

#### About Us ...

We partner with organizations to assist them with investing in their own workforce and future. We understand the diverse needs of industries and specialize in workforce development consulting, grant administration, customized training and curriculum development. What works for one company may not for the next. ALIGN customized training brings solutions direct to you, on your terms, wherever you are. We convene qualified and experienced providers to meet your needs and offer best-in-class solutions. We are

able to bring to you a variety of training, certifications and apprenticeship providers.

We offer onsite and online options, providing flexibility and training when and how you need it.



#### Contact Us ...

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# Agile Management









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

### IATF16949:2016 Internal Auditor

#### **Course Description:**

This 24-hour course is intended for those personnel who have been identified as Internal Auditors for the companies IATF16949:2016 Quality Management System. Using the company's existing Quality Management System participants will learn the process approach to effectively participating in an audit. If time permits, and the companies schedule allows, participants will finish the course by conducting actual audits of the Quality Management System, write audit reports, and present these to management.



#### Course Objectives:

- Ability to identify the requirements of a conformance and nonconformance in the IATF16949:2016 and ISO9001:2015 requirements manual
- Review of the requirements of Auditing the AIAG Core Tools
- Be able to explain the process approach to effective auditing
- Develop an audit check list (Process Turtle Diagrams) and audit plan
- Know how to write and present audit reports and summaries
- Explain how to perform effective follow-up auditing
- Be able to conduct actual audits, and write reports, on the company's Quality Management System
- Recommended methods and techniques for identifying, and ascertaining, objective evidence
- Effective follow-up of prior audit non-conformities

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

### ISO14001:2015 EMS Internal Auditor

#### **Course Description:**

ISO 14001:2015 EMS Internal Auditor Training is a 3-day activity-based course to teach an audit process while providing an in-depth understanding of the changes from ISO 14001:2004 to ISO 14001:2015. Participants can expect to be fully engaged while learning to prepare, plan, conduct and report a process-based internal audit based on the new ISO 14001:2015 standard.



#### **Course Objectives:**

- Define terms associated with an Environmental Management System (EMS)
- Explain how ISO 14001:2015 is used to improve environmental performance, customer satisfaction and the bottom line
- Describe the significant changes for the updated 2015 standard
- Describe the impact of 2015 changes to your organization and the audit process
- Prepare, plan, conduct and report an internal audit for the ISO 14001:2015 EMS

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Lean Bronze

#### **Course Description:**

Lean Bronze Certification is a 24 hour course to teach the Lean Bronze Body of Knowledge from the Association for Manufacturing Excellence (AME), the Society of Manufacturing Engineers (SME), Shingo Prize for Operational Excellence (Shingo Prize) and the American Society for Quality (ASQ). The standard assesses a person's lean knowledge (exam), as well as the individual's ability to apply that knowledge (lean project portfolio). This Bronze Level Exam Preparation Course (with ability to sit for Bronze exam as an option), is designed to prepare students to take and pass the multiple choice, open



book exam that is the first step in pursuing certification. Bronze Certification is focused on tactical application of lean. Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work cell, work group or value stream.

#### Course Objectives:

- Understand the structure and format of the Bronze level certification exam
- Conduct a solid review of the Lean Certification body of knowledge
- Understand the Bronze-level portfolio requirements
- Complete practice exam questions that help illustrate what to expect on the exam
- Identify studying and test-taking strategies
- Review recommended readings and primary references
- Sit for Bronze Level exam
- Participate in your portfolio review

Pre-requisite: N/A

Course length: 24 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## Lean Six Sigma Black Belt Certification

#### **Course Description:**

Lean Six Sigma Black Belt is a 10-day, activitybased workshop to teach the Six Sigma Black Belt Body of Knowledge. Participants will learn advanced tools and techniques and apply them to an actual workrelated project. Facilitation and coaching skills will be studied



and applied to prepare participant for their role in facilitation and coaching Six Sigma Green Belts.

#### **Course Objectives:**

- Describe Six Sigma and explain how it is used as a business improvement strategy
- Describe the various roles & responsibilities as it relates to Six Sigma
- Identify and use appropriate Six Sigma tools and techniques
- Complete a Black Belt project using the DMAIC approach to Six Sigma
- Facilitate and coach a Six Sigma Green Belt team through the completion of a project

Pre-requisite: Lean Six Sigma Green Belt Certification

Course length: 80 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

### Lean Six Sigma Green Belt

#### **Course Description:**

Lean Six Sigma Green Belt is intended for individuals charged with improving process performance. It is

intended to teach a structured approach to improve the quality of products & services, outcomes and the bottom line by identifying and removing wastes, the causes of defects (errors), minimizing variability and improving workflow in business processes. Participants can expect to be fully engaged while learning and applying principles, tools and techniques of Lean and Six Sigma for completing improvement projects. Participants are expected to complete a work-related project as part of this course.

Lean Six Sigma uses a variety of tools, including statistical methods to determine how various factors affect a dependent

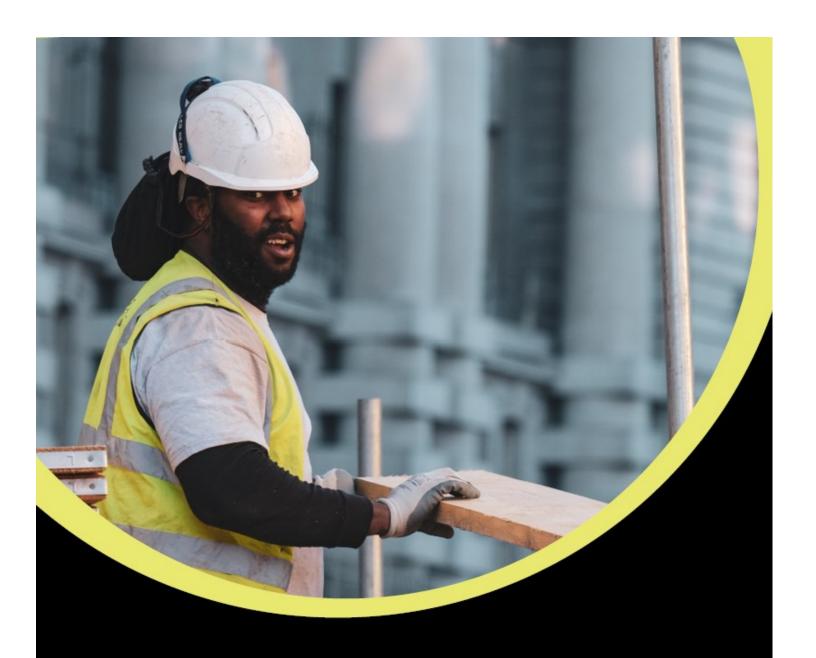


variable or feature of a product that may be causing defects or process problems. Participants should download a free 30-day Minitab 18 as a statistical software package that they will use throughout the session. A laptop or PC is recommended for this class.

#### **Course Objectives:**

- Define the DMAIC process and explain how it is used reduce variation and improve quality
- Define a Lean Six Sigma project opportunity.
- Measure a process utilizing Lean Six Sigma techniques.
- Analyze measurement results utilizing basic statistical concepts.
- Apply Lean Six Sigma techniques in the course of performance improvement work.
- Transition successful project outcomes to managers that will take on responsibility for monitoring and controlling process performance

Pre-requisite: N/A Course length: 40 hours



## **Building Construction**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Applied Construction Math**

#### **Course Description:**

Just seeing the word "math" strikes fear and frustration in the heart and mind of most students. Teachers also understand that a math lesson gets the same reception of any other dreaded chore: "eat your brussels sprouts, take out the garbage, and learn your MATH". Students and teachers must see the relevance in learning before they will invest the time and commitment needed to master the subject.



#### Course Objectives:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Material Handling

Pre-requisite: N/A Course length: 73 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Cabinetmaking

#### **Course Description:**

This module expands on the knowledge and skills gained through the Carpentry Curriculum and provides the basic information needed to construct and apply finishes to custom cabinetry. It identifies and discusses various types of wood products, wood-joining techniques, power tools, cabinet doors, shelves, and hardware. Specific guidance is also provided for the installation of laminated countertops.



#### Course Objectives:

- Wood Products
- Wood Joining Techniques
- Power Tools
- Cabinet Doors
- Shelves
- Hardware

Pre-requisite: N/A Course length: 35 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Carpentry (4 Levels)

#### **Course Description:**

Carpenters make up the largest building trades occupation in the industry and those with all-around skills are in high demand.

Carpenters are involved in many different kinds of construction activities, from building highways and bridges to installing kitchen cabinets. Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials.

This four-level curriculum covers content such as Building Materials, Cabinet Fabrication, and Advanced Wall Systems.



#### Course Objectives:

- Orientation to the Trade
- Building Materials, Fasteners and Adhesives
- Hand and Power Tools
- Introduction Construction Drawings, Specifications and Layout
- Floor Systems
- Wall Systems
- Ceiling Joist and Roof Framing
- Introduction to Building Envelope Systems
- Basic Stair Layout
- Commercial Drawings
- Cold-Formed Steel Framing
- Exterior Finishing
- Thermal and Moisture

- Protection
- Roofing Applications
- Doors and Door Hardware
- Drywall Installation and Finishing
- Suspended Ceilings
- Window, Door, Floor and Ceiling Trim
- Cabinet Installation
- Properties of Concrete
- Rigging Equipment and Practices
- Trenching and Excavating
- Reinforcing Concrete
- Foundations and Slabs-on-Grade
- Vertical and Horizontal

- Formwork
- Handling and Placing Concrete
- Tilt-Up Wall Systems
- Differential Leveling
- Angular and Distance Measurement
- Advanced Roof, Wall, and Stair Systems
- Introduction to Construction Equipment
- Introduction to Oxyfuel Cutting and Arc Welding
- Site Preparation
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 788 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Concrete Construction (2 Levels)

#### **Course Description:**

Filled with technical hints and tips from industry experts and review questions, this two-level curriculum covers a range of specific content such as the characteristics of concrete, using concrete as a building material and the process of curing concrete.

Note: Concrete Construction was previously titled Concrete Finishing.



#### **Course Objectives:**

- Introduction to Concrete Construction
- Concrete Safety
- Fall Protection Orientation
- Concrete Tools and Equipment
- Preparing for Placement
- Reinforcing Concrete
- Foundation and Slabs-0n-Grade
- Vertical Formwork
- Horizontal Formwork
- Site Concrete
- Finishing Concrete

- Curing and Protecting Concrete
- Properties of Concrete
- Estimating Concrete Quantities
- Tilt-Up Wall Systems
- Architectural Finishes
- Industrial Floors
- Superflat Floors
- Surface Treatments
- Troubleshooting and Quality Control
- Concrete Repair

Pre-requisite: N/A

Course length: 416 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (OSHA card)
- ☐ Prepares student for an exam that leads to certification

### **Confined Space**

#### **Course Description:**

This course will cover:

- · Confined space definitions and hazards
- Assessment process and identification of spaces
- Entry requirements for non-permit confined spaces
- Entry requirements for permit-required confined spaces
- Alternate entry procedures
- Confined space personnel duties and responsibilities
- Precautions and pre-planning before entry
- Rescue plan/provisions
- Proper safety equipment for confined space entry
- Hot work and the use of chemicals in a confined space
- Contractor-performed work

#### **Course Objectives:**

- Understand confined space definitions
- Understand the differences between confined space types
- Recognize hazardous air quality in confined spaces, and other hazards
- Understand when an entry permit is required
- Understand alternative entry techniques
- Understand the duties of confined space duties and responsibilities
- Plan for entry and taking precautions
- Recognize when a rescuer is required

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Construction Craft Laborer (2 Levels)

#### **Course Description:**

This curriculum introduces the trainee to a variety of trades, including carpentry, masonry, ironworking, electrical, welding, heavy equipment, and cranes. Upon completion of this two-level course the trainee will have the basic knowledge needed on any job site. The Construction Craft Laborer curriculum covers such subjects as Site Layout, Reinforcing Concrete, and Electrical Safety.



#### Course Objectives:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Material Handling
- Orientation to the Trade
- Building Materials, Fasteners, and Adhesives
- Properties of Concrete
- Site Layout One: Differential Leveling
- Handling and Placing Concrete

- Foundations and Slabs-On-Grade
- Reinforcing Concrete
- Vertical Framework
- Horizontal Framework
- Heavy Equipment, Forklift, and Crane Safety
- Steel Erection
- Electrical Safety
- Introduction to Construction Equipment
- Rough Terrain Forklifts
- Oxyfuel Cutting
- Elevated Masonry
- Working from Elevations
- Your Role in the Green Environment

Pre-requisite: N/A Course length: 321 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Construction Technology**

#### **Course Description:**

This curriculum will ground the trainee in the basic knowledge and principles of carpentry, masonry, concrete finishing, electrical work, HVAC, and plumbing. He or she will become skilled in different phases of a project from start to finish. Once completing this course, the trainee will be able to interpret construction drawings; perform quality concrete and brickwork; frame walls, ceilings, and floors of a structure; and install the proper wiring and piping for electrical, and plumbing systems.



#### Course Objectives:

- Introduction to Masonry
- Masonry Unit and Installation Techniques
- Floor Systems
- Ceiling Joist and Roof Framing
- Roofing Applications
- Wall Systems
- Exterior Finishing
- Basic Stair Layout
- Electrical Safety

- Residential Electrical Services
- Introduction to HVAC
- Introduction to Drain, Waste and Vent (DWV) System
- Plastic Pipe Fittings
- Copper Pipe Fittings
- Cabinetmaking
- Cabinet Installation
- Introduction to Construction Equipment

Pre-requisite: N/A

Course length: 425 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Construction Tools For Success**

#### **Course Description:**

This workbook is designed specifically for employees entering the construction industry and has been reviewed and updated with input from construction and training professionals. This edition includes more activities and has been updated to reflect changes in the workplace as well as laws that affect workplace behavior. A new module



entitled *First Impressions: Getting a Job* that features tips on finding a job, interviewing, filling out applications and resume writing.

#### **Course Objectives:**

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings

- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Material Handling

Pre-requisite: N/A Course length: 73 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Construction Workforce Development Professional

#### **Course Description:**

Now more than ever, the construction industry needs qualified construction workforce development professionals to manage the growing need for a skilled workforce.

NCCER's new
Construction Workforce
Development
Professional assessment
evaluates and validates
the knowledge and skills
of your organization's
workforce development
professionals.

The Construction
Workforce Development



Professional training and certification program is the first of its kind in the construction industry. Raise the standard and make sure your workforce development professionals are trained today.

#### Course Objectives:

For more information on this training, see contact information below.

Pre-requisite: N/A Course length: TBD



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Core: Introduction to Craft Skills

#### **Course Description:**

NCCER Core is a prerequisite to all other Level 1 craft curriculum. Its modules cover topics such as Basic Safety, Communication Skills and Introduction to Construction Drawings. The recently released sixth edition of Core features a new modules introducing construction careers, more rigorous performance tests and extensive updates on math, hand tools, power tools and drawings. Completing this curriculum gives the trainee the basic skills needed to continue education in any craft area he or she chooses.



#### **Course Objectives:**

- Build Your Future in Construction
- Basic Safety (Construction Site Safety Orientation)
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools

- Introduction to Construction Drawings
- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Materials Handling

Pre-requisite: N/A Course length: 78 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Drywall (2 Levels)

#### **Course Description:**

Drywall applicators often install walls and ceilings, as well as place insulation, soundproofing, and firestopping materials behind and onto those walls and ceilings. They may also apply textures and trims to enhance both the interiors and exteriors of the buildings. The two-level curriculum for Drywall covers such subjects as Thermal and Moisture Protection, Steel Framing and Acoustical Ceilings.



#### Course Objectives:

- Orientation to the Trade
- Construction Materials and Methods
- Thermal and Moisture Protection
- Drywall Installation
- Drywall Finishing
- Commercial Drawings

- Steel Framing
- Acoustical Ceilings
- Interior Specialties
- Exterior Cladding
- Specialty Finishes

Pre-requisite: N/A

Course length: 292 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Electrical (4 Levels)

#### **Course Description:**

Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code and state and local codes.

To prepare trainees a career in the electrical field, NCCER offers a comprehensive, 4-level Electrical curriculum that complies with DOL time-based standards for apprenticeship.



#### **Course Objectives:**

- Occupational Overview: The Electrical Industry
- Safety for Electricians
- Introduction to Electrical Circuits
- Electrical Theory
- Introduction to the National Electrical Code
- Device Boxes
- Hand Bending
- Wireways, Raceways and Fittings
- Conductors and Cables
- Basic Electrical Construction Documents
- Residential Wiring
- Electrical Test Equipment
- Alternating Current
- Motors: Theory and Application
- Electric Lighting

- Conduit Bending
- Pull and Junction Boxes
- Conductor Installations
- Cable Tray
- Conductor Terminations and Splices
- Grounding and Bonding
- Circuit Breakers and Fuses
- Control Systems and Fundamental Concepts
- Lead Calculations—Branch and Feeder Circuits
- Conductor Selection and Calculations
- Practical Applications of Lighting
- Hazardous Locations
- Overcurrent Protection
- Distribution Equipment
- Transformers
- Commercial Electrical

#### Services

- Motor Calculations
- Voice, Data and Video
- Motor Controls
- Lead Calculations—Feeders and Services
- Health Care Facilities
- Standby and Emergency Systems
- Basic Electronic Theory
- Fire Alarm Systems
- Specialty Transformers
- Advanced Controls
- HVAC Controls
- Heat Tracing and Freeze Protection
- Medium-Voltage Terminations/ Splices
- Special Locations
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 668 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Fall Protection**

#### **Course Description:**

Workers are exposed to many potentially lifethreatening hazards on job sites, and death by falling is one of the greatest risks. Proper training of every craft professional, coupled with enforcement of safety regulations and standards, is the most effective way to reduce this risk and protect the lives and well-being of the construction workforce.



#### **Course Objectives:**

- Fundamental Safety
- Hazard Recognition
- Introduction to OSHA
- Causes of Falls
- Costs of Falls
- Consequences of Falls

- Proper Use of Fall Protection Equipment
- Stairs
- Ladders
- Scaffolds
- Aerial Lifts

Pre-requisite: N/A

Course length: 8 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Field Safety

#### **Course Description:**

To help prevent accidents, a safety program must be in place. This curriculum will provide you with the rules and safeguards you need to work safely on any job site. Safety must be incorporated into all phases of the job and involve all employees at every level, including management. Field Safety covers topics such as Hazard Communication, Fall Protection, and Forklift Safety.



