedures. online activities provide hands-on experience in solving troubleshooting problems. Text and online access. 02-605..... \$85

Troubleshooting Electrical/Electronic Systems

Step-by-step applications show how to troubleshoot electrical and electronic systems. CD activities provide hands-on experience in solving troubleshooting problems. Text & CD 02-606..... \$84

Component Identification

This CD course introduces the concepts of electronics by using detailed diagrams, step by step electrical operational procedures, animations and user feedback through quizzes and tests. 02-751\$49.95

Current, Voltage & Resistance

Learn the concepts of: atoms, circuits, current, voltage, resistance, and the units to measure these parameters. This CD course uses detailed diagrams, step by step electrical operational procedures, animations and user feedback through quizzes and tests. 02-752\$49.95

Resistor Color Code CD Course

Learn how to identify resistor values using their color coded bands. This CD course uses detailed diagrams, step by step electrical operational procedures, animations and user feedback through quizzes and tests. 02-753\$49.95

Ohm's Law CD Course

Learn the relationships of current, voltage and resistance of circuits through visual demonstrations and mathematical formulas. This CD course uses detailed diagrams, step by step electrical operational procedures, animations and user feedback through quizzes and tests. 02-750\$49.95

NEW! Desolder Course

Learn to desolder and solder with this complete training course. Includes circuit board, 100 components, manual, iron, pump & more. 02-808 \$22

Introduction to Surface Mount Technology

Surface mount technology uses tiny leadless components, known as surface mount devices (SMDs), that are quickly replacing standard electronic components. Currently, most new electronic equipment incorporates this exciting new technology.

By completing this course, the student learns concepts about surface mount technology (SMT) such as:

- Different Types of Surface Mount Devices (SMDs)
- Various Types of Surface Mount Assemblies
- Automated Soldering Methods
- The Stages of Manual and Automated Assembly
- Processes of Surface Mount Circuits

The student gains experience identifying, soldering and using surface mount devices by physically building an actual working surface mount technology project.

This course is the perfect introduction to SMT and does not require any previous knowledge of the topic.

Comes with a detailed instruction manual, identification parts (both SMD and Standard), one "Learn to Solder Kit" and a magnifier with tweezers.

02-777\$37

NEW! Intro to Sensors DVD Course & Arduino Lab

Learn about Sensors and Arduino with this DVD course and hands-on lab. Program an Arduino Nano microcontroller board and interface it with several different sensors.

Lab includes over 170 components and the Arduino Nano. Course covers everything from the basic mechanical sensor to the more advanced electronic sensors and Arduino microprocessor.

The lab comes fully stocked with all the components needed for the experiments along with an Arduino Nano.

This is an entry level program and assumes no prior knowledge of sensors but by the course's end students will have a strong foundation in sensor technology and electronics.

A hands-on approach is taken that will teach you step-by-step about the different basic components used as sensors.

02-807\$59

Beginners Guide to Reading Schematics

Learn step by step through every phase of understanding and using electronic circuit diagrams of schematics. See which symbols stand for capacitors, resistors, inductors, transformers, switches, conductors, cables batteries and much more. Designed for the beginner and includes a section on how to draw your own schematics.

19-6323 (text)\$25

Reading Electrical Schematic Diagrams Course

This course covers 66 commonly used United States of America Standard electrical schematics symbols including junctions, batteries, light fixtures, resistors, capacitors, transformers, & more.

02-060 (text with guide)\$29

Schematic Diagrams

Step-by-step, this book shows the reader how to recognize schematic symbols and determine their uses & functions in diagrams. Learn how to design, maintain and repair electronic equipment.

This book is geared towards technicians with some familiarity with circuits.

11-1059 (text)\$80

NEW! Intro To Microcontrollers Course DVD & Lab

Learn to build a build an operational and programmable microcontroller! 10 videos lessons on DVD with hands-on labs, step-by-step lessons and projects.

This microcontrollers course was designed for the beginner with no previous experience. The objective of this course is to provide students with a strong foundation in microcontroller technology through video lessons and hands-on labs.

Microcontrollers are powerful components that let you write programs to control electronics devices. Electronics technicians should have a solid understanding of microcontrollers and how they work.

02-810\$59

Capacitance Substitution Kit

Contains 12 different values of capacitors from 100 pfd to .1 MFD. Build it yourself.

01-510\$12.95



Beginner Computer Course

Learn how to run a PC with confidence upgrade your computer skills with this basic computer certificate course.

It was designed to help beginners with their computer training and no previous computer experience is assumed.

This easy step-by-step course covers software, hardware, mobile, internet & more! It includes 8 lessons, instructor support & a professional Certificate of Completion suitable for framing when finished.

Today's computers are better than ever and there are new uses for them being discovered every day. The incredible growth, coupled with the large number of main-frame computers and minicomputers being used already, has resulted in tremendous opportunities for well trained individuals.

Lesson Topics:

- Today's Technologies and Communicating Online
- Computers and Mobile Devices and Programs and Apps
- Digital Safety and Security and Inside Computers and Mobile Devices
- Input and Output, Digital Storage
- Operating Systems
- Communications and Networks
- Information and Data Management
- Information Systems

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 8 lessons with online exams

02-M110 \$250

Operating Systems

Quickly learn how to install, configure, and troubleshoot Windows, Apple OS X, Linux and Mobile Operating Systems.

What will I learn?

- How to diagnose and troubleshoot common operating system problems
- Configuring accounts and wireless connections on mobile devices
- Install and upgrade software applications, printers, and other system components
- Identify key features common to all operating systems
- Use Windows, DOS, Macintosh OS X, and Linux
- Describe basic networking and network operating system concepts
- Connect to a LAN and the Internet
- Implement important security features

Learn from the comfort of your own home and study when it's convenient for you - there are no time limits.

Take your exams online and finish with an academic Certificate of Completion in Operating Systems Management from CIE Bookstore suitable for framing.

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

02-M230 \$225

Introduction to Microsoft Office

Learn to create professional looking documents with Microsoft Office! This course will show you time saving techniques that will allow you to master Microsoft Office quickly.

12 step-by-step learning labs cover real world projects in Excel, Word, Access and Power Point.

Learn from the comfort of your own home and study when it's convenient for you - there are no time limits!

This easy-to-complete program includes 12 unique distance learning lessons and instructor tutorial help.

What will I learn?

- Develop a company newsletter using various fonts, styles, spacing and margins with Word. Edit and insert external documents.
- Develop an Excel spreadsheet budget using cell formatting, column and row titles, copying cells charts & auto sum.
- Develop a database using Access by creating forms and reports that will calculate statistics, join tables, grouping, add records & lookup fields.
- Develop a Power Point presentation using the skills they learned from previous projects.

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 12 lessons with online exams

02-M910 \$245



CompTIA A+ Certification

Learn to troubleshoot computers and prepare for CompTIA's latest A+ exams with this certificate course.

The CompTIA A+ Certification is one of the most desired credentials in the Information Technology industry.