#### **Course Objectives:**

- Introduction to Safety
- Confined Spaces and Excavations
- Work-zone Safety
- Electrical Safety
- Working from Elevations

- Steel Erection
- Heavy Equipment, Forklift, and Crane Safety
- Concrete and Masonry
- Introduction to Materials Handling

Pre-requisite: N/A

Course length: 45 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Fundamentals of Crew Leadership

#### **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has demonstrated leadership qualities. To become an effective leader, it helps if a trainee has natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.



#### Course Objectives:

- Basic leadership skills
- Leadership Styles
- Communication
- Delegating
- Problem Solving

- Jobsite Safety
- Project Planning
- Scheduling
- Estimating

Pre-requisite: N/A

Course length: 22.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### HVAC (4 Levels)

#### **Course Description:**

The increasing development of HVAC (heating and air-conditioning systems) technology causes employers to recognize the importance of continuous education and keeping up to speed with the latest equipment and skills. Hence, technical school training or apprenticeship programs often provide an advantage and a higher qualification for employment.

NCCER's program has been designed by highly qualified subject matter experts with this in mind. Our four levels, **North American Technician Excellence (NATE)** recognized, present theoretical and practical skills essential to your success as an HVAC installer or technician.



#### **Course Objectives:**

- Trade Mathematics
- Basic Electricity
- Introduction to HVAC, Heating, Cooling, Air Distribution Systems, Hydronic Systems
- Basic Copper and Plastic Piping Practices
- Soldering and Brazing
- Basic Carbon Steel Piping Practices
- Alternating Current
- Compressors
- Refrigerants and Oils
- Leak Detection, Evacuation, Recovery and Charging
- Metering Devices
- Heat Pumps
- Basic Maintenance

Pre-requisite: N/A

- Chimneys, Vents and Flues
- Sheet Metal Duct Systems
- Fiberglass and Flexible Duct Systems
- Commercial Airside Systems
- Air Quality Equipment
- Fasteners, Hardware and Wiring Terminations
- Troubleshooting Control Circuit and Motor, Cooling, Heat Pumps, Gas Heating, Oil Heating, Accessories
- Zoning, Ductless and Variable Refrigerant Flow Systems
- Commercial Hydronic Systems
- Steam Systems
- Retail Refrigeration System
- Customer Relations

- Water Treatment
- Indoor Air Quality
- Energy Conservation Equipment
- Building Management Systems
- System Air Balancing
- System Startup and Shutdown
- Construction Drawings and Specifications
- Heating and Cooling System Design
- Commercial/Industrial Refrigeration Systems
- Alternative and Specialized Heating and Cooling Systems
- Fundamentals of Crew Leadership

Course length: 693 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Industrial Coating & Lining Application Specialist**

#### **Course Description:**

Industrial coatings applicators specialize in painting industrial structures to prevent deterioration. They may apply protective coatings to steel bridges to fight corrosion, or they may coat interior and exterior facilities and equipment such as storage tanks, plant buildings, lockers, piping, structural steel, and ships. NCCER and NACE International have joined forces to deliver a comprehensive industrial coating applicator training and certification program.



#### Course Objectives:

- Basic Safety
- Basic Rigging
- Introduction to the Trade
- Surface Preparation

- Industrial Coatings
- Coating Application
- Health and Safety, Debris Management, Containment, and Ventilation

Pre-requisite: N/A

Course length: 308 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Ironworking (3 Levels)

#### **Course Description:**

This curriculum provides a basic foundation in ironworking safety, tools, welding, cranes, rigging, forklifts, and survey equipment are included, as well as trade drawings, steel joists, and structural steel. It also includes updated technology and practices, helping trainees be safer and more effective on the job site. The trainee will also learn how to apply practical applications of mathematical principles on the job site.



This training is a rich source of knowledge and experience that will give each trainee a competitive edge as he or she grows in this profession.

#### Course Objectives:

- Introduction to the Trade
- Trade Safety
- Tools and Equipment of the Trade
- Fastening
- Mobile Construction Cranes
- Rigging Equipment and Practices
- Trade Drawings
- Structural Ironworking
- Plumbing, Aligning and Guying
- Oxyfuel Cutting
- Introduction to Arc Welding

- Bar Joists and Girders
- Metal Decking
- Field Fabrication
- Trade Math
- Weld Quality
- Position Arc Welding
- Forklifts
- Intermediate Rigging
- Steel Joists and Joist Girders
- Tower Cranes
- Survey Equipment Use and Care
- Applied Trade Math

- Flux Core for Ironworking
- Stud Welding
- Advanced Rigging
- Precast/Tilt-Up Erection
- Special Application Hoisting Devices
- Pre-Engineered Systems
- Miscellaneous/Ornamental Ironworking
- Grating and Checkered Plate
- Air Carbon Arc Cutting and Gouging
- Demolition

Pre-requisite: N/A Course length: 548 hours

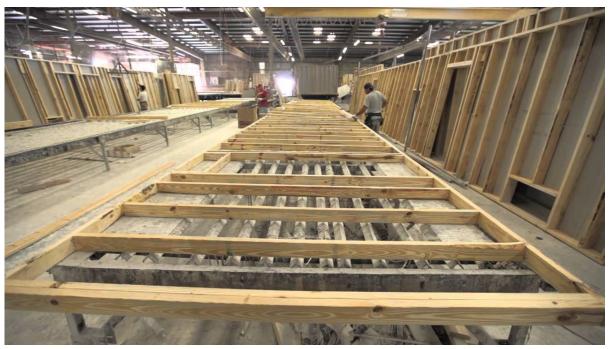


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### **Manufactured Construction Technology**

#### **Course Description:**

Manufactured Construction is a modular prefabrication system that involves creating modular units, with a high degree of completion of interior elements fabricated in a factory or a specialized facility. This curriculum presents the construction side



of the manufactured construction industry. It will present the trainee with knowledge and principles of carpentry, plumbing, electrical, and HVAC systems that are critical to the manufactured construction industry.

#### Course Objectives:

For more information about this certification, please use the contact information below.

Pre-requisite: N/A Course length: TBD



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Masonry (3 Levels)

#### **Course Description:**

The study of masonry is one of the world's oldest and most respected crafts. Masonry construction existed for thousands of years. The remains of stone buildings date back 15,000 years, and the earliest manufactured bricks unearthed by archaeologists are more than 10,000 years old. These bricks were made of hand-shaped, dried mud. Among the most well known works of masons are the pyramids of ancient Egypt and Notre Dame Cathedral in Paris.

This three-level curriculum encompasses modules such as mortar, metalwork in masonry and estimating.



#### Course Objectives:

- Introduction to Masonry
- Masonry Safety
- Masonry Tools and Equipment
- Measurement, Drawings and Specifications
- Mortar
- Masonry Units and Installation Technique
- Residential Plans and Drawing Interpretation
- Residential Masonry

- Reinforced Masonry
- Masonry Openings and Metalwork
- Advanced Laying Techniques
- Effects of Climate on Masonry
- Construction Inspection and Quality Control
- Elevated Masonry
- Specialized Materials and Techniques

- Repair and Restoration
- Commercial Drawings
- Estimating
- Site Layout—Distance Measurement and Leveling
- Stone Masonry
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 548 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Mechanical Insulating (3 Levels)

#### **Course Description:**

This curriculum will teach basic safety practices and all the tools of the trade, as well the characteristics and applications of all types of pipe insulation as well as their installation.

This training also teaches the processes for sheet metal lagging and the fabrication of jacketing for piping, fittings, vessels and equipment, as well as practices for installing pipe fittings, valves and flanges.



#### Course Objectives:

- Orientation to the Trade
- Material Handling, Storage, and Distribution
- Characteristics of Pipe
- Plumbing Systems
- Chilled and Hot Water Heating Systems
- Installing Fiberglass Pipe Insulation
- Insulating Pipe Fittings, Valves, and Flanges
- Construction Drawings and Specifications
- Trade Math and Layout
- Heat Transfer

- Flexible Foam Insulations
- Air Duct Systems
- Blanket Insulation for Ducts
- Board Insulation for Ducts
- Cements and Fabric Finishes
- Insulation Adhesives
- Vapor Retarders and Insulation Coatings
- Steam and Process Water Systems
- Calcium Silicate / Expanded Perlite Pipe Insulation
- Rigid Foam and Cellular Glass Insulation
- Industrial Boiler Systems

- Mineral Wool Insulation
- Board and Block Insulations
- Sheet-metal Lagging
- Jacketing Systems
- Jacketing Fabrication-Pipe and Fittings
- Jacketing Fabrication-Vessels and Equipment
- Removable and Reusable Flexible Insulation Covers
- Specialized Insulation Systems
- Fundamentals of Crew Leadership

Pre-requisite: N/A Course length: 491 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Mentoring for Craft Professionals**

## **Course Description:**

The Mentoring for Craft
Professionals curriculum is an important addition to NCCER's workforce development training. The exchange in knowledge and guidance from those who are more experienced has been an important part of craft training and apprenticeship. This curriculum provides formal guidance to the craft professional entering a mentorship role.



### **Course Objectives:**

For course information, please contact Sheila Blair (contact information below).

Pre-requisite: N/A Course length: 12.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Mobile Crane Operations (3 Levels)

### **Course Description:**

The mobile crane may be the most powerful piece of equipment in the construction industry. With maximum mast heights of over 400 feet and lift capacities of hundreds of thousands of pounds, mobile cranes are essential in building and maintaining bridges, highways, buildings, pipelines and towers. Mobile crane operation requires physical coordination, stamina, focus and concentration.



### Course Objectives:

- Orientation to the Trade
- Basic Principles of Cranes
- Rigging Practices
- Crane Communications
- Crane Safety and Emergency Procedures
- Operating a Crane
- Computer Aids / Operator Aids

- Machine Power Flow
- Wire Rope
- Mobile Crane Maintenance and Inspections
- Load Dynamics
- Transporting Requirements
- On-site Equipment Movement
- Load Charts

- Lift Planning
- Telescopic Boom Attachment Setup and Assembly
- Lattice Boom Assembly and Disassembly
- Hoisting Personnel
- Advanced Operational Techniques

Pre-requisite: N/A Course length: 458 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Painting (3 Levels)

### **Course Description:**

A career in the painting trade can be financially rewarding and provide satisfaction for the skilled craftsperson who takes pride in a job well done. Work on the job, combined with the appropriate formal training, provides numerous career paths for professional growth in this thriving, technical industry.



### Course Objectives:

- Careers in the Painting Trade
- Safety
- Ladders, Lifts, Scaffolds, and Fall Protection
- Identifying Surface / Substrate Materials and Conditions
- Protecting Adjacent Surfaces
- Basic Surface Preparation
- Sealants and Repair / Fillers
- Introduction to Paints and Coatings
- Brushing and Rolling Paints and Coatings

- Painting Failures and Remedies
- Job Planning and Completion
- Chemical Cleaning and Stripping
- Low-pressure Water Cleaning
- Abrasive Blasting
- Drywall Finishing and Patching
- Stains
- Clear Finishes
- Wood Finishing
- Coatings Two

- Spray Painting
- Painting Failures and Remedies Two
- Job Supervision, Planning, and Control
- Coatings Three
- Color and Tinting
- Decorative (Faux) Finishes
- Wallcovering
- Graphics
- Texturing
- Spraying with Special Devices

Pre-requisite: N/A

Course length: 451 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Pipelayer

## **Course Description:**

NCCER's Pipelayer curriculum covers all of the knowledge required for a Pipelayer to achieve success in their trade. In addition to addressing both the rigging, delivery and cutting of pipe, the Pipelayer books concentrate on other learning objectives important to the craft, including materials, elevation, site and trench safety, foundation stabilization, testing and maintenance.



## Course Objectives:

- Job Site Safety
- Tools and Equipment
- Rigging and Delivering Pipe and Associated Structures
- Cutting Pipe
- Gaskets, Joints, and Fittings
- Introduction to Elevations
- Trench Safety
- Foundation, Stabilization, Bedding, and Dewatering
- Testing Pipe

Pre-requisite: N/A

Course length: 185 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Plumbing (4 Levels)

### **Course Description:**

Most people are familiar with plumbers who come to their home to unclog a drain or install an appliance. In addition to these activities, however, plumbers install, maintain, and repair many different types of pipe systems. For example, some systems move water to a municipal water treatment plant and then to residential, commercial, and public buildings. Other systems dispose of waste, provide gas to stoves and furnaces, or supply air conditioning. Pipe systems in power plants carry the steam that powers huge turbines. Pipes also are used in manufacturing plants, such as wineries, to move material through production processes.



### **Course Objectives:**

- Introduction to the Plumbing Profession
- Plumbing Safety
- Tools of the Plumbing Trade
- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe/Fittings
- Copper Tube/Fittings
- Cast-iron Pipe and Fittings
- Steel Pipe/Fittings
- Introduction to Plumbing Fixtures
- Intro to Drain, Waste, Vent (DWV) Systems

- Introduction to Water Distribution Systems
- Plumbing Math Two
- Reading Commercial Drawings
- Structural Penetrations, Insulation, Firestopping
- Install/Test DWV Pipe
- Installing Roof, Floor, and Area Drains
- Installing and Testing Water Supply Piping
- Types of Valves
- Applied Math
- Sizing/Protecting the Water Supply System

- Portable Water Supply Treatment
- Types of VentingSizing DWV and
- Storm Systems
  Sewage Pumps and
- Sump Pumps
- Corrosive-resistant Waste Piping
- Compressed Air
- Service Plumbing
- Business Principles for Plumbers
- Fundamentals of Crew Leadership
- Water Pressure Booster/Recirculation Systems

- Indirect and Special Waste
- Hydronic and Solar Heating Systems
- Codes
- Private Water Supply Well Systems
- Private Wastedisposal Systems
- Swimming Pools and Hot Tubs
- Plumbing for Mobile Homes and Travel Trailer Parks
- Introduction to Medical Gas and Vacuum Systems

Pre-requisite: N/A Course length: 698 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Project Supervision**

## **Course Description:**

Field supervisors play a major role in every construction company and every construction project. They are the frontline managers on the job, directly supervising workers and other field supervisors. They are both the engine and the anchor of the construction team, driving it toward effectiveness and efficiency, and stabilizing it with consistency and good judgment. To fill this role, field supervisors need more



than experience in the field. They also need management skills in problem solving, planning, estimating, safety supervision, scheduling, controlling costs and resources, and, perhaps most important, managing people.

### Course Objectives:

- Orientation to the Job
- Human Relations and Problem Solving
- Safety
- Quality Control

- Contract and Construction Documents
- Document Control and Estimating
- Planning and Scheduling
- Resource Control and Cost Awareness

Pre-requisite: N/A

Course length: 85 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Reinforcing Ironwork (2 Levels)

## **Course Description:**

Concrete is arguably our most important construction material. Properly installed and reinforced, it can safely serve as the supporting structures for large buildings, bridges, dams, and roads. This curriculum teaches the basics of reinforcing materials, along with various tasks related to placing reinforcing materials.



## **Course Objectives:**

- Concrete Reinforcement
- Concrete Reinforcement Safety
- Rigging Equipment
- Rigging Practices

- Commercial Blueprints
- Oxyfuel Cutting
- Foundations and Flatwork
- Concrete Forms
- Handling and Placing

#### Concrete

- Manufactured Forms
- Metal Decking
- Introductory Skills for the Crew Leader

Pre-requisite: N/A

Course length: 309 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Rigger (3 Levels)

## **Course Description:**

In 2010, OSHA updated the crane regulations to include additional training and qualifications for riggers. In response, NCCER has restructured and added to its existing curriculum to create a three-level rigger course that meets or exceeds the current requirements found in the OSHA 29 CFR Part 1926 Amendment.



## Course Objectives:

- Rigging Practices
- Crane Safety and Emergency Procedures
- Basic Principles of Cranes
- Crane Communications
- Intermediate Rigging
- Load Dynamics
- Wire Rope

- Telescopic Boom Attachment Setup and Assembly
- Lattice Boom Assembly and Disassembly
- Advanced Rigging
- Load Charts
- Lift Planning
- Hoisting Personnel

Pre-requisite: N/A

Course length: 338 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Roofing

## **Course Description:**

and repair roofs for

buildings using a variety of materials such as shingles, asphalt, wood and aluminum. Roofers may work on residential or commercial buildings. They perform routine inspections and maintenance on a building's roof and determine the best repair procedures.



## Course Objectives:

- Introduction to Roofing
- Roofing Safety
- **Fall Protection Orientation**
- Drawings in Roofing
- Introduction to Steep-Slope Roofing

- Introduction to Low-Slope Roofing
- Substrates, Decks, and Roof Insulation
- Sheet Metal in Roofing
- Rigging Practices

Pre-requisite: N/A Course length: 181 hours

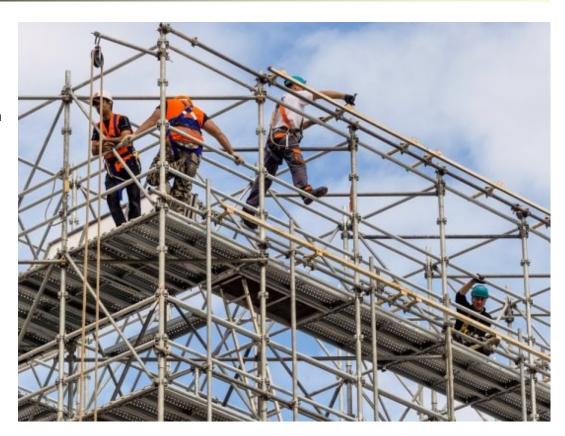


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Scaffolding

## **Course Description:**

This curriculum prepares trainees to perform safely on the job site, with information on tools and equipment they will use in the industry, as well as discussion of stationary, mobile, and suspension scaffolds.



## **Course Objectives:**

- Introduction to the Trade
- Trade Safety
- Trade Tools and Equipment
- Trade Math

- Supported Scaffolds
- Mobile Scaffolds
- Suspension Scaffolds

Course length: 153 hours

Pre-requisite: N/A



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Sheet Metal (4 Levels)

### **Course Description:**

Sheet metal workers mainly work in heating, ventilation, air conditioning, and refrigeration (HVACR), but there are many other opportunities. Sheet metal craftsmen might help build airplanes, automobiles, or even billboards. They might install hoods and vents for restaurants or build grain silos for farmers.