Course Objectives:

Upon the completion of this course students will be prepared to take the A+ Certification exam from CompTIA and do the following:

- Troubleshoot Computers
- Hard Drive Installation and Support
- Networking Fundamentals
- Work with Different Operating Systems
- Work with Printers and Fonts
- Maintain Computers
- Work with Graphics
- Manage Memories
- Disaster Recovery and Virus Control

What do I get?

- Certificate from CIE upon finishing
- Textbook and study guide
- Instructor support
- 15 lessons with online exams

02-M620 \$345

PC Pro Software

The LabSim for PC Pro online course prepares you for the CompTIA A+ Certification with 145 videos, 119 demos, 96 simulations, 121 exams and 1059 questions.

This course will take your knowledge and skill levels in PC repair and service from novice to pro.

You will learn how to build, configure, and maintain a PC as well as learn the basics of networking and security.

02-790 \$150

CompTIA Network+ Certification

Knowing how to install, configure and troubleshoot a computer network is a highly marketable skill.

This certificate course will train individuals with little or no computer networking background about computer networking technology and prepare them to pass the CompTIA Network+ Certification exam.

By the course's end they will have gained the skills to select the best network design, hardware and software for their environment and know how to maintain and troubleshoot it.

Learn to network computers and prepare for the CompTIA Network+ certification.

Course Objectives:

After you complete all the lessons you will be prepared to take the CompTIA Network+ Certification exam and do the following:

- Build a Network from Scratch
- Understand Networking Standards
- Maintain and Upgrade a Network
- Troubleshoot Network Problems
- Network with TCP/IP and the Internet
- Networking with Unix and more!

What do I get?

- Certificate from CIE upon finishing
- Textbook and study guide
- Instructor support
- 12 lessons with online exams

02-M350 \$345

CompTIA Security+ Course!

See page 14. Course: 01-CET360.

CompTIA Mobility+ Certification Guide

Learn to become a Mobile Technology Expert by getting the Mobile+ certification from CompTIA.

Get the skills and technologies required to successfully deploy, integrate, support, and manage a mobile environment with this unique 512 page training guide.

It covers all the objectives for the CompTIA Mobility+ exam.

CompTIA Mobility+ Certification

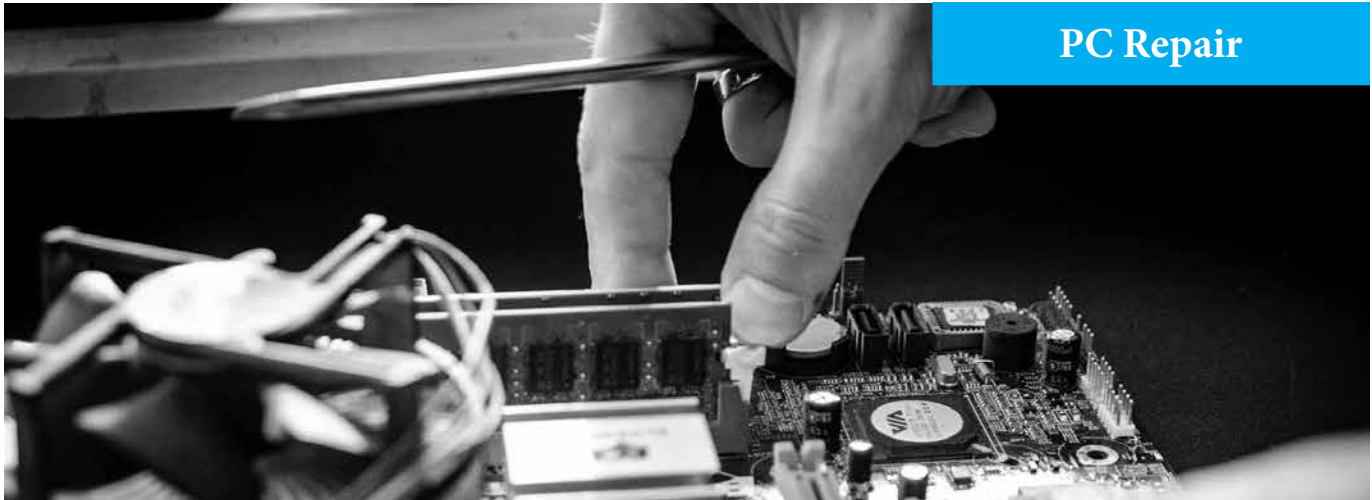
The Mobility+ certification identifies IT professionals who can deploy, integrate, support and manage a mobile environment while ensuring proper security measures are maintained for devices and platforms to mitigate risks and threats.

You'll find learning objectives at the beginning of each chapter, exam tips, practice exam questions, and in-depth explanations that map directly to the Mobility+ exam.

Learn about the following topics:

- Networking concepts and the OSI model
- Network infrastructure and technologies
- Radio frequency principles
- Cellular technologies
- Wi-Fi client technologies
- Planning for mobile devices
- Implementing mobile device infrastructure
- Mobile security risks
- Mobile security technologies
- Troubleshooting network issues
- Troubleshooting mobile security
- Troubleshooting client issues

19-5320\$45



PC Repair Course with Diagnostic Software

Learn how to troubleshoot and repair PCs in your own home. Step-by-step videos with no previous experience necessary.

This online course includes:

- Over 9 hours of hands-on training with 20 online course videos
- Computer Repair Study Guide with Quizzes
- Diagnostic Software Download
- How to Start a Business Guide
- Marketing Guide

Over 9 hours of 100% new, high-quality, how-to video and a revised study guide with images, diagrams and in depth content. New video showing how to fix problems in Windows.

Course Video Outline:

- Section I: Getting Started
- Section II: Hardware Diagnosis & Replacement
- Section III: Software Problems and Solutions
- Section IV: Install and Configure Windows Operating System
- Section V: Optimize User Experience

Online PC Repair Video Format

The advantages to studying online is that this course is super flexible and your membership never expires. A one time fee will allow you to watch these videos over and over and come back when there are new technology updates. You can watch all these videos on your desktop computer, laptop, TV, tablet, anywhere you have internet access!

PC Repair Course with Diagnostic Software (Cont.)

Computer Repair Study Guide

The Study Guide follows the videos with summaries, additional tutorials, quizzes, and study materials. It's over 125 pages and is included in the course for free. (PDF download.)

Bonus #1: Diagnostics Software

Use the diagnostic programs inside the software to identify hardware problems with your computer. (Online download.)

- Identify and benchmark hardware
- Perform Burn-ins for new hardware
- Securely Erase hard drives
- Use cloning tools to backup entire drives & installations to new drives or image files
- Partition drives with Parted Magic
- Resize partitions
- Run diagnostics and data recovery from the Parted Magic Live environment

Bonus #2: Start a Business Guide

Knowing how to deal with customers, bill them correctly, collect your payments, and keep everyone happy is key to your success.

Our Business guide makes sure you have all the advice you need to be a success at any level. (PDF download.)

Bonus #3: Marketing Guide

This guide will give you the tools you need to find the right customers. (PDF download.)

Complete course with 9 hours of video, quizzes, diagnostic software and pdf guides.

02-755 \$97

Laptop Repair Course

Learn how to fix laptops with this detailed online course with 48 videos available in a convenient online format. That's over 11 hours of high quality video training!

After completing this course you will be able to:

- Do a complete teardown on your laptop
- Replace your power jack
- Remove and replace your motherboard
- Clean up spilled water, coffee, or soda
- Replace a LCD or LED screen
- Replace a bad hard drive
- Restore your Operating System
- Fix your wireless card
- Add more RAM to your laptop
- Replace your screen's inverter
- Replace a DVD or Blu-ray burner
- Replace a keyboard
- Replace a BIOS battery

Diagnostics

This course will show you how to quickly find the root of the problem that is causing specific symptoms. Learn where to start and which components to replace.

Online Laptop Repair Course includes:

- Lesson 1: Diagnostics, Tools and Parts
- Lesson 2: Batteries, Keyboards, Drives & RAM
- Lesson 3: Screens
- Lesson 4: CPU, Heatsinks, Fan and BIOS Batteries
- Lesson 5: Power Jack and Wireless Cards
- Lesson 6: Full Teardowns (HP/Sony)
- Lesson 7: Full Teardown (MacBook)
- Lesson 8: Clean Up a Spill

02-754 \$87

IT Security



Industry Overview

The demand for computer security specialists has increased in recent years as cyber attacks have become more sophisticated.

Analysts will be needed to come up with innovative solutions to prevent hackers from stealing critical information or creating problems for computer networks.

Job Outlook

Employment of information security analysts is projected to grow 18 percent from 2014 to 2024, much faster than the average for all occupations.

The federal government is expected to greatly increase its use of information security analysts to protect the nation's critical information technology (IT) systems.

In addition, as the healthcare industry expands its use of electronic medical records, ensuring patients' privacy and protecting personal data are becoming more important.

Source:
U.S. Bureau of Labor Statistics

Computer Security Specialist with Security+

This certificate course will show you how to master computer security techniques quickly.

Every lesson is designed to present you with easy-to-understand information about computer security and help you plan and implement it in different settings.

No previous in-depth knowledge of network, system hardware or operating systems is required.

Security+ Lab

This course includes an online lab from TestOut. It teaches you security theories with real world labs and 109 Training Videos, 73 Demonstrations, 59 Section Quizzes, 28 Lab Simulation Exercises, 86 Written Lessons & 635 Exam Questions.

What will I learn?

Start learning essential skills needed for a career in IT like troubleshooting hubs, switches, routers, IP addresses, URLs, firewalls, proxy servers, port scanners, port monitoring utilities, identifying top network threats and more!

In addition, LabSim's Security+ training lab is designed to help students pass their CompTIA Security+ certification exam and become CompTIA Security+ certified.

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- TestOut Security+ Lab
- 15 lessons with online exams

01-CET360 \$295

Applying Practical Security Techniques

New!

This certificate course is designed for PC users who want to make their computers and related technology equipment including tablets, laptops, smart phones and wireless networks secure.

Course covers: Introduction to Security; Desktop Security; Internet Security; Personal Security; Wireless Network Security; and Enterprise Security.

Course Objectives:

- Learn how to make a PC secure
- What type of attacks antivirus prevent
- Set up a Firewall
- Test a PC for security cracks
- Install Windows patches

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 8 lessons with online exams

02-S370 \$245

Firewalls and VPNs

Learn the skills needed to configure, maintain, and operate firewalls and VPNs along with identifying the latest techniques used to attack your hosts and networks.

Master basic firewall requirements first and then move on to advanced step-by-step guidelines for installation, designing and implementing a virtual private network and analyze log files for network forensics.

- Certificate upon finishing
- Textbook & study guide
- 12 lessons with Instructor support

01-CET370 \$245



Intro to Database Management

Learn SQL in a database-neutral environment with all major topics being covered, including E-R diagrams, normalization, and database design. This course prepares students using real-world cases addressing current issues such as database design, data integrity, concurrent updates, and data security.

- Detailed coverage of the relational model (including QBE and SQL)
- Normalization and Views
- Database Design
- Database Administration & Management
- Advanced topics covered include Distributed Databases
- Data Warehouses
- Stored Procedures
- Triggers
- Data Macros and Web Databases

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 15 lessons with online exams

01-CET360 \$295

Fundamentals of IS

Introductory course in information technology. The goal of this course is to cover the core computer information technology concepts. It will also present the changing role of the IS professional and show the value of a career in IS.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 9 lessons with online exams

01-CET111 \$225

Database Development

General introduction to database creation, administration and management. Course focuses on SQL technology but most database structure and methods are identical.

By the end of the course you will have learned how to build, administer and troubleshoot databases and write SQL code.

Every lesson is designed to present you with easy-to-understand information about databases and help you plan and implement it in different settings.

Master basic database concepts first and then move on to more advanced database design and database administration functions. No previous in-depth knowledge of databases systems is required.

Database Development Course Topics:

- General Database Concepts
- Data Models - Queries
- Transportation Database
- RC Models
- Intro to SQL
- Database Design
- Transaction Management
- Query Outputs
- Distributed Database Management Systems
- Database Connectivity & Web Development
- Excel Connectivity
- Database Administration

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 12 lessons with online exams

01-CET360 \$295

Healthcare IT Course

This Healthcare IT course will show you how to install, manage and troubleshoot electronic health records systems for healthcare providers. It is designed to prepare you for the CompTIA Healthcare IT Technician certification.

The CompTIA Healthcare IT Technician certification shows that you have the knowledge and skills required to implement, deploy, and support healthcare IT systems in various clinical settings.



What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 8 lessons with online exams

01-HITC \$195

Certified Ethical Hacker CEH

Ethical hacking is the use of programming skills to determine vulnerabilities in a computer system.

An ethical hacker attacks a security system on behalf of its owners seeking vulnerabilities but reporting problems instead of taking advantage of them.

This course will help prepare you for the Certified Ethical Hacker (C|EH) certification and cover many techniques and technology used in hacking environments.

What do I get?



- Certificate upon finishing
- Textbook and study guide
- CertBlaster Test Prep Resources
- Instructor support
- 10 lessons with online exams

02-ETHK \$145

Programming



Python Programming

Python Programming has become one of the fastest programming languages due to its diversity. If you want to improve your job prospects in the programming field, consider learning Python.

This certificate course assumes no previous experience. It was designed with a convenient step-by-step learning format that will allow you to master new topics quickly and effectively. Learn how to plan and implement Python in different settings.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-PYTHON\$245

ANSI C Programming

The ANSI C language has become one of the most popular test and measurement programming languages used in business and industry.

This certificate course will show you how to master ANSI C programming techniques quickly. Every lesson was designed to present you with easy-to-understand information about ANSI C and help you plan and implement it in different settings.