### **Course Objectives:**

- Occupational Overview: The Sheet Metal Industry
- Sheet Metal Tools and Equipment
- Plasma Arc Cutting
- Sheet Metal Math and Measurements
- Sheet Metal Layout and Processes
- Parallel Line Development
- Installation of Ductwork
- Installation of Air Distribution Accessories
- Field Measurements, Calculations, and Fittings

- Construction and Sheet Metal Drawings
- Radial Line Development
- Triangulation
- Sheet Metal Duct Fabrication Standards
- Bend Allowances
- Soldering
- Air Distribution Systems
- Commercial Airside Systems
- Principles of Airflow
- Using Construction Drawings in Sheet Metal
- Sheet Metal Job Specifications
- Air Testing and Balancing

- Blanket Insulation for Ducts
- Board Insulation for Ducts
- Fume and Exhaust System Design
- Welding and Brazing
- Oxyfuel Cutting
- Architectural Sheet Metal
- Shop Production and Organization
- Sheet Metal Business and Technology
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 631 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Site Layout (2 Levels)

### **Course Description:**

Site layout is an important phase of any construction activity from beginning to end. The impact of good layout practices in terms of time, money, and construction efficiency increases with the size of the project. Site layout technicians typically survey and otherwise gather information about a proposed job site. As a job progresses, they lay out the location of structures and other features on the site, check the dimensions of the structures as they



are being built, document the completed work, and verify that all the work is done in accordance with the design plans and specifications.

### Course Objectives:

- Introduction to Site Layout
- Surveying Math
- Surveying Use and Equipment Care One
- Blueprint Reading for Surveyors
- Advanced Surveying Math
- Surveying Use and Equipment Care Two, EDMI's and Total Stations
- Control Setup
- Boundary and Topography Surveys
- Data Collection and Basic Computer Skills
- Concrete Properties and Quality Control
- Means and Methods

Pre-requisite: N/A Course length: 308 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Sprinkler Fitting (4 Levels)

### **Course Description:**

Fire sprinklers are one of the most important methods for protecting life and property. They provide protection 24 hours a day, seven days a week, even when building occupants are asleep or absent from the premises. But sprinkler systems provide adequate protection only if designed and installed properly. Therefore, sprinkler system installation is the primary focus of this training program. Sprinkler systems are designed and installed



based on specific codes and standards from organizations like the National Fire Protection Association (NFPA), with worker safety considerations governed by the Occupational Safety and Health Administration (OSHA).

### Course Objectives:

- Orientation to the Trade
- Introduction to Components and Systems
- Steel Pipe
- CPVC Pipe and Fittings
- Copper Tube Systems
- Underground Pipe
- Hangars, Restraints, Supports, and Guides
- General Purpose Valves

- General Trade Math
- Shop Drawings
- Standard Spray Fire Sprinklers
- Wet Fire Sprinkler Systems
- Dry-pipe Systems
- Deluge/Pre-action systems
- Standpipes
- Water Supplies
- Fire Pumps
- Application-Specific Sprinklers

- and Nozzles
- System Layout
- Inspection, Testing, and Maintenance
- Special Extinguishing Systems
- Introductory Skills for the Foreman
- Procedures and Documentation

Pre-requisite: N/A

Course length: 591 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

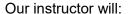
## AWS D1.1 Structural Steel Welding Code

### **Course Description:**

This is an 8-hour practical welding test only covering AWS D1.1, Structural Steel Welding Code; there is no classroom time. The first hour will be dedicated to instruction in safety and review of the applicable Welding Procedure Specification (WPS) governing the test.

#### Students will:

- Have a chance to familiarize themselves with the machine and the settings.
- Be asked to properly set up a plate with the correct root opening (with/without backing) and place it in the proper position.
- Apply a hot pass to be inspected by a test supervisor - and applying additional passes as needed to fill the joint to the weld plate.
- First possess the skills necessary to produce a sound weld that is visually acceptable and meets the testing requirements.
- Demonstrate acceptable welding techniques by following a set of written instructions contained in the Welding Procedure Specification (WPS) to produce the weld specimen for testing.



- Ensure that you have applied a sound root weld before asking you to move forward.
- Give a final visual inspection of the plate to see if the test piece is acceptable for the destructive testing portion of the AWS Welding Certification.
- Guide you through the preparation process of the pieces and assembly, and periodically check your progress to ensure conformity to the Code and Standards of the AWS Certified Welder Test.

The testing procedure requires you to make a weld under supervision that is then tested by an inspector, to ensure the weld conforms to a particular Code, Standard, or written Welding Procedure Specification. Testing methods include Visual Inspection, and may involve either Destructive or Non-Destructive Testing.

Your weld coupons will be examined and tested to make sure they are satisfactory welds. More details will be available once testing is scheduled.

Pre-requisite: N/A

Course length: 8 hours





- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Sustainable Construction Supervisor

## **Course Description:**

This module was developed to instruct construction supervisors on sustainable management techniques, especially as they relate to constructionphase LEED points targeted for their projects. A collaborative effort of the Green Building



Certification Institute (GBCI), the Myers-Lawson School of Construction at Virginia Tech, the University of Florida, and Subject Matter Experts from the Top 100 Green Contractors in the United States, this module covers a topic not addressed until now—sustainable construction management for front-line supervisors. This module has been endorsed by GBCI and approved by the US Green Building Council for 20 GBCI general *and* LEED-specific Continuing Education (CE) Hours for LEED Professionals. Topics covered in Sustainable Construction Supervisor include Project Sustainability, Green Building Materials, and Green Building Methods.

### **Course Objectives:**

- Project Sustainability Goals
- Green Building Materials and Technologies
- Green Building Methods and Processes

Pre-requisite: N/A Course length: 15 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Tower Crane Operations**

## **Course Description:**

This module expands on the knowledge and skills gained through the Carpentry Curriculum and provides the basic information needed to construct and apply finishes to custom cabinetry. It identifies and discusses various types of wood products, wood-joining techniques, power tools, cabinet doors, shelves, and hardware. Specific guidance is also provided for the installation of laminated countertops.



## Course Objectives:

- Orientation to the Trade
- Basic Principles of Tower Cranes
- Tower Crane Safety
- Rigging Practices

- Load Charts
- Communications
- Operating a Tower Crane

Pre-requisite: N/A

Course length: 178 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Weatherization

## **Course Description:**

As energy efficiency is becoming a priority for homeowners across America, many are turning to the weatherization industry to assist in their efforts. NCCER's Weatherization program offers training that exceeds the existina standards for



weatherization installers, crew chiefs, and building auditors. This program combines existing NCCER curriculum with new building science modules that address the specific needs within this industry. Dual credentials are available within this program. Topics covered within this program include Sealing the Building Envelope, Commercial Drawings, and Diagnostics and Management Practices.

## **Course Objectives:**

- Building Auditor, Level 2
- Fundamentals of Weatherization

- Weatherization Crew Chief, Level 2
- Weatherization Technician, Level 1

Pre-requisite: N/A

Course length: 425 hours



# **Customer Service**









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to DCSP and CSPC certification

## Certified Customer Service Professional Exam Prep

### **Course Description:**

In Customer Service Excellence, service professionals will be introduced to a variety of topics in order to

maximize the service they provide to their customers - both external and internal. Through lecture, case study, and engaging activities, participants will discover their own strengths and weaknesses and how to apply the best practices of customer service while on the job. Topics covered include the foundations of customer service, communication, emotional intelligence, teamwork, and business ethics. These skills will give participants the interpersonal awareness and detail-oriented, above-and-beyond mindset that will help differentiate them as exceptional customer service representatives. This introductory-level course is appropriate for frontline customer service professionals who are not in positions of leadership.

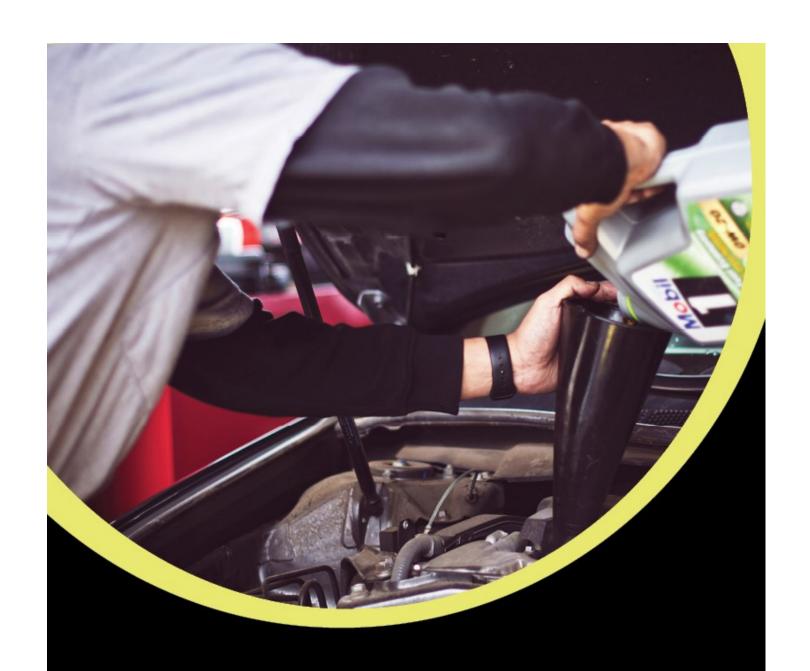


**Note:** This course aligns with the National Customer Service Association's standards of quality customer service. Completion of this course fully prepares participants to pass the **NCSA's Direct Contact Service Professional (DCSP) exam and the Customer Service Professional Certification (CSPC) exam.** 

### **Course Objectives:**

- Define customer, customer service, and the AKE Root of Service Model.
- Identify your own customers (both external and internal) and think critically about how the specific services you provide impacts them.
- Define the four drivers of human behavior and learn to recognize these drivers as motivators for interpersonal behavior in frustrating situations.
- Learn techniques to communicate both in-person and remotely in a way that builds strong interpersonal relationships.
- Learn how to be a better team member in order to maximize overall customer satisfaction.
- Obtain an introductory-level understanding of business ethics and learn how to respond to unethical behavior in the workplace, whether directed at customers or at staff.
- Demonstrate learned skills through a comprehensive roleplay-based skill practice.

Pre-requisite: N/A Course length: 24 hours



# **Equipment Maintenance**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Boilermaker (4 Levels)

### **Course Description:**

Boilermaking is a four-level curriculum that meets the requirements of a boiler-maker apprenticeship program (4 years and 8,000 hours of on-the-job-training). If a trainee completes all four levels, he or she can be a journey-level Boilermaker, with specialized skills and opportunities for career advancement. For this second edition, information has been added on towers, vessels, and furnaces; safety analysis and pre-job safety check lists; and up-to-date techniques for cutting and fitting gaskets, base metal preparation, and



welding basics. Also new to the second edition are the Going Green features. These features highlight products, practices, and projects that are energy-efficient, sustainable, and Earth-friendly.

#### **Course Objectives:**

- Introduction to Boilermaking
- Boilermaking Safety
- Boilermaking Tools
- Basic Materials
- Oxyfuel Cutting
- Cutting and Fitting Gaskets
- Base Metal Preparation
- Welding Basics
- Boiler Systems and Components
- Identifying and Installing Valves
- Pipe Hangers and Supports
- Drawings and Detail Sheets
- Fasteners and Anchors
- Welding Symbols

- Socket Weld Pipe Fabrication
- Butt Weld Pipe Fabrication
- Tube Weld Preparation and Fitting
- Air Carbon Arc Cutting and Gouging
- Plasma Arc Cutting
- Boiler Pressure Components
- Boiler Nonpressure Components
- Boiler Auxiliaries
- Brick, Refractory, Insulation, Lagging (BRIL)
- Advanced Tube Work
- Testing Piping Systems and Equipment

- Rigging
- Towers and Exchangers
- Advanced Mechanical Trade Math
- Advanced Rigging
- Advanced Boilermaking Construction Drawings
- Advanced Pipe Fabrication
- Stress Relieving
- Quality Assurance
- Advanced Exchangers
- Advanced Towers
- Fundamentals of Crew Leadership

Pre-requisite: N/A Course length: 700 hours

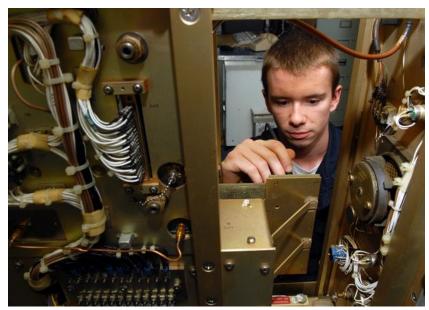


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Electronic System Technician (2 Levels)

## **Course Description:**

Electronic Systems Technicians (EST) are skilled in a variety of areas, and they work in both residential and commercial settings. They are tasked with installing lighting, telecommunications equipment, and security systems. Electronic Systems Technicians also install remote monitoring systems in commercial applications and can retrofit current systems with modernized remote monitoring technology. The skills and duties of ESTs are broad, varied, and in high demand.



### Course Objectives:

- Limited-Energy Cabling
- Limited-Energy Cable Selection
- Limited-Energy Cable Termination
- Limited-Energy Network Installations
- Fiber Optics
- Wireless Communication
- Site Survey, Project Planning, and Documentation
- Rack Assembly
- System Commissioning and User Training
- Maintenance and Repair
- Audio Systems

- Video Systems
- Broadband
- Media Management Systems
- Telecommunication Systems
- Residential and Commercial Networks
- Intrusive Detection Systems
- Fire Alarm Systems
- Nurse Call and Signaling Systems
- Closed Circuit Television (CCTV)
- Access Control Systems
- EST ad Internet of Things (IoT)

Pre-requisite: N/A

Course length: 508 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- Prepares student for an exam that leads to certification

## Industrial Maintenance Mechanic (4 levels)

### **Course Description:**

Industrial maintenance mechanics (IM Mechanic) are needed in every industry that uses machinery, from assembly plants to power manufacturers. Not only do mechanics repair and maintain equipment, they also install and dismantle it. Every time a new appliance leaves a factory or a new car rolls off the line, a skilled mechanic played a role in producing it. Wherever there are machines, there will be a need for maintenance craftworkers.



### **Course Objectives:**

- Orientation to the Trade
- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valvės
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- Basic Layout
- Introduction to Piping Components
- Copper and Plastic Piping

- Practices
- Introduction to Ferrous Metal Piping Practices
- Identify, Install and Maintain Valves
- Hydrostatic and Pneumatic Testing
- Introduction to Bearings
- Low-Pressure Steam Systems
- High-Pressure Steam Systems and Auxiliaries
- Distillation Towers and Vessels
- Heaters, Furnaces, Heat Exchangers, Cooling Towers and Fin Fans
- Introduction to Tube Work
- Advanced Trade Math
- Precision Measuring Tools
- Installing Bearings

- Installing Couplings
- Setting Baseplates and Prealignment
- Conventional Alignment
- Installing Belt and Chain Drives
- Installing Mechanical Seals
- Preventive and Predictive Maintenance
- Advanced Blueprint Reading
- Compressors and Pneumatic Systems
- Reverse and Laser Alignment
- Introduction to Supervisory Skills
- Troubleshooting and Repairing Pumps
- Troubleshooting and Repairing Gearboxes

Pre-requisite: N/A

Course length: 700 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Industrial Maintenance Electrical & Instrumentation (4 Levels)

### **Course Description:**

Industrial maintenance electrical and instrumentation (IM E&I) technicians are needed in every industry that uses machinery, from automotive assembly plants to computer manufacturers. Not only do they repair and maintain electrical instruments and equipment, they also install and dismantle them. Every time a new appliance leaves a factory or a new car rolls off the line, a skilled electrical and instrumentation technician played a role in producing it.



### Course Objectives:

- Orientation to the Trade
- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- Industrial Safety for E&I Technicians
- Introduction to the National Electrical Code
- Electrical Theory
- Alternating Current
- E&I Test Equipment

- Flow, Pressure, Level, and Temperature
- Process Mathematics
- Hand Bending
- Tubing
- Clean, Purge, and Test Tubing and Piping Systems.
- Instrument Drawing and Documents, Part One
- Conductors and Cables
- Conductor Terminations and Splices
- Hazardous Locations
- Electronic Components
- E&I Drawings
- Motor Controls
- Distribution Equipment
- Transformer Applications
- Conductor Selection and Calculation
- Temporary Grounding
- Layout and Installation of Tubing and Piping Systems

- Machine Bending of Conduit
- Hydraulic Controls
- Pneumatic Controls
- Motor-Operated Valves
- Standby and Emergency Systems
- Basic Process Control Elements, Transducers, and Transmitters
- Instrumentation Calibration and Configuration
- Pneumatic Control Valves, Acuators, and Positioners
- Performing Loop Checks
- Troubleshooting and Commissioning a Loop
- Process Control Loops and Tuning
- Data Networks
- Programmable Logic Controllers
- Distributed Control Systems

Pre-requisite: N/A Course length: 703 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Instrumentation (4 Levels)

### **Course Description:**

Instrument Fitters and Technicians perform key installation and maintenance functions across several industries. The field of instrumentation covers important processes and knowledge areas, including piping, tubing, fasteners, and metallurgy. Instrumentation Technicians and Fitters are familiar with electrical systems, craft-specific drawings, and are experts in the hand and power tools specific to their trade.



### Course Objectives:

- Instrumentation Safety Practices
- Hand/Power Tools for Instrumentation
- Craft-related Math
- Instrument Drawings, Documents Pt. One
- Inspect, Handle, and Store Instrumentation Materials
- Electrical Systems for Instrumentation
- Fasteners
- Gaskets, O-Rings, and Packaging
- Lubricants, Sealants, and Cleaners
- Tubing
- Steel Piping Practices

- Hoses
- Temperature, Pressure, Level, Flow
- Instrument Fitter's Math
- Instrument Drawings, Documents Part Two
- Test Equipment
- Panel-mounted Instruments
- Installing Fieldmounted Instruments
- Raceways for Instrumentation
- Clean, Purge, Test Tube, Pipe Systems
- Protective Measures for Instrumentation
- Layout/Install of Tube/Pipe Systems

- Instrument Air Filters, Regulators, Dryers
- Control Valves, Actuators, Positioners
- Detectors, Secondary Elements, Transducers, and Transmitters
- Instrumentation Electrical Circuitry
- Relays and Timers
- Switches and Photoelectric Devices
- Terminating Conductors
- Grounding/Shielding of Instrumentation Wiring
- Process Control

- Theory Controllers
- Instrument Calibration and Configuration
- Proving, Commissioning, and Troubleshooting a Loop
- Tuning Loops
- Digital Logic Circuits
- Programmable Logic Controllers
- Distributed Control Systems
- Analyzers and Monitors

Pre-requisite: N/A

Course length: 686 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Power Generation I&C Maintenance Technician (4 Levels)

### **Course Description:**

As a four-level curriculum, *Power Generation I&C Maintenance Technician* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a competitive edge as they grow in their profession.