4 part course covers C programming, interactive input, flow of control, arrays, selection, functions, character strings, data files & dynamic data structures.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-ANSI\$245

Intro to Java Programming

Learn how to master Java programming functions quickly. This certificate course introduces non-programmers to basic Java programming concepts and then moves on to advanced topics in an easy, step-by-step learning format.

Learn from a rich collection of examples, exercises and hands-on projects drawn from many different industries. This will provide you with a chance to solve interesting real-world problems and help prepare you for a new career.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

02-M940\$245

Intro to C# Programming

C# has quickly become the fastest-growing programming language and that trend is expected to continue in the coming years. This certificate course shows students how to create Object-Oriented programs using C#.

It assumes no prior programming experience and introduces concepts in an easy and convenient step-by-step learning format.

Upon completion the student will know how to create practical and useful programs written in C# and build Windows based graphical user interface forms.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

02-M610..... \$145

Intro to C++ through Game Programming

Learn how to program games using C++ with this certificate course.

Written for the beginning game developer or programmer, this course assumes no previous programming experience and each new skill and concept is taught using a simple and convenient step-by-step learning format.

Students will complete small projects in each chapter to reinforce what they've learned and a final project at the end combines all of the major topics covered in the course. Covers all the latest technology and advances.

- Certificate upon finishing
- C++ compiler, textbook and study guide
- Instructor support
- 10 lessons with online exams

02-M620 \$145

iPhone Game Development

Learn how to create games for the iPhone, iPad or iPod Touch. Developing games for iPhones is one of the hottest trends in computing and this course will show you exactly how to enter this lucrative field!

Students with no previous programming experience learn the complete process of developing an iPhone game.

The project based lessons provide the step-by-step knowledge needed to create games using Multimedia Fusion, GIMP, Audacity and Acid loops.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams



02-iphgame \$125

New!

Visual Basic Programming

Learn the fundamentals then quickly move on to more advanced projects. Hands-on approach with 100's of working programs.

Begin by getting comfortable with the free Visual Basic Express IDE and basic VB syntax. Next, build your skills one step at a time, mastering control structures, classes, objects, methods, variables, arrays, and the core techniques of object-oriented programming.

With this strong foundation in place, move on to more sophisticated techniques, including inheritance, polymorphism, exception handling, strings, GUIs, data structures, generics and collections

Plus, learn how to make the most of Microsoft's Visual Studio tools.

Develop applications that run under Windows and/or a web browser without the complexity generally associated with programming.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 9 lessons with online exams

02-M450 \$195

CNC Programming

New!

This certificate course is a perfect fit for those who want to prepare for a career as a CNC operator, CNC tool setter, CNC programmer or other CNC occupations.

Easy step-by-step lessons let you gain valuable CNC programming skills at home.

Learn to develop programs that control the machining of metal or plastic parts by automatic machine tools, equipment or systems.

Get an overview of the entire manufacturing process, from planning and prep to code writing and set up. Other learning topics include tooling, print reading, quality control, and precision measurement.

Includes the most up-to-date information on G and M code programming available today.

Learn from home and study when it's convenient for you - there are no time limits.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

02-M450 \$195

Intro to Microcontroller Programming & Troubleshooting

This course is ideal for students with no prior programming experience who want to master the basics of troubleshooting and programming Motorola's 68HC11 microcontroller.

Both hardware and software are covered in detail to provide a complete understanding of the principles underlying how a microprocessor works.

By learning how to program the 68HC11 at an elementary level, readers also gain valuable experience using manufacturer-specific documentation that prepares them for work with more sophisticated microcontrollers.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 17 lessons with online exams

02-W670 \$170

GameSalad Course

New!

Learn how to create computer games with the world's fastest game creation engine - GameSalad.

Use the official GameSalad guide book and get a great foundation for game development concepts. See how to create projects that can be used across multiple platforms like desktop, mobile, online, social, and serious games--as well as key platforms such as iOS, Android, Mac, Windows, and HTML 5.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 9 lessons with online exams

02-COMGAM \$145

Mobile Apps Programming

This certificate course will show you how to start developing smartphone apps on three major platforms.

The 416 page textbook and study guide include hands-on tutorials with screenshots and step-by-step instructions to guide students in developing applications for Google Android, Apple iOS, and Windows Phone 7.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-MOBAP \$195

Intro to iPhone and iPad Apps Programming

Learn to build any app for iPads and iPhones. This course builds on each topic as the student moves through the program. You'll see that creating iPad apps and learning how to make iPhone apps is easy and fun!

Learn how to:

- Set up your PC for iPhone and iPad app development
- Make use of the iPhone's touch screen and accelerometer
- Use shortcuts to create apps the easy way
- Use the accompanying videos to maximize your understanding
- Style your application so it looks good and users can easily navigate through it

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-iPhone \$95

Intro to Android App Development

Learn to create and publish Android Apps. This certificate program with textbook, study guide, online exams and instructor support provides an ideal, quick-start tutorial for anyone interested in developing Android mobile device applications, from the student or hobbyist to the experienced programmer wanting to enter the mobile device app market.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-ANDRD \$175

Intro to Windows Phone 7

Learn the skills needed to create apps for Windows Phone 7 handsets. Start with the basics then learn step-by-step though the development process as you build and deploy a complete application with a highly sophisticated user interface.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

It is designed for beginners and includes textbook, study guide, instructor support, online exams and a certificate upon completion.

01-WINPH7 \$95

PLC Technology



Industry Overview

A programmable logic controller (PLC) is a computer-based device capable of controlling many types of industrial equipment and entire automated systems.

Emerging capabilities are taking PLCs into new applications while expanding their use in existing ones.

The advent of low cost computers has made the PLC the most common choice for manufacturing controls today. They can be programmed to do a variety of functions through a simple ladder logic program. (valves, relays, motors, lights, etc.) They combine flexibility with high reliability and low cost.

PLCs have a strong presence on the factory floor and will probably remain predominant for some time to come. They are used in just about every industry all across the globe.

There is a high growth potential in this field - that's why our PLC courses are the right fit for your specific training needs.

NEW! Industrial Control and PLC Operation



This course covers the full spectrum of industrial maintenance and control from servomechanisms to instrumentation.

The components, circuits, instruments, control techniques, calibration, tuning and programming associated with industrial automated systems are introduced. This course will focus on the operation, rather than mathematical design concepts.

Course Objectives:

Upon the completion of this course the student will be able to:

- Describe A/D and D/A converters
- Discuss the nature and methods of motion control
- Describe the components used for motion control
- Design and Troubleshoot motion control circuits
- Utilize basic instruments, control techniques and calibration of motion control circuits
- Develop and interpret programming codes and logic ladders associated with motion control circuits

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 13 lessons with online exams

02-L435A \$275

New!

PLC Simulator Lab Course

This course provides students with a practical understanding of logic ladder and PLC through the use of a software simulation package.

The software is called the LogixPro 500 Simulator and it emulates the Allen-Bradley PLC/SLC style of control logic.

Learn ladder logic programming through a series of interactive labs by running industrial process equipment such as conveyors, batch mixing tanks, pumps and bottling plants.

With the Allen-Bradley simulator lab, you'll be able to execute real world projects on your PC.

The lessons will cover intro to PLC programming, latches, logic functions, timers, sequencers, counters, controls & converters (ADC/DAC).

Course Objectives:

Upon the completion of this course the student will be able to:

- Understand and program PLCs using a software simulation package
- Simulate real world applications with various practical scenarios
- Analyze how PLCs & ladder logic work
- Troubleshoot applications when results do not meet expectations
- Apply logic to problem statements before designing ladder logic circuits

What do I get?

- Certificate upon finishing
- PLC simulation software
- Instructor support & study guide
- 12 lessons with online exams

02-L436 \$175



PLC Hands-on Trainer Allen Bradley MicroLogix

Learn to program Allen-Bradley PLCs at home. This course includes a hands-on PLC lab, software and lesson material with exercises.

Hands-on Trainer

The Allen Bradley Micrologix 1000 has everything you need to start PLC programming. This course includes a real hands-on PLC lab, software and lesson material. All you do is provide the PC and you can start programming PLCs!

Software

The software included is RSLogix Micro, this is the same software as RSLogix 500 and for programming SLC's and MicroLogix.

You will be given complete set of instructions and videos on how to use the software.

By learning RSLogix 500 you will be able to program all SLC's (5/01-5/05) and MicroLogix PLC's (1000-1500).

PLC Course Includes:

- 1 PLC
- 1 Training Module with 4 discrete inputs and 4 discrete outputs
- Power switch
- Programming cable
- Power cable
- 8 Programming lessons
- 2 Analog lessons
- Videos
- USB-1761-CBL-PM02

Programming Lessons a;

Allen Bradley (RSLogix 500) These lessons include real world scenarios with real machines that you will come across in the field so you'll learn how to program and troubleshoot the real thing.

Learn PLC programming with a step-by-step method where every task is explained thoroughly. 5 programs and 8 pdf files (about 50 pages) are contained on a 2 gig flash drive.

These PLC lessons will have you programming in no time.

02-800 \$315

LogixPro 500 PLC Simulator

A complete stand-alone PLC training system on CD covering Allen-Bradley's (Rockwell) RSLogix 500 without the expense of a PLC.



What is the LogixPro 500 PLC Simulator?

It's a PLC Editor/Emulator which mimics Allen-Bradley's (Rockwell) RSLogix 500

LogixPro 500 is the ideal tool for learning the fundamentals of ladder logic programming. The look, feel and operation of LogixPro's ladder rung editor so closely mimics Rockwell's world renown PLC editing software, that many need a second look to be sure whose editor they're using.

ProSim-II Simulations

This is where LogixPro really out-shines typical PLC training setups employing a PLC connected to a handful of switches and lights.

By graphically simulating process equipment such as conveyors, bottling plants, etc. in software, the synchronous and interactive nature of real industrial processes, presents the student with a far more realistic and challenging programming experience.

For example, a properly addressed PLC output can be used to start a pump on a mixing tank. Once started, visual indication of the pump's rotation and fluid flow will appear on the computer screen.

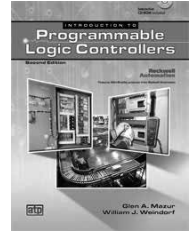
In addition, a digital signal representative of fluid flow would be transferred back as an input to the PLC program.

The ProSim-II software includes the following simulated processes:

- 1) Hardware I/O and BCD Simulator/ Tester/Demonstrator
- 2) Motorized Garage Door simulation
- 3) Automated filling system
- 4) Intersection Traffic Light Control Simulation
- 5) Batch Mixing system Simulation
- 6) (BCD) Binary Coded Decimal Simulator
- 7) (Comp) Dual Compressor Control Simulator
- 8) 4 Floor Elevator Simulator
- 9) Bottle Line Simulator

02-798\$46

Introduction to Programmable Logic Controllers



Introduction to Programmable Logic Controllers Course with MicroLogix Software is a complete self-paced program with quizzes and interactive labs.

What is included?

- 2 textbooks
- 2 CDs
- Quizzes
- MicroLogix Programming Software
- 48 hands-on labs and exercises
- View the optional lab upgrade

Students get a comprehensive introduction to PLC theory, operation, installation, programming, maintenance, and troubleshooting.

The text is a useful training tool and reference for students, apprentices, and technicians in the trade. Special emphasis is placed on the wiring and programming of PLCs for the control of industrial, commercial, and residential systems.

The CD includes Quick Quizzes™, an Illustrated Glossary, PLC Programming Software, Tutorial Videos, and other related information. The Tutorial Videos help guide the user through the PLC Software.

Contents include:

- PLC and Electrical Safety
- Electrical Principles and PLCs
- Electrical Circuits and PLCs
- PLC Hardware
- PLC Programming Instructions
- Programming PLC Timers and Counters
- PLC and System Interfacing
- PLC Installations and Startup
- PLC and System Maintenance
- Troubleshooting Principles
- Troubleshooting PLC Hardware
- Troubleshooting with PLC Software

02-617 \$180

Introduction to PLCs

A text guide for people who want to troubleshoot PLCs on the factory floor. No prior experience needed.

02-493\$23.95



Wireless Communications

This certificate program was designed to provide students with a thorough understanding of Wireless and Personal Communications.

After you complete all 11 lessons you will be able to understand the following topics:

- How Wireless Works
- Wireless Radio Frequency Communications
- Infrared
- Bluetooth
- Digital Cellular Technology
- Fixed Wireless
- Personal Area Networks
- Local Area Networks
- Wide Area Networks
- Wireless in Business
- Career Paths in Wireless & Electronics Communications

Why Study Wireless Technology?

Although wireless is the hottest computer topic today, it is perhaps the least understood of the new technologies.

Because wireless technology is rapidly becoming a primary means of business communication, it is important for people in the computer and electronics industries to understand how to use it today and determine how it can be used tomorrow.

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 11 lessons with online exams

02-266 \$225

Digital Communications

The communication of information by means of binary signals - the ones and zeros that are used by computers - has developed into an integral part of today's society.

Learn the concepts and principles of digital communication with this certificate course.

It covers communications between terminals and computers, local area networks and packet networks, fiber optic and satellite systems plus much more!

Topics Covered:

- An Overview of Data Communications
- Terminal Devices
- Messages and Transmission Channels
- Digital Transmissions
- Multiplexing Techniques
- Fiber Optic & Satellite Communications
- Alternatives in Local Area Networks
- Architectures and Packet Networks
- Network Design & Management, ISDN

Computer Training Kit:

Starting from scratch, you can build a complete computer system! The Micro-Master Trainer teaches you to write into RAMs, ROMs and run an 8085 micro-processor. Simple and easy to understand instructions teach you how to write in machine language. Upon completion of this kit, you will be proficient in computer technology. Includes 128 page lesson manual, instructions and experiments.