## Course Objectives:

- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- SMAW Equipment and Setup
- Industrial Safety for E&I Technicians
- Managing Electrical Hazards

- Introduction to the National Electric Code
- Electrical Theory
- Alternating Current
- E&I Drawings
- E&I Test Equipment
- Conductors and Cables
- Conductor Termination and Splices
- Motor Controls
- Hydraulic Controls
- Pneumatic Controls
- Programmable Logic Controllers
- Instrumentation Electrical Circuitry
- Process Mathematics
- Flow, Pressure, Level and Temperature
- Instrument Drawings and Documents Part One

- Electrical Systems for Instrumentation
- Relays and Timers
- Switches and Photoelectric Devices
- Tubing
- Clean, Purge, and Test Tubing and Piping Systems
- Layout and Installation of Test Tubing and Piping Systems
- Electronic Components
- Panel-Mounted Instruments
- Installing Field-mounted Instruments
- Grounding and Shielding of Instrumentation Wiring
- Analyzers
- Standby and Emergency Systems

- Basic Process Control Elements, Transducers and Transmitters
- Instrument Calibration and Configuration
- Pneumatic Control Valves, Actuators, and Positioners
- Performing Loop Checks
- Troubleshooting and Commissioning a Loop
- Process Control Theory
- Process Control Loops and Tuning
- Data Networks
- Digital Logic Circuits
- Calibrate Supervisory Instrumentation Elements
- Boiler/HRSG Control
- Preventive and Predictive Maintenance
- Distributed Control Systems

Pre-requisite: N/A Course length: 829 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Power Generation Maintenance Mechanic (4 Levels)

### **Course Description:**

As a four-level curriculum, *Power Generation Maintenance Mechanic* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a competitive edge as they grow in their profession.



### **Course Objectives:**

- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication

- SMAW Equipment and Setup
- Basic Layout
- Advanced Trade Math
- Precision Measuring Tools
- Introduction to Bearings
- Installing Bearings
- Installing Couplings
- Installing Mechanical Seals
- Conventional Alignment
- Reverse Alignment
- Laser Alignment
- Installing Belt and

- Chain Drives
- Introduction to Piping Components
- Copper and Plastic Piping Practices
- Introduction to Ferrous Metal Piping Practices
- Identify, Install, and Maintain Valves
- Low-Pressure Steam Systems
- High-Pressure Steam Systems and Auxiliaries
- Heaters, Furnaces, Heat Exchangers, Cooling Towers and

- Fin Fans
- Hydrostatic and Pneumatic Testing
- Installing Fans and Blowers
- Conveyors
- Troubleshooting and Repairing Conveyors
- Basic Hydraulic Systems
- Troubleshooting and Repairing Hydraulic Equipment
- Motor Operated Valves
- Advanced Blueprint Reading

Pre-requisite: N/A

Course length: 828 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- Prepares student for an exam that leads to certification

# Power Generation Maintenance Electrician (4 Levels)

### **Course Description:**

As a four-level curriculum *Power Generation Maintenance Electrician* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a competitive edge as they grow in their profession.



## Course Objectives:

- Tools of the Trade
- Fasteners/Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-related Math
- Construction Drawing
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile/Support Equip.
- Lubrication
- SMAW Equip/Setup
- Industrial Safety for E&I Technicians
- Managing Electrical Hazards
- Introduction to The National Electrical

- Code
- Electrical Theory
- Alternating Current
- E&I Drawings
- E&I Test Equipment
- Conductors/Cables
- Conductor Terminations/Splices
- Motor Controls
- Hydraulic Controls
- Pneumatic Controls
- Programmable Logic Controllers
- Conductor Installs
- Cable Tray
- Grounding/Bonding
- Hand Bending
- Machine Bending of Conduit
- Electric Lighting
- Practical Applications of Lighting

- Hazardous Locations
- Circuit Breakers/ Fuses
- Transformer Applications
- Distribution Equipment
- Power Plant Electrical Systems
- Conductor Selection and Calculations
- Motors: Theory and Application
- Motor-Operated Valves
- Control Systems and Fundamental Concepts
- Temporary Grounding
- Load Calculations— Branch and Feeder

- Circuits
- Motor Calculations
- Overcurrent Protection
- Specialty
   Transformers
- Advanced Controls
- Motor Operation and Maintenance
- Generator Maintenance
- Switchgear and Breaker Maintenance
- Preventive/Predictive Maintenance
- Medium Voltage Termination/Splices
- Fire Alarm Systems
- Heat Tracing and Freeze Protection
- Standby and Emergency Systems

Pre-requisite: N/A Course length: 814 hours



# **Equipment Operation**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **CNC Lathe**

## **Course Description:**

This course introduces students to basic CNC lathe operation. Concepts to be covered include pendant operation, theory, basic g and m coding, work holding and tool setup and offsets.

Successful passing of a NIMS test is available.



## Course Objectives:

- Perform start-up procedures and maintenance
- Demonstrate tasks related to set up and operation
- Utilize CNC control/operator panel buttons and switches
- MDI programmable machine functions
- Exhibit knowledge of CNC models of operation
- Exhibit CNC safe operating procedures
- Demonstrate speed and feed relationships and manipulation
- Operations used to manufacture piece parts
- Understand tool offset concepts (lengths, diameters and wear(
- · Perform work offsets
- Understand the use and modification of cutter compensation
- Perform program editing procedures
- Understand expectations of operator edits (PGM and COMP values)
- Recognize basic program structure from an operator's viewpoint
- Perform program verification

Pre-requisite: N/A

Course length: 40 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# **CNC Mill**

## **Course Description:**

In this course, students will learn to set up and operate CNC mills, write CNC programs, identify and select tooling and perform precision measurements. Topics include safety and preventive maintenance, the eight basic functions of a CNC machine control, and high-speed machining processes.

If NIMS certification is required, an exam is required.



### Course Objectives:

- Explain safety requirements
- Describe the different types of tooling required for CNC mills
- Select tooling required for a specific jobs
- Write and manually input program data
- Execute programs for CNC mill according to project specifications
- Read job orders and process sheets to determine tooling and setup information
- Perform tapping operation
- Perform million operation (pocketing, contour profile, helical)
- Perform tool axis operations (drilling, boring, reaming)
- · Perform external and internal thread milling
- Perform canned cycles
- Switch coordinate plains (x-z, y-z)

Pre-requisite: N/A Course length: 40 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Heavy Equipment Operations (3 Levels)

### **Course Description:**

Heavy equipment operators (HEO) not only work on regular construction building jobs, but also on infrastructure projects (roads, bridges, and ports, otherwise called non-building construction), and in mining and timber operations. A trained and experienced equipment operator provides necessary skills for any project that requires moving and transporting heavy materials, or that demands any kind of earthmoving.

NCCER offers a three-level curriculum which will guide the trainee through modules



covering each major piece of heavy equipment, as well as topics such as Civil Blueprint Reading, Soils, and Paving.

### **Course Objectives:**

- Orientation to the Trade
- Heavy Equipment Safety
- Identification of Heavy Equipment
- Basic Operational Techniques
- Utility Tractors
- Introduction to Earthmoving
- Grades
- Vertical-Mast Sit-Down

- Counterbalance Forklifts
- Rough Terrain Forklifts
- On-Road Dump Trucks
- Excavation Math
- Interpreting Civil Drawings
- Site Work
- Soils
- Skid Steers
- Leaders

- Scrapers
- Finishing and Grading
- Compaction Equipment
- Backhoes
- Off-Road Dump Trucks
- Dozers
- Excavators
- Motor Graders

Pre-requisite: N/A

Course length: 555 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Heavy Highway Construction (2 Levels)

### **Course Description:**

Heavy Highway Construction professionals build the infrastructure. working on roads, bridges and ports, otherwise called nonbuilding construction. A trained heavy highway construction worker needs math skills and knowledge of heavy equipment operations, safety, earthmoving, hand tools and traffic regulations.



## Course Objectives:

- Orientation to the Trade
- Identification of Equipment Used in Heavy Highway Construction
- Heavy Highway Construction Safety
- Work-Zone Safety
- Soils
- Site Work
- **Excavation Math**

- Interpreting Civil Drawings
- Rigging Practices
- Crane Safety and Emergency **Procedures**
- **Basic Principles of Cranes**
- **Crane Communications**
- Introduction to Earthmoving
- Finishing and Grading
- Trenching and Excavating
- Plant Operations

- Paving
- Horizontal Formwork
- Vertical Formwork
- Reinforcing Concrete
- Working with Concrete
- Trade Drawings One
- Structural Ironworking One
- **Bridge Construction**
- Bridge Foundations
- Bridge Formwork

Pre-requisite: N/A

Course length: 438 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Mobile Crane Operations (3 Levels)

### **Course Description:**

The mobile crane may be the most powerful piece of equipment in the construction industry. With maximum mast heights of over 400 feet and lift capacities of hundreds of thousands of pounds, mobile cranes are essential in building and maintaining bridges, highways, buildings, pipelines and towers. Mobile crane operation



requires physical coordination, stamina, focus and concentration.

### Course Objectives:

- Orientation to the Trade
- Basic Principles of Cranes
- Rigging Practices
- Crane Communications
- Crane Safety and Emergency Procedures
- Operating a Crane
- Computer Aids / Operator Aids
- Machine Power Flow
- Wire Rope
- Mobile Crane Maintenance and Inspections

- Load Dynamics
- Transporting Requirements
- On-site Equipment Movement
- Load Charts
- Lift Planning
- Telescopic Boom Attachment Setup and Assembly
- · Lattice Boom Assembly and Disassembly
- Hoisting Personnel
- Advanced Operational Techniques

Pre-requisite: N/A

Course length: 458 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# NIMS CAM Milling

## **Course Description:**

To keep pace with industry's changing needs, NIMS has developed a Smart Standards methodology to properly train employees in a world where technology emerges and changes faster than an average individual can master in their career span. Its customizable format is aligned with manufacturers and based on specific job roles within an occupation that are easily stackable into a masterful career.

Smart Standards enable communities to define their specific job roles from a



collection of industry-recognized Job Duties. These Duties are translated into hands-on performance that aligns to the needs of the stakeholder community.

## **Course Objectives:**

- Understand design intent from detailed drawings
- Create a process plan for machining parts
- Create 3D CAD files from 2D drawings
- Create CNC toolpaths
- Export supporting documentation and g code

Pre-requisite: N/A Course length: 40 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# NIMS CAM Turning

## **Course Description:**

To keep pace with industry's changing needs, NIMS has developed a **Smart Standards** methodology to properly train employees in a world where technology emerges and changes faster than an average individual can master in their career span. Its customizable format is aligned with manufacturers and based on specific job roles within an occupation that are easily stackable into a masterful career.



Smart Standards enable communities to define their specific job roles from a collection of industry-recognized Job Duties. These Duties are translated into hands-on performance that aligns to the needs of the stakeholder community.

## Course Objectives:

- Develop process plans to program parts requiring turning
- Create and edit 2D model sketches
- Generate 2D turning toolpath to geometric (solid) models
- Creating turning machine operator documentation
- Export supporting documentation and g code

Pre-requisite: N/A Course length: 40 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### PLC & Robotic Technician

#### **Course Description:**

This certification course includes 14 separate modules which build on each other to provide participants with the knowledge and skills need

to earn their certification. These modules include:

- Manufacturing Safety OSHA 10
- Shop Math
- Blueprint Reading
- Basic Electrical
- AC, DC Motors and Motor Control
- Robotics Operations
- Robotics Mechanical
- Robotics Electrical
- Rigging for Robot Mechanical Teardown
- Fluid Power
- Digital Electronics
- Electronic Sensors
- Welding Processes
- PLC and Communication Devices

#### Course Objectives:

- Use software to writing programming instructions; execute program to operate electromechanical circuits
- Employ local, remote I/O and network communications
- Read and interpret relay logic prints
- Employ hands-on welding skills with experience with MIG, TIG, Stick, Plasma and Oxy-Fuel equipment
- Identify types of sensors on a schematic diagram or electrical print
- Be able to identify logic input values from a sensor to a PLC input
- Explain binary logic encoding and decoding
- Adjust switches and controls on hydraulic/pneumatic system
- Maintain filtration and vacuum systems on pneumatic system
- Diagnose robot mechanical problems to the component level
- Set up and/or software limits, issues relating to new software limit setting program.
- Perform robot calibration and test for proper master
- Understand interpolation operation of robot

Pre-requisite: N/A Course length: 496 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **Tower Crane Operations**

#### **Course Description:**

This module expands on the knowledge and skills gained through the Carpentry Curriculum and provides the basic information needed to construct and apply finishes to custom cabinetry. It identifies and discusses various types of wood products, wood-joining techniques, power tools, cabinet doors, shelves, and hardware. Specific guidance is also provided for the installation of laminated countertops.



#### Course Objectives:

- Orientation to the Trade
- Basic Principles of Tower Cranes
- Tower Crane Safety
- Rigging Practices

- Load Charts
- Communications
- Operating a Tower Crane

Pre-requisite: N/A

Course length: 178 hours



# **Equipment Maintenance**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Boilermaker (4 Levels)

#### **Course Description:**

Boilermaking is a four-level curriculum that meets the requirements of a boiler-maker apprenticeship program (4 years and 8,000 hours of on-the-job-training). If a trainee completes all four levels, he or she can be a journey-level Boilermaker, with specialized skills and opportunities for career advancement. For this second edition, information has been added on towers, vessels, and furnaces; safety analysis and pre-job safety check lists; and up-to-date techniques for cutting and fitting gaskets, base metal preparation, and



welding basics. Also new to the second edition are the Going Green features. These features highlight products, practices, and projects that are energy-efficient, sustainable, and Earth-friendly.

#### Course Objectives:

- Introduction to Boilermaking
- Boilermaking Safety
- Boilermaking Tools
- Basic Materials
- Oxyfuel Cutting
- Cutting and Fitting Gaskets
- Base Metal Preparation
- Welding Basics
- Boiler Systems and Components
- Identifying and Installing Valves
- Pipe Hangers and Supports
- Drawings and Detail Sheets
- Fasteners and Anchors
- Welding Symbols

- Socket Weld Pipe Fabrication
- Butt Weld Pipe Fabrication
- Tube Weld Preparation and Fitting
- Air Carbon Arc Cutting and Gouging
- Plasma Arc Cutting
- Boiler Pressure Components
- Boiler Nonpressure Components
- Boiler Auxiliaries
- Brick, Refractory, Insulation, Lagging (BRIL)
- Advanced Tube Work
- Testing Piping Systems and Equipment

- Rigging
- Towers and Exchangers
- Advanced Mechanical Trade Math
- Advanced Rigging
- Advanced Boilermaking Construction Drawings
- Advanced Pipe Fabrication
- Stress Relieving
- Quality Assurance
- Advanced Exchangers
- Advanced Towers
- Fundamentals of Crew Leadership

Pre-requisite: N/A Course length: 700 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (OSHA card)
- ☐ Prepares student for an exam that leads to certification

## **Confined Space**

#### **Course Description:**

This course will cover:

- Confined space definitions and hazards
- Assessment process and identification of spaces
- Entry requirements for non-permit confined spaces
- Entry requirements for permitrequired confined spaces
- Alternate entry procedures
- Confined space personnel duties and responsibilities
- Precautions and pre-planning before entry
- Rescue plan/provisions
- Proper safety equipment for confined space entry
- Hot work and the use of chemicals in a confined space
- Contractor-performed work

#### Course Objectives:

- Understand confined space definitions
- Understand the differences between confined space types
- Recognize hazardous air quality in confined spaces, and other hazards
- Understand when an entry permit is required
- Understand alternative entry techniques
- Understand the duties of confined space duties and responsibilities
- Plan for entry and taking precautions
- Recognize when a rescuer is required

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Drywall (2 Levels)

#### **Course Description:**

Drywall applicators often install walls and ceilings, as well as place insulation, soundproofing, and firestopping materials behind and onto those walls and ceilings. They may also apply textures and trims to enhance both the interiors and exteriors of the buildings. The two-level curriculum for Drywall covers such subjects as Thermal and Moisture Protection, Steel Framing and Acoustical Ceilings.



#### Course Objectives:

- Orientation to the Trade
- Construction Materials and Methods
- Thermal and Moisture Protection
- Drywall Installation
- Drywall Finishing
- Commercial Drawings
- Steel Framing

- Acoustical Ceilings
- Interior Specialties
- Exterior Cladding
- Specialty Finishes

Pre-requisite: N/A

Course length: 292 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Electrical (4 Levels)

#### **Course Description:**

Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code and state and local codes.

To prepare trainees a career in the electrical field, NCCER offers a comprehensive, 4-level Electrical curriculum that complies with DOL time-based standards for apprenticeship.



#### Course Objectives:

- Occupational Overview: The Electrical Industry
- Safety for Electricians
- Introduction to Electrical Circuits
- Electrical Theory
- Introduction to the National Electrical Code
- Device Boxes
- Hand Bending
- Wireways, Raceways and Fittings
- Conductors and Cables
- Basic Electrical Construction Documents
- Residential Wiring
- Electrical Test Equipment
- Alternating Current
- Motors: Theory and Application
- Electric Lighting

- Conduit Bending
- Pull and Junction Boxes
- Conductor Installations
- Cable Tray
- Conductor Terminations and Splices
- Grounding and Bonding
- Circuit Breakers and Fuses
- Control Systems and Fundamental Concepts
- Lead Calculations—Branch and Feeder Circuits
- Conductor Selection and Calculations
- Practical Applications of Lighting
- Hazardous Locations
- Overcurrent Protection
- Distribution Equipment
- Transformers
- Commercial Electrical

#### Services

- Motor Calculations
- Voice, Data and Video
- Motor Controls
- Lead Calculations—Feeders and Services
- Health Care Facilities
- Standby and Emergency Systems
- Basic Electronic Theory
- Fire Alarm Systems
- Specialty Transformers
- Advanced Controls
- HVAC Controls
- Heat Tracing and Freeze Protection
- Medium-Voltage Terminations/ Splices
- Special Locations
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 668 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Electronic System Technician (2 Levels)

#### **Course Description:**

Electronic Systems
Technicians (EST) are
skilled in a variety of
areas, and they work in
both residential and
commercial settings. They
are tasked with installing
lighting,

telecommunications
equipment, and security
systems. Electronic
Systems Technicians also
install remote monitoring
systems in commercial
applications and can
retrofit current systems
with modernized remote



monitoring technology. The skills and duties of ESTs are broad, varied, and in high demand.

#### **Course Objectives:**

- Limited-Energy Cabling
- Limited-Energy Cable Selection
- Limited-Energy Cable Termination
- Limited-Energy Network Installations
- Fiber Optics
- Wireless Communication
- Site Survey, Project Planning, and Documentation
- Rack Assembly
- System Commissioning and User Training
- Maintenance and Repair
- Audio Systems

- Video Systems
- Broadband
- Media Management Systems
- Telecommunication Systems
- Residential and Commercial Networks
- Intrusive Detection Systems
- Fire Alarm Systems
- Nurse Call and Signaling Systems
- Closed Circuit Television (CCTV)
- Access Control Systems
- EST ad Internet of Things (IoT)

Pre-requisite: N/A

Course length: 508 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Fundamentals of Crew Leadership

#### **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has demonstrated



leadership qualities. To become an effective leader, it helps if a trainee has natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.

#### **Course Objectives:**

- Basic leadership skills
- Leadership Styles
- Communication
- Delegating

- Problem Solving
- Jobsite Safety
- Project Planning
- Scheduling

Estimating

Pre-requisite: N/A Course length: 22.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## HVAC (4 Levels)

#### **Course Description:**

The increasing development of HVAC (heating and air-conditioning systems) technology causes employers to recognize the importance of continuous education and keeping up to speed with the latest equipment and skills. Hence, technical school training or apprenticeship programs often provide an advantage and a higher qualification for employment.

NCCER's program has been designed by highly qualified subject matter experts with this in mind. Our four levels, **North American Technician Excellence (NATE)** recognized, present theoretical and practical skills essential to your success as an HVAC installer or technician.



#### Course Objectives:

- Trade Mathematics
- Basic Electricity
- Introduction to HVAC, Heating, Cooling, Air Distribution Systems, Hydronic Systems
- Basic Copper and Plastic Piping Practices
- Soldering and Brazing
- Basic Carbon Steel Piping Practices
- Alternating Current
- Compressors
- Refrigerants and Oils
- Leak Detection, Evacuation, Recovery and Charging
- Metering Devices
- Heat Pumps
- Basic Maintenance

Pre-requisite: N/A

- Chimneys, Vents and Flues
- Sheet Metal Duct Systems
- Fiberglass and Flexible Duct Systems
- Commercial Airside Systems
- Air Quality Equipment
- Fasteners, Hardware and Wiring Terminations
- Troubleshooting Control Circuit and Motor, Cooling, Heat Pumps, Gas Heating, Oil Heating, Accessories
- Zoning, Ductless and Variable Refrigerant Flow Systems
- Commercial Hydronic Systems
- Steam Systems
- Retail Refrigeration System
- Customer Relations

- Water Treatment
- Indoor Air Quality
- Energy Conservation Equipment
- Building Management Systems
- System Air Balancing
- System Startup and Shutdown
- Construction Drawings and Specifications
- Heating and Cooling System Design
- Commercial/Industrial Refrigeration Systems
- Alternative and Specialized Heating and Cooling Systems
- Fundamentals of Crew Leadership

Course length: 693 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Hydroblasting (2 Levels)

#### **Course Description:**

Using the sheer force of water at pressures between 10,000 and 20,000 psi, or even ultra high-pressure water blasting up to 40,000 psi, a hydroblaster's job is not only risky, but irreplaceable once you receive proper training and experience. Jets of high-pressure water are used to clean tanks, boilers, remove paint, and perform numerous maintenance functions necessary for achieving high-quality operations at various industries.



This course describes the

safety procedures, basic techniques, and theory of hydroblasting, including confined spaces, manlifts, and the use of pumps and waterjet equipment.

#### Course Objectives:

For more information, contact Sheila Blair (contact information below).

Pre-requisite: N/A

Course length: 438 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Industrial Maintenance Mechanic (4 Levels)

#### **Course Description:**

Industrial maintenance mechanics (IM Mechanic) are needed in every industry that uses machinery, from assembly plants to power manufacturers. Not only do mechanics repair and maintain equipment, they also install and dismantle it. Every time a new appliance leaves a factory or a new car rolls off the line, a skilled mechanic played a role in producing it. Wherever there are machines, there will be a need for maintenance craftworkers.



#### Course Objectives:

- Orientation to the Trade
- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valvės
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- Basic Layout
- Introduction to Piping Components
- Copper and Plastic Piping

- Practices
- Introduction to Ferrous Metal Piping Practices
- Identify, Install and Maintain Valves
- Hydrostatic and Pneumatic Testing
- Introduction to Bearings
- Low-Pressure Steam Systems
- High-Pressure Steam Systems and Auxiliaries
- Distillation Towers and Vessels
- Heaters, Furnaces, Heat Exchangers, Cooling Towers and Fin Fans
- Introduction to Tube Work
- Advanced Trade Math
- Precision Measuring Tools
- Installing Bearings

- Installing Couplings
- Setting Baseplates and Prealignment
- Conventional Alignment
- Installing Belt and Chain Drives
- Installing Mechanical Seals
- Preventive and Predictive Maintenance
- Advanced Blueprint Reading
- Compressors and Pneumatic Systems
- Reverse and Laser Alignment
- Introduction to Supervisory Skills
- Troubleshooting and Repairing Pumps
- Troubleshooting and Repairing Gearboxes

Pre-requisite: N/A

Course length: 700 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **Industrial Coating & Lining Application Specialist**

#### **Course Description:**

Industrial coatings applicators specialize in painting industrial structures to prevent deterioration. They may apply protective coatings to steel bridges to fight corrosion, or they may coat interior and exterior facilities and equipment such as storage tanks, plant buildings, lockers, piping, structural steel, and ships. NCCER and NACE



International have joined forces to deliver a comprehensive industrial coating applicator training and certification program.

#### Course Objectives:

- Basic Safety
- Basic Rigging
- Introduction to the Trade
- Surface Preparation
- Industrial Coatings
- Coating Application
- Health and Safety, Debris
  Management, Containment,
  and Ventilation

Pre-requisite: N/A Course length: 308 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Industrial Maintenance Electrical & Instrumentation (4 Levels)

#### **Course Description:**

Industrial maintenance electrical and instrumentation (IM E&I) technicians are needed in every industry that uses machinery, from automotive assembly plants to computer manufacturers. Not only do they repair and maintain electrical instruments and equipment, they also install and dismantle them. Every time a new appliance leaves a factory or a new car rolls off the line, a skilled electrical and instrumentation technician played a role in producing it.



#### Course Objectives:

- Orientation to the Trade
- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- Industrial Safety for E&I Technicians
- Introduction to the National Electrical Code
- Electrical Theory
- Alternating Current
- E&I Test Equipment

- Flow, Pressure, Level, and Temperature
- Process Mathematics
- Hand Bending
- Tubing
- Clean, Purge, and Test Tubing and Piping Systems.
- Instrument Drawing and Documents, Part One
- Conductors and Cables
- Conductor Terminations and Splices
- Hazardous Locations
- Electronic Components
- E&I Drawings
- Motor Controls
- Distribution Equipment
- Transformer Applications
- Conductor Selection and Calculation
- Temporary Grounding
- Layout and Installation of Tubing and Piping Systems

- Machine Bending of Conduit
- Hydraulic Controls
- Pneumatic Controls
- Motor-Operated Valves
- Standby and Emergency Systems
- Basic Process Control Elements, Transducers, and Transmitters
- Instrumentation Calibration and Configuration
- Pneumatic Control Valves, Acuators, and Positioners
- Performing Loop Checks
- Troubleshooting and Commissioning a Loop
- Process Control Loops and Tuning
- Data Networks
- Programmable Logic Controllers
- Distributed Control Systems

Pre-requisite: N/A Course length: 703 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Instrumentation (4 Levels)

#### **Course Description:**

Instrument Fitters and Technicians perform key installation and maintenance functions across several industries. The field of instrumentation covers important processes and knowledge areas, including piping, tubing, fasteners, and metallurgy. Instrumentation Technicians and Fitters are familiar with electrical systems, craft-specific drawings, and are experts in the hand and power tools specific to their trade.



#### Course Objectives:

- Instrumentation Safety Practices
- Hand/Power Tools for Instrumentation
- Craft-related Math
- Instrument Drawings, Documents Pt. One
- Inspect, Handle, and Store Instrumentation Materials
- Electrical Systems for Instrumentation
- Fasteners
- Gaskets, O-Rings, and Packaging
- Lubricants, Sealants, and Cleaners
- Tubing
- Steel Piping Practices

- Hoses
- Temperature, Pressure, Level, Flow
- Instrument Fitter's Math
- Instrument Drawings, Documents Part Two
- Test Equipment
- Panel-mounted Instruments
- Installing Fieldmounted Instruments
- Raceways for Instrumentation
- Clean, Purge, Test Tube, Pipe Systems
- Protective Measures for Instrumentation
- Layout/Install of Tube/Pipe Systems

- Instrument Air Filters, Regulators, Dryers
- Control Valves, Actuators, Positioners
- Detectors, Secondary Elements, Transducers, and Transmitters
- Instrumentation Electrical Circuitry
- Relays and Timers
- Switches and Photoelectric Devices
- Terminating Conductors
- Grounding/Shielding of Instrumentation Wiring
- Process Control

- Theory Controllers
- Instrument Calibration and Configuration
- Proving, Commissioning, and Troubleshooting a Loop
- Tuning Loops
- Digital Logic Circuits
- Programmable Logic Controllers
- Distributed Control Systems
- Analyzers and Monitors

Pre-requisite: N/A

Course length: 686 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## Lockout/Tagout

#### **Course Description:**

The Lockout/Tagout standard establishes the employer's responsibility to protect workers from hazardous

energy. Employers are also required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures:

- Proper lockout/tagout (LOTO) practices and procedures safeguard workers from the release of hazardous energy. The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout) (29 CFR 1910.147) for general industry, outlines specific action and procedures for addressing and controlling hazardous energy during servicing and maintenance of machines and equipment. Employers are also required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures. Workers must be trained in the purpose and function of the energy control program and have the knowledge and skills required for the safe application, usage and removal of the energy control devices.
- All employees who work in an area where energy control procedure(s) are utilized need to be instructed in the purpose and use of the energy control procedure (s), especially prohibition against attempting to restart or reenergize machines or other equipment that are locked or tagged out.
- All employees who are authorized to lockout machines or equipment and perform the service and
  maintenance operations need to be trained in recognition of applicable hazardous energy sources in the
  workplace, the type and magnitude of energy found in the workplace, and the means and methods of
  isolating and/or controlling the energy. And more.

#### **Course Objectives:**

- Explain the contents and implications of 29 CFR 1910.147
- Understand the relationship between machine guarding and Lockout/Tagout
- Perform effective lockout tagout procedures

Pre-requisite: N/A Course length: 8 hours



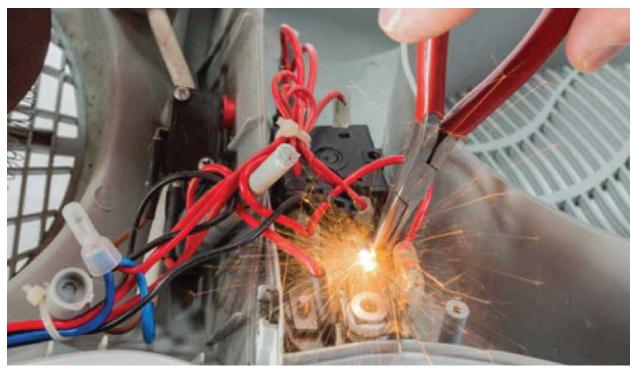


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Managing Electrical Hazards

#### **Course Description:**

This module introduces electrical hazards in the workplace and describes how to avoid electrical hazards and how to analyze and document shock and arc flash hazards; and how to plan and conduct work around



them. Includes examples of how to complete an energized electrical work permit, and how to select the specialized personal protective equipment required for electrical work.

#### Course Objectives:

- Accessing and Eliminating Shock
- Arc Blast
- Arc Flash Hazards
- Practical Safe Working Environments

- Energized Electrical Work Permit
- Safety Procedures
- Personal Protective Equipment

Pre-requisite: N/A

Course length: 12.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Millwright (5 Levels)

#### **Course Description:**

Since its humble beginnings in the construction of wood mills, the Millwright trade has expanded to include work in metal and machinery of everincreasing technology and precision. Millwrights install, align, and troubleshoot machinery in factories, power plants (particularly the precision machinery required in nuclear power plants), and other industrial sites. They install conveyor systems, connect machinery to power supplies and piping, direct hoisting and setting of machines, and adjust the moving and stationary parts of machines to certain specifications. Millwrights must be extremely skilled at



mathematics and interpreting blueprints and specifications to set machines at perfect measurements, sometimes working with clearances no bigger than thousandths of an inch.

#### Course Objectives:

- Orientation
- Millwright Hand Tools
- Fasteners/Anchors
- Basic Layout
- Gaskets and O-Rings
- Oxyfuel Cutting
- Intermediate Math
- Field Sketching
- Intermediate Blueprint Reading
- Specialty Tools
- Power Tools
- Riaaina
- Setting Baseplates and Soleplates
- Lubrication
- Bearings
- Advanced Math

- Precision Measuring Tools
- Installing Packing
- Installing Seals
- Mechanical Seals
- Removing and Installing Bearings
- Couplings
- Fabricating Shims
- Alignment Fixtures and Specialty Jigs
- Pre-alignment for Equipment Installs
- Installing Belt and Chain Drives
- Install Fans/Blowers
- Conveyors
- Troubleshooting and

- Repairing Conveyors
  Conventional
- Alignment
- Pumps
- Troubleshooting and Repairing Pumps
- Compressors and Compressor Maintenance
- Basic Pneumatic Systems
- Troubleshooting and Repairing Pneumatic Equipment
- Basic Hydraulic Systems
- Troubleshooting and Repairing Hydraulic Equipment

- Troubleshooting and Repairing Gearboxes
- Reverse Alignment
- Laser Alignment
- Advanced Blueprint Reading
- Optical Alignment
- Turbines
- Maintaining and Repairing Turbine Components
- Installing Electric Motors
- Preventive and Predictive Maintenance
- Vibration Analysis

Pre-requisite: N/A Course length: 773 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Painting (3 Levels)

#### **Course Description:**

A career in the painting trade can be financially rewarding and provide satisfaction for the skilled craftsperson who takes pride in a job well done. Work on the job, combined with the appropriate formal training, provides numerous career paths for professional growth in this thriving, technical industry.



#### Course Objectives:

- Careers in the Painting Trade
- Safety
- Ladders, Lifts, Scaffolds, and Fall Protection
- Identifying Surface / Substrate Materials and Conditions
- Protecting Adjacent Surfaces
- Basic Surface Preparation
- Sealants and Repair / Fillers
- Introduction to Paints and Coatings
- Brushing and Rolling Paints and Coatings

- Painting Failures and Remedies
- Job Planning and Completion
- Chemical Cleaning and Stripping
- Low-pressure Water Cleaning
- Abrasive Blasting
- Drywall Finishing and Patching
- Stains
- Clear Finishes
- Wood Finishing
- Coatings Two
- Spray Painting

- Painting Failures and Remedies Two
- Job Supervision, Planning, and Control
- Coatings Three
- Color and Tinting
- Decorative (Faux) Finishes
- Wallcovering
- Graphics
- Texturing
- Spraying with Special Devices

Pre-requisite: N/A

Course length: 451 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Pipefitting (4 Levels)

#### **Course Description:**

There are some who may consider pipefitting synonymous with plumbing, but these are really two very distinct trades. Plumbers install and repair the water, waste disposal, drainage and gas systems in homes and commercial and industrial buildings. Pipefitters, on the other hand, install and repair both high- and low-pressure pipe systems used in manufacturing, in the generation of electricity, and in the heating and cooling of buildings.



#### **Course Objectives:**

- Orientation to the Pipefitting Craft
- Pipefitting Hand Tools
- Pipefitting Power Tools
- Oxvfuel Čuttina
- Ladders and Scaffolds
- Motorized Equipment One
- Piping Systems
- Drawings and Detail Sheets
- Identifying and Installing Valves
- Pipefitting Trade Math
- Threaded Pipe Fabrication

- Socket-weld Pipe Fabrication
- Butt-weld Pipe Fabrication
- Excavations
- Underground Pipe Installations
- Introduction to Basic Rigging
- Rigging Practices
- Standards and Specifications
- Advanced Trade Math
- Motorized Equipment Two
- Introduction to Aboveground Pipe Installation
- Field Routing and Vessel Trim
- Pipe Hangars and Supports

- Testing Piping Systems and Equipment
- Advanced Blueprint Reading
- Advanced Pipe Fabrication
- Stress Relieving and Aligning
- In-line Specialties
- Special Piping
- Hot Taps
- Maintaining Valves
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 649 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Plumbing (4 Levels)

#### **Course Description:**

Most people are familiar with plumbers who come to their home to unclog a drain or install an appliance. In addition to these activities, however, plumbers install, maintain, and repair many different types of pipe systems. For example, some systems move water to a municipal water treatment plant and then to residential, commercial, and public buildings. Other systems dispose of waste, provide gas to stoves and furnaces, or supply air conditioning. Pipe systems in power plants carry the steam that powers huge turbines. Pipes also are used in manufacturing plants,



such as wineries, to move material through production processes.

#### Course Objectives:

- Introduction to the Plumbing Profession
- Plumbing Safety
- Tools of the Plumbing Trade
- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe/Fittings
   Plastic Pipe/Fittings
- Copper Tube/Fittings
- Cast-iron Pipe and Fittings
- Steel Pipe/Fittings
- Introduction to Plumbing Fixtures
- Intro to Drain, Waste, Vent (DWV) Systems

- Introduction to Water Distribution Systems
- Plumbing Math Two
- Reading Commercial Drawings
- Structural Penetrations, Insulation, Firestopping
- Install/Test DWV Pipe
- Installing Roof, Floor, and Area Drains
- Installing and Testing Water Supply Piping
- Types of Valves
- Applied Math
- Sizing/Protecting the Water Supply System

- Portable Water
  Supply Treatment
- Types of Venting
   Similar DWV
- Sizing DWV and Storm Systems
- Sewage Pumps and Sump Pumps
- Corrosive-resistant Waste Piping
- Compressed Air
- Service Plumbing
- Business Principles for Plumbers
- Fundamentals of Crew Leadership
- Water Pressure Booster/Recirculation Systems

- Indirect and Special Waste
- Hydronic and Solar Heating Systems
- Codes
- Private Water Supply Well Systems
- Private Wastedisposal Systems
- Swimming Pools and Hot Tubs
- Plumbing for Mobile Homes and Travel Trailer Parks
- Introduction to Medical Gas and Vacuum Systems

Pre-requisite: N/A Course length: 698 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Power Generation I&C Maintenance Technician (4 Levels)

#### **Course Description:**

As a four-level curriculum, *Power Generation I&C Maintenance Technician* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a competitive edge as they grow in their profession.