What do I get?

- Certificate upon finishing
- Textbook, study guide & computer lab
- Instructor support
- 11 lessons with online exams

01-DD01 \$275

Fiber Optics Course with Lab

Apply what you have learned from this certificate course to install, diagnose and repair complex fiber-optic communications systems and take your place in the forefront of a fascinating and challenging new technology.

Topics Covered:

- Lasers in Communications & Industry
- Laser Atomic Physics
- Practical Lasers
- Modulating the Laser Beam
- Masters
- Laser Applications
- Maintenance of Lasers & Laser Systems
- Light
- Characteristics of Fiber Optics
- Fiber Optic Communications Modules
- Troubleshooting Fiber Optics

Fiber Optic Lab with Manual:

Learn Fiber Optics by experimenting and building projects with no prior experience needed. The practical 224-page text has theory with 8 experiments and 5 projects. After completion of this lab several useful projects will have been constructed, such as an analog voice link and a light pen.

What do I get?

- Certificate upon finishing
- Lesson books, textbook & fiber optic lab
- Instructor support with online exams
- 2 lessons, 8 experiments & 5 projects

01-FB02 \$175

Communications and Opto-Electronics Lab

Build amazing communication experiments by using wire, fiber optics, radio waves, light and infrared links.

02-620 \$59.95



Telecommunications DVD Courses

Learn Telecom, Datacom, Networking, IP, MPLS, Voice over IP and wireless at your own pace with these DVD courses.

Teracom's DVD video training courses are high-quality multimedia productions featuring an instructor lead course, extensive animated graphics and point-by-point bullets.

Every course comes with a comprehensive workbook with detailed notes and graphics and the opportunity to earn a Course Completion Certificate from Teracom.

Fundamentals of Datacom and Networking DVD Course

This DVD course comes with 106 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes, and a personalized certificate of completion from Teracom suitable for framing when you pass the final exercise.

Covers WANs, LANs, Frames, Packets and the Network Cloud.
02-735 \$239

Fundamentals of Telecommunications I DVD course

This DVD course comes with 142 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes, and a personalized certificate of completion from Teracom suitable for framing when you pass the final exercise.

Covers Telephony, Telecom Equipment & the Telecom Industry.
02-733 \$239

Fundamentals of Telecommunications II DVD Course

124 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes, and a personalized certificate of completion from Teracom suitable for framing when you pass the final exercise.

In this DVD course you'll understand the concepts, standards and technologies for actually transmitting voice calls from one place to another. Learn what digital actually means, and how it is implemented.

02-734 \$239

Understanding Networking I DVD Course

This course comes with 127 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes, and a personalized certificate of completion from Teracom suitable for framing when you pass the final exercise.

Covers: Protocol Stacks, OSI Layers, IP Addressing, Frame Relay, ATM and TCP/IP over MPLS.
02-736 \$239

Understanding Networking II DVD Course

This course comes with 151 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes, and a personalized certificate of completion from Teracom suitable for framing when you pass the final exercise.

Covers Internet, ISPs, IP Security, Viruses, Firewalls, Encryption, IPsec and VPNs.
02-737 \$239

Understanding Voice over IP I DVD Course

134 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes. Personalized certificate of completion from Teracom when you pass the final exercise.

Covers Components, Standards and Architectures.
02-739 \$239

Understanding Voice over IP II DVD Course

116 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes. Personalized certificate of completion from Teracom when you pass the final exercise.

Covers Voice Packetization, Voice Quality, Codecs, Jitter, Packet Loss, QoS with MPLS.
02-740 \$239

Understanding Voice over IP III DVD Course

116 minutes of instruction, a comprehensive workbook/textbook with graphics and detailed notes. Personalized certificate of completion from Teracom when you pass the final exercise.

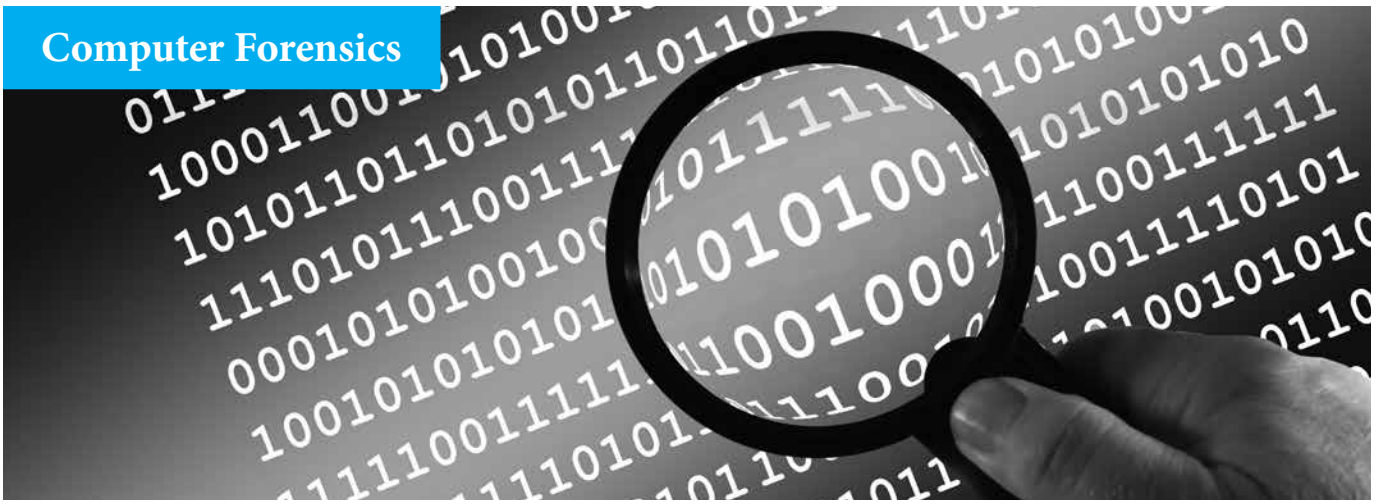
SIP, IP, Call Flow, Carrier Interconnect.
02-741 \$239

Understanding Wireless I DVD Course

134 minutes of instruction with workbook & textbook. Certificate of completion from Teracom when you pass the final exercise. Covers mobile communications, cellular, PCS and 3G, plus the wireless Web.

02-738 \$239

Computer Forensics



Industry Overview

Computer forensic investigators obtain and search computers and electronic records for evidence related to a case.

They can recover deleted files from a victim's computer or by probing a company's records for evidence of fraud.

With the rapid growth of technology in all parts of our lives, criminal activity must be tracked down and investigated using electronic methods that require up-to-date techniques and knowledge of the latest software tools.

Job Prospects

Job opportunities for Computer Forensics Technicians are expected to be excellent.