#### Course Objectives:

- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- SMAW Equipment and Setup
- Industrial Safety for E&I Technicians
- Managing Electrical Hazards

- Introduction to the National Electric Code
- Electrical Theory
- Alternating Current
- E&I Drawings
- E&I Test Equipment
- Conductors and Cables
- Conductor Termination and Splices
- Motor Controls
- Hydraulic Controls
- Pneumatic Controls
- Programmable Logic Controllers
- Instrumentation Electrical Circuitry
- Process Mathematics
- Flow, Pressure, Level and Temperature
- Instrument Drawings and Documents Part One

- Electrical Systems for Instrumentation
- Relays and Timers
- Switches and Photoelectric Devices
- Tubing
- Clean, Purge, and Test Tubing and Piping Systems
- Layout and Installation of Test Tubing and Piping Systems
- Electronic Components
- Panel-Mounted Instruments
- Installing Field-mounted Instruments
- Grounding and Shielding of Instrumentation Wiring
- Analyzers
- Standby and Emergency Systems

- Basic Process Control Elements, Transducers and Transmitters
- Instrument Calibration and Configuration
- Pneumatic Control Valves, Actuators, and Positioners
- Performing Loop Checks
- Troubleshooting and Commissioning a Loop
- Process Control Theory
- Process Control Loops and Tuning
- Data Networks
- Digital Logic Circuits
- Calibrate Supervisory Instrumentation Elements
- Boiler/HRSG Control
- Preventive and Predictive Maintenance
- Distributed Control Systems

Pre-requisite: N/A Course length: 829 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### Power Generation Maintenance Mechanic (4 Levels)

#### **Course Description:**

As a four-level curriculum, *Power Generation Maintenance Mechanic* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a



#### Course Objectives:

- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-Related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication

- SMAW Equipment and Setup
- Basic Layout
- Advanced Trade Math
- Precision Measuring Tools
- Introduction to Bearings
- Installing Bearings
- Installing Couplings
- Installing Mechanical Seals
- Conventional Alignment
- Reverse Alignment
- Laser Alignment
- Installing Belt and

- Chain Drives
- Introduction to Piping Components
- Copper and Plastic Piping Practices
- Introduction to Ferrous Metal Piping Practices
- Identify, Install, and Maintain Valves
- Low-Pressure Steam Systems
- High-Pressure Steam Systems and Auxiliaries
- Heaters, Furnaces, Heat Exchangers, Cooling Towers and

- Fin Fans
- Hydrostatic and Pneumatic Testing
- Installing Fans and Blowers
- Conveyors
- Troubleshooting and Repairing Conveyors
- Basic Hydraulic Systems
- Troubleshooting and Repairing Hydraulic Equipment
- Motor Operated Valves
- Advanced Blueprint Reading

Pre-requisite: N/A

Course length: 828 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Power Generation Maintenance Electrician (4 Levels)

#### **Course Description:**

As a four-level curriculum *Power Generation Maintenance Electrician* provides a basic foundation for skill development in testing, diagnosing, and repairing power generation plant equipment. From reading plant construction drawings, to using test instruments, to hands-on experience in valve installation and shielded metal arc welding, this training is a rich source of knowledge and experience that will give trainees a competitive edge as they grow in their profession.



#### Course Objectives:

- Tools of the Trade
- Fasteners/Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-related Math
- Construction Drawing
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile/Support Equip.
- Lubrication
- SMAW Equip/Setup
- Industrial Safety for E&I Technicians
- Managing Electrical Hazards
- Introduction to The National Electrical

- Code
- Electrical Theory
- Alternating Current
- E&I Drawings
- E&I Test Equipment
- Conductors/Cables
- Conductor Terminations/Splices
- Matan Cantrala
- Motor Controls
- Hydraulic Controls
- Pneumatic Controls
- Programmable Logic Controllers
- Conductor Installs
- Cable Tray
- Grounding/Bonding
- Hand Bending
- Machine Bending of Conduit
- Electric Lighting
- Practical Applications of Lighting

- Hazardous Locations
- Circuit Breakers/ Fuses
- Transformer Applications
- Distribution Equipment
- Power Plant Electrical SystemsConductor Selection
- and CalculationsMotors: Theory and
- Application
- Motor-Operated Valves
- Control Systems and Fundamental Concepts
- Temporary Grounding
- Load Calculations— Branch and Feeder

- Circuits
- Motor Calculations
- Overcurrent Protection
- Specialty Transformers
- Advanced Controls
- Motor Operation and Maintenance
- Generator Maintenance
- Switchgear and Breaker Maintenance
- Preventive/Predictive Maintenance
- Medium Voltage Termination/Splices
- Fire Alarm Systems
- Heat Tracing and Freeze Protection
- Standby and Emergency Systems

Pre-requisite: N/A Course length: 814 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Rigger (3 Levels)

#### **Course Description:**

In 2010, OSHA updated the crane regulations to include additional training and qualifications for riggers. In response, NCCER has restructured and added to its existing curriculum to create a three-level rigger course that meets or exceeds the current requirements found in the OSHA 29 CFR Part 1926 Amendment.



#### Course Objectives:

- Rigging Practices
- Crane Safety and Emergency Procedures
- Basic Principles of Cranes
- Crane Communications
- Intermediate Rigging
- Load Dynamics
- Wire Rope
- Telescopic Boom Attachment Setup and

#### Assembly

- Lattice Boom Assembly and Disassembly
- Advanced Rigging
- Load Charts
- Lift Planning
- Hoisting Personnel

Pre-requisite: N/A Course length: 338 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Roofing

#### **Course Description:**

Roofers build. inspect and repair roofs for buildings using a variety of materials such as shingles, asphalt, wood and aluminum. Roofers may work on residential or commercial buildings. They perform routine inspections and maintenance on a building's



roof and determine the best repair procedures.

#### Course Objectives:

- Introduction to Roofing
- Roofing Safety
- Fall Protection Orientation
- Drawings in Roofing
- Introduction to Steep-Slope Roofing

- Introduction to Low-Slope Roofing
- Substrates, Decks, and Roof Insulation
- Sheet Metal in Roofing
- Rigging Practices

Pre-requisite: N/A

Course length: 181 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Sprinkler Fitting (4 Levels)

#### **Course Description:**

Fire sprinklers are one of the most important methods for protecting life and property. They provide protection 24 hours a day, seven days a week, even when building occupants are asleep or absent from the premises. But sprinkler systems provide adequate protection only if designed and installed properly. Therefore, sprinkler system installation is the primary focus of this training



program. Sprinkler systems are designed and installed based on specific codes and standards from organizations like the National Fire Protection Association (NFPA), with worker safety considerations governed by the Occupational Safety and Health Administration (OSHA).

#### **Course Objectives:**

- Orientation to the Trade
- Introduction to Components and Systems
- Steel Pipe
- CPVC Pipe and Fittings
- Copper Tube Systems
- Underground Pipe
- Hangars, Restraints, Supports, and Guides
- General Purpose Valves

- General Trade Math
- Shop Drawings
- Standard Spray Fire Sprinklers
- Wet Fire Sprinkler Systems
- Dry-pipe Systems
- Deluge/Pre-action systems
- Standpipes
- Water Supplies
- Fire Pumps
- Application-Specific Sprinklers

- and Nozzles
- System Layout
- Inspection, Testing, and Maintenance
- Special Extinguishing Systems
- Introductory Skills for the Foreman
- Procedures and Documentation

Pre-requisite: N/A

Course length: 591 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Welding (4 Levels)

#### **Course Description:**

Welding is a high-tech industry that can take you places all over the world. From ladders to aircraft carriers, from NASCAR to national defense, and from the laboratory to sales and repair, the varied welding industry impacts virtually every industry.

Technology is creating more uses for welding in the workplace. For example, new ways are being developed to bond dissimilar materials and non-metallic materials, such as plastics, composites, and



new alloys. Also, advances in laser beam and electron beam welding, new fluxes, and other new technologies and techniques all point to an increasing need for highly trained and skilled workers.

#### Course Objectives:

- Welding Safety
- Oxyfuel Cutting
- Plasma Arc Cutting
- Air-carbon Arc Cutting and Gouging
- Base Metal Preparations
- Weld Quality
- SMAW-Equipment and Setup
- SMAW Electrodes
- SMAW-Beads and Fillet Welds
- Joint Fit-up and Alignment
- SMAW-Groove Welds With Backing
- SMAW-Open Root Groove Welds-Plates

- Welding Symbols
- Reading Welding Detail Drawings
- Physical Characteristics and Mechanical Properties of Metals
- Preheating and Post heating of Metals
- GMAW and FCAW— Equipment and Filler Metals
- GMAW-Plate
- FCAW-Plate
- GTAW-Equipment and Filler Materials
- GTAW-Plate

- SMAW-Open Root Pipe Welds
- GMAW-Pipe
- FCAW-Pipe
- GTAW-Carbon Steel Pipe
- GTAW-Low Alloy and Stainless Steel Pipe
- SMAW-Stainless Steel Plate and Pipe Groove Welds
- GMAW-Aluminum Plate
- GMAW-Aluminum Pipe
- GTAW-Aluminum Plate
- GTAW-Aluminum Pipe
- Soldering and Brazing

Pre-requisite: N/A Course length: 1,229 hours



# **Human Resources**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Human Resources Certification Exam Prep Course

#### **Course Description:**

Topics covered during this course include: exam-taking and study tips, review of the six topic areas, and a practice exam. Participants will receive study guides, workbook, test prep book, online flash cards, handouts, and access to online textbook and study materials and 50 extra practice exams as part of the course.

The other thing that makes this course unique, is that it is designed around the study needs of the participants. Prior to



our session, participants are asked to provide their top three topics which they would like more information on relative to the test, which ensures that their specific study needs are addressed.

#### **Course Objectives:**

- Business Management Strategy
- Workforce Planning and Employment
- Human Resource Development
- Compensation and Benefits
- Employee and Labor Relations
- Risk Management
- Studying Tips
- Soldering and Brazing

Pre-requisite: N/A

Course length: 32 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## SHRM-CP HR Certification Exam Prep Course

#### **Course Description:**

Topics covered during this course include: exam taking and study tips, review SHRM's three Behavioral Competencies Clusters and the 15 HR expertise knowledge domain areas along with daily practice exams. Participants will receive a study guide, workbook, test prep book, online flash cards and handouts.

The other thing that makes this course unique, is that it is designed around the study needs of the participants.



#### **Course Objectives:**

- HR Strategic Planning
- Talent Acquisition & Employee Engagement & Retention
- Learning & Development
- Total Rewards
- Structure of the HR Function
- Organizational Effectiveness & Development
- Workforce Management
- Employee and Labor Relations
- Technology Management
- HR in the Global Context
- Diversity & Inclusion
- Risk Management
- Corporate Social Responsibility

- US Employment Law & Regulations
- Leadership Cluster
- Interpersonal Cluster
- Business Cluster
- Study Tips

Pre-requisite: N/A

Course length: 32 hours



# Information Technology









- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## CompTIA A+

#### **Course Description:**

The CompTIA A+ Core Series requires candidates to pass two exams: Core 1 (220-1001) and Core 2 (220-1002) covering the following content:

- Demonstrate baseline security skills for IT support professionals
- Configure device operating systems, including Windows, Mac, Linux, Chrome OS, Android and iOS and administer clientbased as well as cloud -based (SaaS) software
- Troubleshoot and problem solve core service and support challenges while applying best practices for documentation, change management, and scripting
- Support basic IT infrastructure and networking
- Configure and support PC, mobile and IoT device hardware
- Implement basic data backup and recovery methods and apply data storage and management best practices

#### Course Objectives:

- Hardware
- Networking
- Mobile Devices
- Operating Systems
- Hardware and Network Troubleshooting
- Security
- Virtualization and Cloud
- Computing
- Software Troubleshooting
- Operational Procedures

Pre-requisite: N/A Course length: TBD





- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### CompTIA CASP+

#### **Course Description:**

The CASP+ certification validates advanced-level competency in risk management, enterprise security operations and architecture, research and collaboration, and integration of enterprise security. The CASP+ exam covers the following:

Enterprise security domain expanded to include operations and architecture concepts, techniques and requirements

More emphasis on analyzing risk through interpreting trend data and anticipating cyberdefense needs to meet business goals

Expanding security control topics to include mobile and small-form factor devices, as well as software vulnerability



Broader coverage of integrating cloud and virtualization technologies into a secure enterprise architecture Inclusion of implementing cryptographic techniques, such as blockchain, cryptocurrency and mobile device encryption

CASP+ is compliant with ISO 17024 standards and approved by the US DoD to meet directive 8140/8570.01-M requirements. Regulators and government rely on ANSI accreditation, because it provides confidence and trust in the outputs of an accredited program. Over 2.3 million CompTIA ISO/ANSI-accredited exams have been delivered since January 1, 2011.

#### **Course Objectives:**

- Risk Management
- Technical Integration of Enterprise Security
- Enterprise Security Architecture

- Research, Development and Collaboration
- Enterprise Security Operations

Pre-requisite: N/A Course length: TBD



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

### CompTIA Cloud+

#### **Course Description:**

CompTIA Cloud+ is a global certification that validates the skills needed to deploy and automate secure cloud environments that support the high availability of business systems and data.

CompTIA Cloud+ is the only performance-based IT certification that views cloud-based infrastructure services in the context of broader IT systems operations regardless of the platform. Migrating to the cloud presents opportunities to deploy, optimize, and protect mission critical applications and data storage. CompTIA Cloud+ validates the technical skills needed to secure these valuable assets.

The reality of operating multi-cloud environments poses new challenges. CompTIA Cloud+ is ideal for cloud engineers who need to have expertise across multiple products and systems.



CompTIA Cloud+ is the only cloud focused certification approved for DoD 8570.01-M, offering an infrastructure option for individuals who need to certify in IAM Level I, CSSP Analyst and CSSP Infrastructure Support roles.

CompTIA Cloud+ now features flexible training options including self-paced learning, live online training, custom training and labs to advance the career development of IT professionals in server administration.

The new CompTIA Cloud+ CV0-003 is now available. CompTIA Cloud+ CV0-002 (English language version) will retire late December 2021.

#### Course Objectives:

- Cloud Architecture and Design
- Operations and Support
- Cloud Security

- Troubleshooting
- Cloud Deployment

Pre-requisite: N/A Course length: TBD



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## CompTIA Cloud Essentials+

#### **Course Description:**

CompTIA Cloud Essentials+ is the only internationally recognized, vendor-neutral certification utilizing key business principles and fundamental cloud concepts that validate data-driven cloud recommendations. It stands alone in this field by demonstrating that all necessary staff members – not just the IT specialists – understand how to increase efficiency, manage costs, and reduce security risks for organizations whenever tasked with making current cloud technology decisions.

#### About the exam:

Business analysts and IT pros alike are consistently called upon to assist their organization in determining which cloud service provider(s) to use, what to migrate to the cloud, and when to



implement. Collecting and analyzing cloud products and services information is essential when making operational cloud business decisions. The financial and operational impacts covered by Cloud Essentials+ ensure an ability to develop and implement solid cloud strategies. CompTIA Cloud Essentials+ will show that successful candidates:

- Have the knowledge and understanding of the foundational business and technical components included in a cloud assessment
- Understand specific security concerns and measures
- Comprehend new technology concepts, solutions, and benefits to an organization

#### Course Objectives:

- Cloud Concepts
- Management and Technical Operations
- Business Principles of Cloud Environments
- Governance, Risk, Compliance and Security

Pre-requisite: N/A Course length: TBD



- □ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

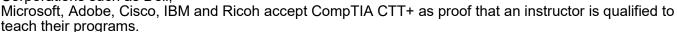
# CompTIA CTT+

#### **Course Description:**

Earning the CTT+ certification designates you as an exceptional trainer in your field. As an instructor, you not only have to plan engaging classroom lectures, practice tasks and exams, but you must also be a knowledgeable and effective communicator. CTT+ certification provides comprehensive training standards to validate your skills in a traditionál or virtual classroom environment. and ensures that you can teach effectively and step up to the front of the class with confidence

CTT+ is trusted by leading organizations:

Corporations such as Dell,





CompTIA ČTT+ validates that you have the necessary skills and knowledge to prepare, present, facilitate and evaluate a training session. By requiring a video submission of the training session instruction as part of the certification, CTT+ ensures candidates have effective teaching skills.

CTT+ verifies essential teaching modalities:

In a survey conducted by the Training Associates, 87% of respondents use instructor led training (ILT) as a primary learning modality. Moreover, 74% of organizations take a blended approach to learning, augmenting ILT delivery with either a mobile, video, or social component. Earning a CTT+ certification can validate your skills as a top trainer in a virtual or physical classroom.



Pre-requisite: N/A Course length: TBD



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# CompTIA CySA+

### **Course Description:**

As attackers have learned to evade traditional signature-based solutions, such as firewalls and anti-virus software, an analytics-based approach within the IT security industry is increasingly important for organizations. CompTIA CySA+ applies behavioral analytics to networks to improve the overall state of security through identifying and combating malware and advanced persistent threats (APTs), resulting in an enhanced threat visibility across a broad attack surface. It will validate an IT professional's ability to proactively defend and continuously improve the security of an organization. CySA+ will verify the successful candidate has the knowledge and skills required to:



- Leverage intelligence and threat detection techniques
- Analyze and interpret data
- Identify and address vulnerabilities
- Suggest preventative measures
- Effectively respond to and recover from incidents

CompTIA CySA+ meets the ISO 17024 standard and is approved by U.S. Department of Defense to fulfill Directive 8570.01-M requirements. It is compliant with government regulations under the Federal Information Security Management Act (FISMA). Regulators and government rely on ANSI accreditation because it provides confidence and trust in the outputs of an accredited program. Over 2.3 million CompTIA ISO/ANSI-accredited exams have been delivered since January 1, 2011.

## **Course Objectives:**

- Threat and Vulnerability Management
- Security Operations and Monitoring
- Software and Systems Security

- Incident Response
- Compliance and Assessment

Pre-requisite: N/A Course length: TBD

For more information about this and other certificate and non-certificate courses, please contact



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# CompTIA ITF+

# **Course Description:**

The CompTIA IT Fundamentals exam focuses on the essential IT skills and knowledge needed to perform tasks commonly performed by advanced endusers and entry-level IT professionals alike, including:

Using features and functions of common operating systems and establishing network connectivity

Identifying common software applications and their purpose



Using security and web browsing best practices

This exam is intended for candidates who are advanced end users and/or are considering a career in IT. The exam is also a good fit for individuals interested in pursuing professional-level certifications, such as A+.