Employment of forensic science technicians is projected to grow 27 percent from 2014 to 2024, much faster than the average for all occupations.

Source:

U.S. Bureau of Labor Statistics

Introduction to Computer Forensics

This certificate course will show you the techniques for gathering electronic evidence and explore the new frontier of crime investigation.

Criminal activity can be tracked down and investigated using electronic methods with knowledge of the latest software tools - and this course will show you how to use these tools.

Learn from the comfort of your own home and study when it's convenient for you - there are no time limits.

Get the legal, technical and investigative skills needed to help you enter a career in computer forensics or advance in careers such as criminal justice, accounting, law enforcement and federal investigation!

Learn how to:

- Manage a computer forensics case, authenticate evidence & analyze data
- Recover forensic data within the Windows & Linux file systems
- Examine email and other popular text communication
- Investigate & prosecute accounting fraud
- Investigate large scale attacks such as identity theft, fraud, phishing, extortion and malware infections
- Use the correct investigative tools and procedures to maximize effectiveness of evidence gathering
- Keep evidence in pristine condition so it will be admissible in a legal action
- Use practical tools such as FTK, EnCase, Passware, Ethereal, LADS, Win Hex, GIMP, Camouflage and Snort

Student Evaluation and Grading Method:

Each of the 13 lessons culminates with an exam comprising of multiple-choice questions and matching questions. The 2 projects are case studies that require written responses. The lesson exams are open book.

Everything you need to graduate is sent to your home and you can take your exams online. Our highly trained instructors are only a phone call away (or e-mail) from providing you with reassuring assistance whenever you need it.

Lessons

1. Forensic Evidence & Crime Investigation
2. Computer Forensics and Digital Detective Work
3. Tools, Environments, Equipment and Certifications
4. Policies and Procedures
5. Data, PDA and Cell Forensics
6. Operating Systems and Data Transmission Basics for Digital Investigations
7. Project #1 Case study report.
8. Investigating Windows, Linux and Graphic Files
9. E-mail and Webmail Forensics
10. Internet and Network Forensics and Intrusion Detection
11. Tracking down those who intend to do harm on a large scale
12. Fraud and Forensic Accounting Investigation
13. Federal Rules and Criminal Codes
14. Ethical and Professional Responsibility
15. Project #2 Case study report.

01-CET430 \$225



Diesel Repair

Diesel Cylinder Head Service DVD

Diesel Cylinder Head Service is a twenty-nine minute DVD tutorial which is part of the series, Diesel Engines.

It will show you how to repair Diesel Cylinder Heads

02-435 \$79.95

Diesel Engine Operation DVD

Diesel Engine Operation is a twenty-four minute DVD tutorial which is part of the series, Diesel Engines.

Learn the design, construction, and operation of diesel engines.

02-436 \$79.95

Diesel Engine Reassembly DVD

Diesel Engine Reassembly is a twenty-three minute DVD tutorial which is part of the series, Diesel Engines.

Learn how to install the major parts of a diesel engine back onto its short block.

02-437 \$79.95

Diesel Engine Teardown DVD

Diesel Engine Teardown is a twenty-four minute video which is part of the series, Diesel Engines.

It details the steps needed to properly disassemble diesel engines.

02-438 \$79.95

Diesel Engine Injection System Service DVD

Diesel Injection System Service is a twenty-six minute video which is part of the series, Diesel Engines. This DVD course will show you how the injection system works

02-439 \$79.95

Diesel Short Block Service DVD

Diesel Short Block Service is a twenty-four minute DVD tutorial which is part of the series, Diesel Engines.

Learn about Diesel Short Block Service with this affordable DVD Course.

02-440 \$79.95

Supercharger Service DVD

Supercharger Service is a twenty-five minute DVD tutorial which is part of the series, Diesel Engines.

It shows you how to troubleshoot malfunctions and repair basics.

02-441 \$79.95

Turbocharger Service DVD

Turbocharger Service is a twenty-two minute DVD tutorial which is part of the series, Diesel Engines.

It uses close-up shots of components and service procedures to educate repair technicians.

02-442 \$79.95

Troubleshooting Marine Diesels

Learn to repair marine diesels. Step by step instructions are detailed in every chapter.

This hands-on guide to diesel engine maintenance, troubleshooting, and repair is more user-friendly than ever before.

Finally, boat owners who grew up with gas engines can set aside their fears about tinkering with diesels, which are safer and increasingly more prevalent. Every step of every procedure is illustrated, so that users can work from the illustrations alone.

02-442 (textbook)..... \$79.95

Industry Overview

Employment of diesel service technicians and mechanics is projected to grow 12 percent from 2014 to 2024, faster than the average for all occupations

As more freight is shipped across the country, additional diesel-powered trucks will be needed to carry freight where trains and pipelines are not available or economical.

Additionally, diesel cars and light trucks are becoming more popular, and more diesel technicians will be needed to maintain and repair these vehicles.

Source:
U.S. Bureau of Labor Statistics

These DVDs give an overview of the design, construction, and operation of diesel engines; detail the steps needed to properly disassemble, inspect, and measure the parts of diesel engines; and summarize how to install the major parts of a diesel engine back onto its short block.

Close-up shots of components and service procedures as well as computer animation give viewers maximum learning potential.



Roots, Ratio and Proportion

This certificate course consists of easy-to-complete lesson assignments. You solve all the problems in the exercise sections before continuing to the next topic.

Roots: Introduction to Square Roots, separating numbers into periods, extracting Square Roots and solving formulas.

Ratio & Proportion: Learn the meaning of a Ratio and Proportion as well as the law of Proportion.

Inverse Proportion & Negative Numbers: Direct Proportion and Inverse Proportion and adding positive and negative numbers.

- Certificate upon finishing
- Instructor support
- 2 lessons with online exams

01-ROOTS \$95

Fractions, Decimals & Percentage

This certificate course consists of small, easy-to-complete lesson assignments. You solve all the problems in the exercise sections before continuing to the next topic.

Fractions: Students learn how to divide and multiply fractions.

Decimals: Students learn adding, subtracting and multiplying decimals & decimal point location.

Reciprocals, Percentage and Powers of Numbers: Students learn how to change fractions to decimals & the meaning and use of powers of a number.

- Certificate upon finishing
- Instructor support
- 2 lessons with online exams

01-FRAC01 \$95

Technical Calculus I

This certificate course will show you how to master some of the basic concepts of Calculus quickly.

Students learn principles of analytic geometry, limits, derivatives, simple integration, and indefinite integrals with emphasis on applications of derivatives and integrals.

Our highly trained instructors are only a phone call away (or e-mail) from providing you with reassuring assistance whenever you need it.

- Certificate upon finishing
- Instructor support
- 7 lessons with online exams

01-MTH231 \$95

Technical Calculus II

This certificate course will show you how to master some advanced concepts of Calculus from the comfort of your own home.

Students learn principles of definite integral, derivatives and integrals of transcendental functions, indefinite series, Maclaurin series, Taylor series, and Fourier series.