#### Course Objectives:

- IT Concepts and Terminology
- Infrastructure

- Applications and Software
- Software Development
- Database Fundamentals
- Security

Pre-requisite: N/A

Course length: TBD



- □ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# CompTIA Linux+

#### **Course Description:**

The new CompTIA Linux+ is for the IT pro who will use Linux to manage everything from cars and smartphones to servers and supercomputers, as a vast number of enterprises use Linux in cloud, cybersecurity, mobile and web administration applications.

In the new CompTIA Linux+, candidates are only required to pass one exam for certification. However, the new certification is no longer eligible for the LPI 2-for-1 offer.

CompTIA Linux+ is the only job-focused Linux

certification covering the latest foundational skills demanded by hiring managers.

Unlike other certifications, the new exam includes performance-based and multiple-choice questions to identify the employees who can do the job.

The exam covers tasks associated with all major distributions of Linux, setting the foundation for advanced vendor/distro-specific knowledge.

CompTIA Linux+ covers common tasks in major distributions of Linux, including the Linux command line, basic maintenance, installing and configuring workstations, and networking.



#### **Course Objectives:**

- Hardware & System Configuration
- Linux Troubleshooting & Diagnostic
- System Operation & Maintenance

- Automation & Scripting
- Security

Pre-requisite: N/A

Course length: TBD



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# CompTIA Network+

# **Course Description:**

Network+ ensures an IT professional has the knowledge and skills to:

- Design and implement functional networks
- Configure, manage, and maintain essential network devices
- Use devices such as switches and routers to segment network traffic and create resilient networks
- Identify benefits and drawbacks of existing network configurations
- Implement network security, standards, and protocols
- Troubleshoot network problems
- Support the creation of virtualized networks

CompTIA Network+ N10-008 will be available September 2021. More details coming soon!



#### **Course Objectives:**

- Networking Concepts
- Network Security
- Infrastructure

- Network Troubleshooting and Tools
- Network Operations

Pre-requisite: N/A

Course length: TBD



- □ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor.
- ☐ Successful completion earns certificate of completion
- Prepares student for an exam that leads to certification

# CompTIA PenTest+

### Course Description:

CompTIA PenTest+ is the only penetration testing exam taken at a Pearson VUE testing center with both hands-on, performancebased questions and multiple-choice, to ensure each candidate possesses the skills. knowledge, and ability to perform tasks on systems. PenTest+ exam also includes management skills used to plan, scope, and manage weaknesses, not just exploit them.

PenTest+ is unique because our certification requires a candidate to demonstrate the hands-on ability and knowledge to test devices in new environments such as the cloud and mobile, in addition to traditional desktops and servers.

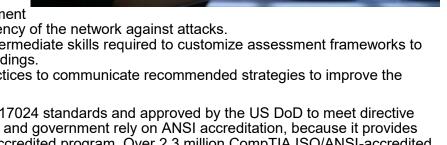
#### About the exam:

- The new PenTest+ (PT0-002) exam will launch October, 2021.
- CompTIA PenTest+ assesses the most up -to-date penetration testing, and vulnerability assessment and management

skills necessary to determine the resiliency of the network against attacks.

- Successful candidates will have the intermediate skills required to customize assessment frameworks to effectively collaborate on and report findings.
- Candidates will also have the best practices to communicate recommended strategies to improve the overall state of IT security.

CompTIA PenTest+ is compliant with ISO 17024 standards and approved by the US DoD to meet directive 8140/8570.01-M requirements. Regulators and government rely on ANSI accreditation, because it provides confidence and trust in the outputs of an accredited program. Over 2.3 million CompTIA ISO/ANSI-accredited exams have been delivered since January 1, 2011.



## Course Objectives:

- Planning and Scoping
- Penetration Testing Tools
- Information Gathering and Vulnerability

#### Identification

- Reporting and Communication
- Attacks and Exploits

Pre-requisite: N/A Course length: TBD





- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

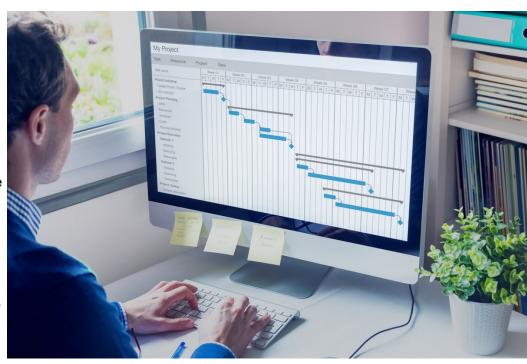
# CompTIA Project+

### **Course Description:**

CompTIA Project+ is ideal for professionals who need to manage smaller, less complex projects as part of their other job duties but still have foundational project management skills. Project+ is more versatile than other certifications because it covers essential project management concepts beyond the scope of just one methodology or framework.

#### About the exam:

The CompTIA Project+ examination is designed for business professionals who coordinate or manage smallto-medium-sized projects. The successful candidate will have the knowledge and skills required to:



- Manage the project life cycle
- Ensure appropriate communication
- Manage resources and stakeholders
- Maintain project documentation

#### Course Objectives:

- Project Basics
- Project Constraints

- Communication and Change Management
- Project Tools and Documentation

Pre-requisite: N/A

Course length: TBD



- ☐ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- Prepares student for an exam that leads to certification

# CompTIA Security+

#### Course Description:

CompTIA Security+ is the first security certification a candidate should earn. It establishes the core knowledge required of any cybersecurity role and provides a springboard to intermediate-level cybersecurity jobs. Security+ incorporates best practices in hands-on troubleshooting, ensuring candidates have practical security problem-solving skills required to:

- Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions
- Monitor and secure hybrid environments, including cloud, mobile, and IoT
- Operate with an awareness of applicable laws and policies. including principles of governance, risk, and compliance

respond to security events and incidents



### Course Objectives:

- Attacks, Threats and Vulnerabilities
- Operations and Incident Response
- Architecture and Design

- Governance, Risk and Compliance
- Implementation

Pre-requisite: N/A Course length: TBD





- □ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# CompTIA Server+

### **Course Description:**

CompTIA Server+ is a global certification that validates the hands-on skills of IT professionals who install, manage and troubleshoot servers in data centers as well as on-premise and hybrid environments.

CompTIA Server+ is the only certification that can ensure that IT professionals at the administrator level are able to do the job in any environment because it is the only certification not restricted to a single platform. The exam covers essential hardware and software technologies of onpremise and hybrid server environments including high availability, cloud computing and scripting. The new exam includes performance-based questions that require the candidate to demonstrate multi-step knowledge to



securely deploy, administer and troubleshoot servers.

CompTIA Server+ now features flexible training options including self-paced learning, live online training, custom training and labs to advance the career development of IT professionals in server administration.

The new CompTIA Server+ SK0-005 is now available. CompTIA Server+ SK0-004 (English language version) will retire late December 2021.

### Course Objectives:

- Server Hardware Installation and Management
- Server Administration

- Security and Disaster Recovery
- Troubleshooting

Pre-requisite: N/A Course length: TBD



# Manufacturing Skills









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# **Certified Production Technician (CPT)**

#### **Course Description:**

This program covers fundamental skills used in the manufacturing industry, including safety, quality,

production processes, maintenance awareness, and CAD drafting. Students who complete this program will have the skills needed to work in manufacturing and production. At the end of each course, students will have the opportunity to earn a stackable Manufacturing Skills Standards Council (MSSC) credential, certifying their knowledge.

Upon successful completion of all four MSSC assessments, students receive full Certified Production Technician (CPT) 4.0 certification.



Course includes the following modules: Industrial Safety, OSHA 10, Blueprint Reading and Precision Measurement, Fabrication and Machining, Basic Electricity and Fluid Systems, and Introduction to CAD.

### Course Objectives:

- Recognize and act on safety concerns
- Read and understand blueprints
- Understand basics of CAD design
- Understand and be able run basic electrical and fluid infrastructure
- Apply fabrication and machining techniques
- Understand OSHA safety regulations
- Recognize quality practices and quality measurement
- Understand basic machine maintenance

Pre-requisite: N/A Course length: 140 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **CNC Lathe**

# **Course Description:**

This course introduces students to basic CNC lathe operation. Concepts to be covered include pendant operation, theory, basic g and m coding, work holding and tool setup and offsets.

Successful passing of a NIMS test is available.



# Course Objectives:

- Perform start-up procedures and maintenance
- Demonstrate tasks related to set up and operation
- Utilize CNC control/operator panel buttons and switches
- MDI programmable machine functions
- Exhibit knowledge of CNC models of operation
- Exhibit CNC safe operating procedures
- Demonstrate speed and feed relationships and manipulation
- Operations used to manufacture piece parts
- Understand tool offset concepts (lengths,

diameters and wear(

- · Perform work offsets
- Understand the use and modification of cutter compensation
- Perform program editing procedures
- Understand expectations of operator edits (PGM and COMP values)
- Recognize basic program structure from an operator's viewpoint
- Perform program verification

Pre-requisite: N/A

Course length: 40 hours



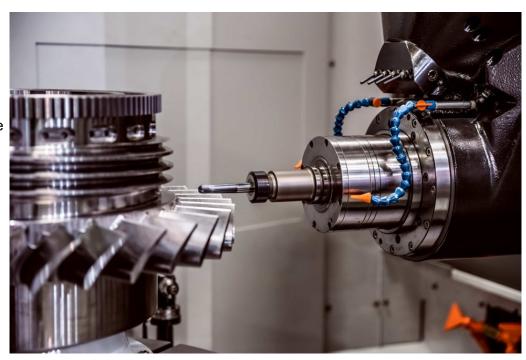
- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# **CNC Mill**

# **Course Description:**

In this course, students will learn to set up and operate CNC mills, write CNC programs, identify and select tooling and perform precision measurements. Topics include safety and preventive maintenance, the eight basic functions of a CNC machine control, and high-speed machining processes.

If NIMS certification is required, an exam is required.



### **Course Objectives:**

- Explain safety requirements
- Describe the different types of tooling required for CNC mills
- Select tooling required for a specific jobs
- Write and manually input program data
- Execute programs for CNC mill according to project specifications
- Read job orders and process sheets to determine tooling and setup information

- Perform tapping operation
- Perform million operation (pocketing, contour profile, helical)
- Perform tool axis operations (drilling, boring, reaming)
- Perform external and internal thread milling
- Perform canned cycles
- Switch coordinate plains (x-z, y-z)

Pre-requisite: N/A

Course length: 40 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Fundamentals of Crew Leadership

# **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has



demonstrated leadership qualities. To become an effective leader, it helps if a trainee has natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.

## Course Objectives:

- Basic leadership skills
- Leadership Styles
- Communication
- Delegating

- Problem Solving
- Jobsite Safety
- Project Planning
- Scheduling

Estimating

Pre-requisite: N/A

Course length: 22.5 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Instrumentation (4 Levels)

### **Course Description:**

Instrument Fitters and Technicians perform key installation and maintenance functions across several industries. The field of instrumentation covers important processes and knowledge areas, including piping, tubing, fasteners, and metallurgy. Instrumentation Technicians and Fitters are familiar with electrical systems, craft-specific drawings, and are experts in the hand and power tools specific to their trade.



## Course Objectives:

- Instrumentation Safety Practices
- Hand/Power Tools for Instrumentation
- Craft-related Math
- Instrument Drawings, Documents Pt. One
- Inspect, Handle, and Store Instrumentation Materials
- Electrical Systems for Instrumentation
- Fasteners
- Gaskets, O-Rings, and Packaging
- Lubricants, Sealants, and Cleaners
- Tubing
- Steel Piping Practices

- Hoses
- Temperature, Pressure, Level, Flow
- Instrument Fitter's Math
- Instrument Drawings, Documents Part Two
- Test Equipment
- Panel-mounted Instruments
- Installing Fieldmounted Instruments
- Raceways for Instrumentation
- Clean, Purge, Test Tube, Pipe Systems
- Protective Measures for Instrumentation
- Layout/Install of Tube/Pipe Systems

- Instrument Air Filters, Regulators, Dryers
- Control Valves, Actuators, Positioners
- Detectors, Secondary Elements, Transducers, and Transmitters
- Instrumentation Electrical Circuitry
- Relays and Timers
- Switches and Photoelectric Devices
- Terminating Conductors
- Grounding/Shielding of Instrumentation Wiring
- Process Control

- Theory Controllers
- Instrument Calibration and Configuration
- Proving, Commissioning, and Troubleshooting a Loop
- Tuning Loops
- Digital Logic Circuits
- Programmable Logic Controllers
- Distributed Control Systems
- Analyzers and Monitors

Pre-requisite: N/A

Course length: 686 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# NIMS CAM Milling

# **Course Description:**

To keep pace with industry's changing needs, NIMS has developed a Smart Standards methodology to properly train employees in a world where technology emerges and changes faster than an average individual can master in their career span. Its customizable format is aligned with manufacturers and based on specific job roles within an occupation that are easily stackable into a masterful career.



Smart Standards enable

communities to define their specific job roles from a collection of industry-recognized Job Duties. These Duties are translated into hands-on performance that aligns to the needs of the stakeholder community.

#### **Course Objectives:**

- Understand design intent from detailed drawings
- Create a process plan for machining parts
- Create 3D CAD files from 2D drawings
- Create CNC toolpaths
- Export supporting

documentation and g code

Pre-requisite: N/A Course length: 40 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# NIMS CAM Turning

# **Course Description:**

To keep pace with industry's changing needs, NIMS has developed a Smart Standards methodology to properly train employees in a world where technology emerges and changes faster than an average individual can master in their career span. Its customizable format is aligned with manufacturers and based on specific job roles within an occupation that are



easily stackable into a masterful career.

Smart Standards enable communities to define their specific job roles from a collection of industry-recognized Job Duties. These Duties are translated into hands-on performance that aligns to the needs of the stakeholder community.

# Course Objectives:

- Develop process plans to program parts requiring turning
- Create and edit 2D model sketches
- Generate 2D turning toolpath to geometric (solid)

#### models

- Creating turning machine operator documentation
- Export supporting documentation and g code

Pre-requisite: N/A

Course length: 40 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# PLC & Robotic Technician

### **Course Description:**

This certification course includes 14 separate modules which build on each other to provide participants with the knowledge and skills need to earn their certification. These modules include:

- Manufacturing Safety OSHA 10
- Shop Math
- Blueprint Reading
- Basic Electrical
- AC, DC Motors and Motor Control
- Robotics Operations
- Robotics Mechanical
- Robotics Electrical
- Rigging for Robot Mechanical Teardown
- Fluid Power
- Digital Electronics
- Electronic Sensors
- Welding Processes
- PLC and Communication Devices



#### Course Objectives:

- Use software to writing programming instructions; execute program to operate electromechanical circuits
- Employ local, remote I/O and network communications
- Read and interpret relay logic prints
- Employ hands-on welding skills with experience with MIG, TIG, Stick, Plasma and Oxy-Fuel equipment
- Identify types of sensors on a schematic diagram or electrical print
- Be able to identify logic input values from a sensor to a PLC input
- Explain binary logic encoding and decoding

- Adjust switches and controls on hydraulic/ pneumatic system
- Maintain filtration and vacuum systems on pneumatic system
- Diagnose robot mechanical problems to the component level
- Set up and/or software limits, issues relating to new software limit setting program
- Perform robot calibration and test for proper master
- Understand interpolation operation of robot

Pre-requisite: N/A Course length: 496 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Sheet Metal (4 Levels)

# **Course Description:**

Sheet metal workers mainly work in heating, ventilation, air conditioning, and refrigeration (HVACR), but there are many other opportunities. Sheet metal craftsmen might help build airplanes, automobiles, or even billboards. They might install hoods and vents for restaurants or build grain silos for farmers.



# Course Objectives:

- Occupational Overview: The Sheet Metal Industry
- Sheet Metal Tools and Equipment
- Plasma Arc Cutting
- Sheet Metal Math and Measurements
- Sheet Metal Layout and Processes
- Parallel Line Development
- Installation of Ductwork
- Installation of Air Distribution Accessories
- Field Measurements, Calculations, and Fittings

- Construction and Sheet Metal Drawings
- Radial Line Development
- Triangulation
- Sheet Metal Duct Fabrication Standards
- Bend Allowances
- Soldering
- Air Distribution Systems
- Commercial Airside Systems
- Principles of Airflow
- Using Construction Drawings in Sheet Metal
- Sheet Metal Job Specifications
- Air Testing and Balancing

- Blanket Insulation for Ducts
- Board Insulation for Ducts
- Fume and Exhaust System Design
- Welding and Brazing
- Oxyfuel Cutting
- Architectural Sheet Metal
- Shop Production and Organization
- Sheet Metal Business and Technology
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 631 hours



# Maritime Skills









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Fundamentals of Crew Leadership

# **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has demonstrated leadership qualities. To become an effective leader, it helps if a trainee has natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.



# Course Objectives:

- Basic leadership skills
- Leadership Styles
- Communication
- Delegating

- Problem Solving
- Jobsite Safety
- Project Planning
- Scheduling

Estimating

Pre-requisite: N/A

Course length: 22.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Hydroblasting (2 Levels)

# **Course Description:**

Using the sheer force of water at pressures between 10,000 and 20,000 psi, or even ultra high-pressure water blasting up to 40,000 psi, a hydroblaster's job is not only risky, but irreplaceable once you receive proper training and experience. Jets of high-pressure water are used to clean tanks, boilers, remove paint, and perform numerous maintenance functions necessary for achieving high-quality operations at various industries.



This course describes

the safety procedures, basic techniques, and theory of hydroblasting, including confined spaces, manlifts, and the use of pumps and waterjet equipment.

### **Course Objectives:**

For more information, contact Sheila Blair (contact information below).

Pre-requisite: N/A

Course length: 438 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Aluminum Welding

### **Course Description:**

One of the places to find a prosperous career as a welder is in the maritime industry. Shipyards and ship repair facilities are plentiful in coastal areas and on major rivers and lake systems. Maritime welding can be done on land or sea and above or underneath the surface of the water. It includes the work on ships, boats, and offshore oil rigs. It



includes the installation and repair of metal structures and components. This curriculum presents the special processes involved in welding aluminum, which is becoming more prevalent in the shipbuilding industry. This curriculum was developed in partnership with the National Maritime Education Council (NMEC).