Our highly trained instructors are only a phone call away (or e-mail) from providing you with reassuring assistance whenever you need it.

- Certificate upon finishing
- Instructor support
- 8 lessons with online exams

01-MTH232 \$95

Trigonometry CD Tutorial

Virtual Labs show you how to find solutions to problems involving triangles and angles.

02-477 \$29.95

Algebra and Trigonometry I

Algebra and trigonometry with analytic geometry is a certificate course that will show you how to master Algebra and Trigonometry functions quickly. This is part one of a two part algebra and trigonometry series.

Students learn equation solving, inequalities, functions and their graphs, trigonometry of the right triangle and trigonometric functions of every angle.

Our highly trained instructors are only a phone call away (or e-mail) from providing you with reassuring assistance whenever you need it.

- Certificate upon finishing
- Instructor support
- 8 lessons with online exams

01-MTH121 \$95

Algebra and Trigonometry II

This certificate course is the second part of the Algebra and Trigonometry series.

Students learn systems of equations, complex numbers, quadratic and equations of higher order, trigonometric functions, and trigonometric identities and equations.

Our highly trained instructors are only a phone call away (or e-mail) from providing you with reassuring assistance whenever you need it.

- Certificate upon finishing
- Instructor support
- 7 lessons with online exams

01-MTH122 \$95

Algebra CD Tutorial

Virtual Labs show you how to find solutions to problems involving algebra functions.

02-478 \$29.95



Business Communication Course

Learn to concentrate on the kind of writing and speaking used in business - from the routine report to the long formal report.

The ability to communicate effectively is vital to your career. Formulas will be given to you to follow for two types of written messages: the deductive format and the inductive format. You can use these methods in just about any project you will encounter.

We'll also show you how to prepare a professional resume and share with you the secrets on how to ace a job interview!

- Certificate upon finishing
- Instructor support & online exams
- 10 lessons with textbook & study guide

01-SCE473\$360

Technical Writing Course

Coverage of various communication tasks including preparation for oral presentations and standard approach to document writing.

- Certificate upon finishing
- Online exams
- Instructor support
- 5 Assignments with lesson books

01-HUM242\$95

Report Writing Course

Learn how to develop an effective business writing style with emphasis on report writing for business and industry. Step-by-step process help students master the fundamentals and move on to more advanced topics.

- Certificate upon finishing
- Online exams
- Instructor support
- 10 Assignments with lesson books

01-HUM232\$195

Psychology Course

This course cover topics in experimental and clinical psychology including physiological bases of behavior, sensation, perception, learning, memory, human development, social processes, personality and abnormal behavior.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 11 lessons with online exams

01-SCE352\$295

Marketing Course

Learn the practices and problems of a marketing manager.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-SCE482\$360

Business Management Course

Discover what it takes to become an effective manager in today's business climate. This program covers the nature of managerial concepts, managerial functions and organizational structure with emphasis on current issues.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-SCE473\$360

Small Business DVD Course

Learn the stages of starting a business from initial decision making through the setting of long term goals. 2 hours 12 minutes.

02-602\$10

Macroeconomics Course

Covers new discussions of the mortgage debt crisis, the economic slowdown, the Fed's term auction facility, current fiscal policy, the two Koreas and fair trade products.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-SCE482\$360

Microeconomics Course

Learn economics in a way that is understandable to everyone. Step-by-step analysis and balanced presentations help students master the fundamentals and move on to more advanced topics.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 9 lessons with online exams

01-SCE351\$295

Introduction to E-Business

Learn how to launch a successful online business! This certificate course will enable you to master the technologies that make e-business possible from basic networking to security to Web site content-management.

Topics include security, wireless advances and developmental tools.

Learn from the comfort of your own home and study when it's convenient for you - there are no time limits.

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online exams

01-CET460\$245

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Photovoltaic Systems

This certificate course will show you how to design, install and evaluate residential and commercial photovoltaic systems.

What you will learn:

Understand how the concepts behind PV arrays and other components operate, and see how components are integrated together to form complete systems.

Learn how to effectively incorporate PV systems into stand-alone or interconnected electrical systems. Then move on to PV system advantages and disadvantages, site evaluation, component operation, system design and sizing, and installation requirements and recommended practices.

This course addresses the PV topics included in the NABCEP Entry Level Program.

Lesson Topics

- Introduction to Photovoltaic Systems
- Solar Radiation
- Site Surveys and Preplanning
- System Components & Configurations
- Solar Cells, Modules, and Arrays
- Solar Batteries & Charge Controllers
- Inverters & System Sizing
- Mechanical Integration
- Electrical Integration
- Utility Interconnection
- Permitting and Inspection
- Commissioning, Maintenance, and Troubleshooting
- Economic Analysis

What do I get?

- Certificate upon finishing
- Textbook and study guide
- Instructor support
- 10 lessons with online videos

02-711B \$225

Hybrid Electric Vehicle Technology Course

Entry level course allows you to learn about vehicles that use more than one propulsion technology to power a drive system.

It is filled with technical illustrations and concise descriptions of the different configurations and vehicle platforms, the operation of various systems and the technologies involved, and the maintenance of hybrid electric vehicles.

Videos and Quizzes with ten questions after each chapter are found on the CD.

Lesson Topics

- Introduction to HEV Technology
- High-Voltage Electrical Safety
- High-Voltage Vehicle Safety Systems
- Hybrid Engines
- AC Induction Electrical Machines
- Permanent Magnet Electric Machines
- Power Inverter Systems
- Electric Propulsion Sensing Systems
- DC-DC Converter Systems
- Transaxels, Gears, and Cooling Systems
- Energy Management Hardware Systems
- Battery Construction and Technologies
- Nickel Metal Hydride Technology
- Battery Pack and Energy Management System
- Braking Systems
- Climate Control Systems
- Hybrid Jump Starting and Jump Start Assist Systems
- GM Flex Power PHT
- Belted Alternator Starter (BAS) System

This is a complete entry level self-paced course that includes a full color textbook and interactive CD.

02-712 \$115

Solar House Course Lab

Learn how different technologies using green or alternate energy can be used in the home with this course



More and more home owners and businesses are installing Photovoltaic Solar Panels to convert sunlight to usable electricity and heat.

Learn how different technologies using green or alternate energy can be used in the home with this course.

You will create your own model house made of Plexiglas and install an amorphous silicon glass solar panel to simulate how to harness the sun's energy. The solar panel provides the energy used for all of the experiments.

The fully illustrated manual will introduce students to some basic technology and fundamental concepts used in lighting, thermostats, fire alarms, and burglar alarms.

Learn about solar panels, motors, fans, resistors, diodes, LEDs, switches, lamps and batteries. The easy-to-follow lessons will guide the student through 26 chapters containing a variety of activities and useful experiments.

All parts to create the model house, along with the necessary components, wires, breadboard, solar panel, and detailed instruction manual are included.

No soldering or additional batteries required.

02-764 \$59.95

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