## Course Objectives:

- Welding Safety
- Plasma Arc Cutting
- Base Metal Preparation
- Weld Quality
- Joint Fit-up and Alignment
- Welding Symbols
- Reading Welding Detail Drawings
- Physical Characteristics and Mechanical

- Properties of Metal
- Preheating and Post heating of Metals
- GMAW & FCAW Equipment and Filler Metals
- GTAW Equipment and Filler Metals
- GMAW Aluminum Plate
- GTAW Aluminum Plate
- GTAW Aluminum Pipe
- GMAW Aluminum Pipe

Pre-requisite: N/A Course length: 348 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Electrical (4 Levels)

# **Course Description:**

The demand for electricity, which powers almost every aspect of human life, has led to vast job opportunities in the electrical field. Electricians constitute one of the largest construction occupations in the world. The shipbuilding industry also requires electricians to install, maintain, and repair shipboard electrical systems. This curriculum was developed in



# Course Objectives:

- Orientation to the Electrical Trade
- Electrical Safety
- Electrical Theory
- Introduction to Électrical Circuits
- Basic Electrical Construction Drawings
- Electrical Test Equipment
- Raceways & Fittings
- Device Boxes
- Alternating Current
- Grounding and Bonding

- Conductors and Cables
- Conductor Installations
- Conductor Termination and Splices
- Pull and Junction Boxes
- Circuit Breakers and Fuses
- Electric Lighting
- Rigging Practices
- Distribution Equipment
- Motors: Theory and Application
- Motor Controls
- Transformers

- Specialty Transformers
- Hazardous Locations
- Control Systems and Fundamental Concepts
- Advanced Controls
- Basic Electronic Theory
- Fire Alarm Systems
- Standby and Emergency Systems
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 458 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Fundamentals

# **Course Description:**

Two hundred fifty thousand jobs. That's not just a number needed to fill the jobs created by workers leaving the building and plant construction industry. It's a number created by men and women leaving jobs in shipbuilding, shipyards,



ship repair facilities, and offshore rigs - the Maritime industry. This industry - our industry - is facing a skilled workforce crisis due to an aging workforce and dwindling pool of workers from which to draw.

# Course Objectives:

Introduction to the Maritime Industry

Pre-requisite: N/A

Course length: 100 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Pipefitting (2 Levels)

### **Course Description:**

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Orientation to the Maritime Pipefitting Trade, Maritime Pipefitting Trade Math, Pipefitting Hand Tools, Pipefitting Power Tools, Oxyfuel Cutting, and Ladders and Scaffolds.



# Course Objectives:

- Orientation to the Maritime Pipefitting Trade
- Maritime Pipefitting Trade Math
- Pipefitting Hand Tools
- Pipefitting Power Tools
- Oxyfuel Cutting
- Ladders and Scaffolds
- Piping Systems

- Butt Weld Pipe Fabrications
- Socket Weld Pipe Fabrications
- Brazing
- Threaded Pipe Fabrication
- Fiberglass and Plastic Pipe
- Identifying Valves, Flanges, and Gaskets
- Drawings and Detail Sheets

Pre-requisite: N/A Course length: 333 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Structural Fitting (3 Levels)

# **Course Description:**

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Kev content includes: Welding Safety, Oxyfuel Cutting, Base Metal Preparation, Weld Quality, Shielded Metal Arc Electrodes, Tack Welding, Fire



Watch, Introduction to Structural Fitter Drawings, and Fitting One.

### Course Objectives:

- Welding Safety
- Oxyfuel Cutting
- Base Metal Preparation
- Weld Quality
- Shielded Metal Arc Welding—Electrodes
- Tack Welding
- Fire Watch
- Introduction to Structural Fitter Drawings
- Fitting One
- Cutting and Burning Processes

- Plasma Arc Cutting
- Intermediate Structural Print Reading
- Fitting Two
- Advanced Structural Print Reading
- Fitting Three
- GMAW and FCAW—Equipment and Filler Metals
- GMAW and FCAW—Plate
- Physical Characteristics and Mechanical Properties of Metals
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 706 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Maritime Welding (3 Levels)

### **Course Description:**

One of the places to find a prosperous career as a welder is in the maritime industry. Shipyards and ship repair facilities are plentiful in coastal areas and on major rivers and lake systems. Maritime welding can be done on land or sea and above or underneath the surface of the water. It includes the work on ships, boats, and off-shore oil rigs. It includes the installation and repair of metal structures and components.

This curriculum was developed in partnership with the National

Maritime Education Council (NMEC).



#### **Course Objectives:**

- Welding Safety
- Oxyfuel Cutting
- Plasma Arc Cutting
- Air Carbon Arc Cutting and Gouging
- Base Metal Preparation
- Weld Quality
- SMAW Equipment and Setup
- SMAW Electrodes
- SMAW Beads and Fillet Welds
- Joint Fit-up and Alignment
- Welding Symbols
- Reading Welding Detail

- Drawings
- SMAW Groove Welds with Backing
- SMAW Open-root Groove Welds
- GMAW & FCAW Equipment and Filler Metals
- GMAW Plate
- FCAW Plate
- GTAW Equipment and Filler Metals
- GTAW Plate
- Physical Characteristics and

- Mechanical Properties of Metal
- Preheating and Post heating of Metals
- SMAW Open-root Pipe Welds
- GMAW Pipe
- FCAW Pipe
- GTAW Carbon Steel Pipe
- GTAW Low Alloy and Stainless Steel Pipe
- SMAW Stainless Steel Plate and Pipe Groove Welds

Pre-requisite: N/A

Course length: 1,083 hours



# **Medical and Dental**









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Clinical Medical Assisting**

### **Course Description:**

Medical Assistants are responsible for a variety of medical office tasks from administrative to technical and specific duties and must have quality human relations skills. Some of the job duties include cleaning and dressing



wounds, taking blood samples, administering medications, taking vitals, preparing a patient EKGs, obtaining a patient's history, and assisting physicians during examinations. Our program provides traditional and online teaching for a blended learning experience. Clinicals are performed during the program to ensure that the students has proper techniques and will be ready to pass the National Certification. Upon completion of the program, you will sit for your Clinical Certified Medical Assistant (CCMA) national certification exams through NHA.

### Course Fee Includes:

- National certification
- Six practice exams
- Online study guide materials
- Books

- Resume assistance
- Other associated fees

Pre-requisite: N/A

Course length: 96 hours

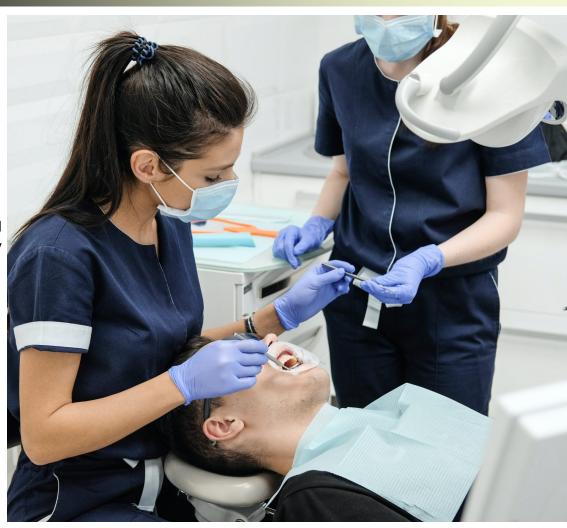


- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Dental Assisting**

# **Course Description:**

Dental Assisting is one of the most highdemand careers. This program is designed to teach all aspects of dental assisting and provide you the skills you need to work in this field and pass a national certification exam. This program is taught by a Dentist and includes an opportunity for internships. We now offer an option for lab days.



# **Course Fee Includes:**

- All books
- Exam preparation materials
- Exam fees for DANB RHS certification exam
- Other associated fees

Pre-requisite: N/A

Course length: 20 hours

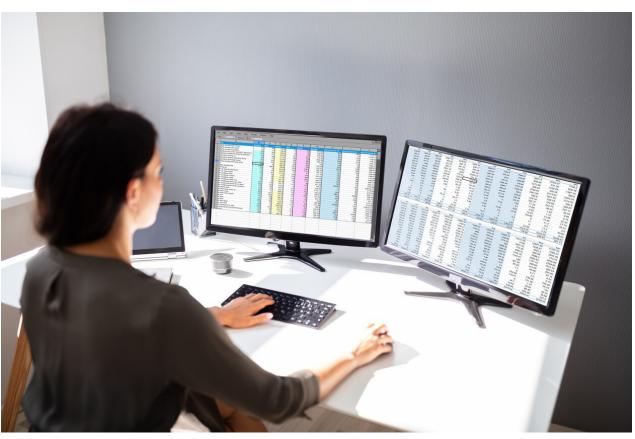


- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Medical Coding**

# **Course Description:**

This program is designed to teach all aspects of medical coding and provide you the skills needed to become nationally certified and get into the job market as a Certified Coder. This certificate program is taught by a Certified



Medical Coder and includes medical terminology, anatomy and physiology. Basic computer skills are required. Course is 48 hours plus a 3-week review before the exam.

# Course Fee Includes:

- Three practice CPC Tests
- All books

- AAPC Membership
- Other associated fees

Pre-requisite: N/A

Course length: 48 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Medical Office Specialist with Medical Billing

# **Course Description:**

This course provides practical realworld skills essential for success in the healthcare field. This allinclusive course consists of medical terminology, medical front office skills, electronic medical records for the medical office. and medical billing. In addition, upon completion of



all courses, you will sit for your Certified Medical Administrative Assistant (CMAA) Certification exam through the National Healthcare Association.

# Course Fee Includes:

- National certification
- Other associated fees

All books

Pre-requisite: N/A Course length: 32 hours

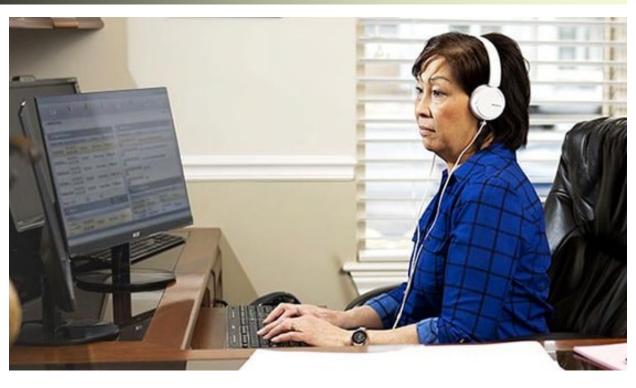


- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Medical Transcription**

# **Course Description:**

Medical transcription is a desired field for most people trying to work at home. Strong typing, computer and English grammar skills are essential. Covered in this course is medical terminology, formats, rules and regulations,



jobs, calculation of pay, confidentiality, and tricks of the trade

This is a State Certified program and you will receive a Certificate of Completion and Letter of Recommendation upon graduation.

# Course Fee Includes:

- State certification
- All course materials
- Equipment
- Reference books
- Course books

Pre-requisite: N/A

Course length: your pace



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Pharmacy Technician

### **Course Description:**

Work one on one with a Pharmacy Technician Trainer and entirely online. Pharmacy Technician is one of the fastest growing jobs in health care today. In this course, you will learn everything from the role of the technician in the pharmacy setting, to the basic sciences at the core of pharmacy practice, to preparing for the PTCB exam. You will learn complete drug information that includes proper name, spelling and



pronunciation, drug class, generic and trade name, route of administration, dosage and more of hundreds of drugs. You will be able to identify pills on sight with pill photos, gain a better understanding of how certain drugs work within the body with a concise review of relevant anatomy and physiology, and stay up to date with cutting-edge pharmacy practice with the latest information on new drugs, regulations, HIPAA guidelines and safety procedures. You will be ready to pass your PTCB national certification.

# Course Fee Includes:

- National certification
- All course materials
- Exam fees
- · Other associated fees

Pre-requisite: N/A

Course length: your pace



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Phlebotomy

# **Course Description:**

This course is all-inclusive and in-depth.
You will be able to:

- Perform basic phlebotomy procedures
- Evaluate patients for ability to withstand venipuncture procedure
- Explain the venipuncture procedure and answer patient questions
- Perform basic point of care testing, such as blood glucose levels on patients
- Prepare blood, urine and other body fluid specimens for testing, according to established standards



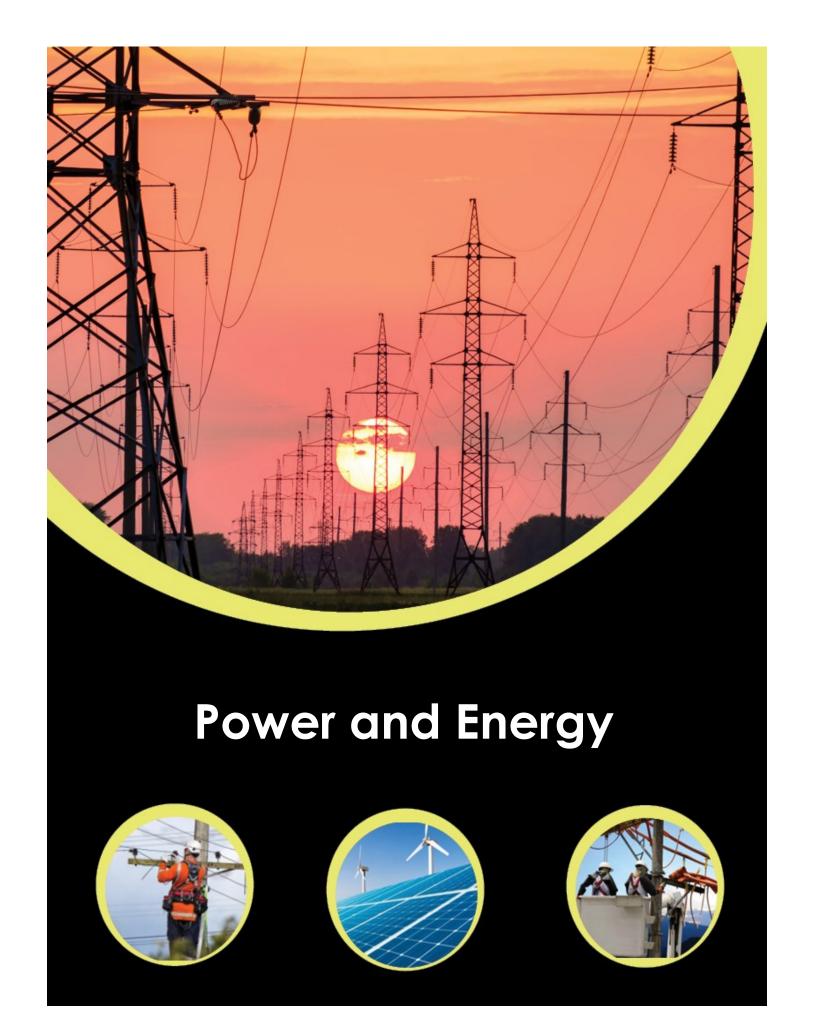
# Course Fee Includes:

- National certification
- All course materials
- Resume development
- Exam fees

- Job assistance
- Other associated fees

Pre-requisite: N/A

Course length: 50 hours





- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Alternative Energy**

#### **Course Description:**

NCCER's Alternative Energy curriculum covers the production and distribution of electricity generated from biomass, biofuel, nuclear, wind, and solar energy sources. In addition to containing the latest information about these generation methods, every module includes interesting and thought -provoking activities about the function and future of alternative energy. Alternative Energy is endorsed by the Florida Energy



Workforce Consortium (FEWC), and this title supports the Florida Department of Education's Curriculum Frameworks for Energy Technicians, Power Distribution Technicians, and Energy Generation Technicians. In addition, Alternative Energy also supports Tier 3 and Tier 4 of the Energy Competency Model as outlined by the Center for Energy Workforce Development (CEWD) and the Employment and Training Administration (ETA).

# Course Objectives:

- Introduction to Alternative Energy
- Biomass and Biofuels
- Nuclear Power

- Solar Power
- Wind Power

Pre-requisite: N/A

Course length: 133 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Introduction to the Power Industry

#### **Course Description:**

Introduction to the Power Industry sets the stage for those entering the electrical energy production and distribution field. It describes the many ways in which electricity can be produced, from burning fossil fuels such as coal and natural gas, to harnessing nuclear energy, and using renewable energy sources such as wind, geothermal, and solar energy. This fullcolor module explains energy and distribution



and transmission and briefly explores the economics involved in energy production and delivery. Finally, the environmental impacts of producing and distributing electrical power, as well as the methods that are employed to mitigate those impacts are addressed.

#### **Course Objectives:**

- Electricity Production
- Fossil Fuel
- Coal
- Natural Gas

- Harnessing Nuclear Energy
- Renewable Energy
- Wind Energy
- Geothermal Energy
- Solar Energy

Pre-requisite: N/A Course length: 13 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Power Line Worker

#### **Course Description:**

Common to Transmission, Distribution, and Substation training programs, Power Line Worker Level One addresses the fundamental aspects of power line work to include safety, electrical theory, climbing techniques, aerial framing and rigging, and operating utility service equipment.



# Course Objectives:

- Power Line Worker Safety
- Introduction to Electrical Circuits
- Introduction to Electrical Theory
- Climbing Wooden Poles
- Climbing Structures Other Than Wood
- Tools of the Trade

- Aerial Framing and Associated Hardware
- Utility Service Equipment
- Rigging
- Setting and Pulling Poles
- Trenching, Excavating, and Boring Equipment
- Introduction to Electrical Test Equipment

Pre-requisite: N/A

Course length: 410 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Power Line Worker: Distribution (3 Levels)

#### **Course Description:**

To address the need for one standardized and nationally recognized Power Line Worker curriculum. NCCER has developed Power Line Worker Level One. Common to transmission. distribution, and substation. Power Line Worker Level One addresses the fundamental aspects of power line work to include safety, electrical theory, climbing techniques, aerial framing and rigging, and operating utility service equipment. After Level One, the training program diverges into the three specialty areas (transmission, distribution, and substation) for two additional years of skills training.



#### **Course Objectives:**

- Power Line Worker Safety
- Introduction to Electrical Circuits
- Introduction to Electrical Theory
- Climbing Wooden Poles
- Climbing Structures Other Than Wood
- Tools of the Trade
- Aerial Framing and Associated Hardware
- Utility Service Equipment
- Rigging
- Setting and Pulling Poles
- Trenching, Excavating, and Boring Equipment
- Introduction to Electrical Test Equipment
- Alternating Current and Three-Phase Systems

- Aerial Distribution Equipment
- Cable and Conductor Installation and Removal
- Underground Residential Distribution (URD) Systems
- Overhead and URD Service Installations
- Distribution Line Maintenance
- Introduction to Substations
- Live-line Work
- Three-Phase URD Systems
- System Protection and Monitoring
- Troubleshooting
- Introduction to Smart Grids
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 713 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Power Line Worker: Mechanic

### **Course Description:**

This curriculum will ground the trainee in the basic knowledge and principles of carpentry, masonry, concrete finishing, electrical work, HVAC, and plumbing. He or she will become skilled in different phases of a project from start to finish. Once completing this course, the trainee will be able to interpret construction drawings; perform quality concrete and brickwork; frame walls, ceilings, and floors of a structure; and install the proper wiring and piping for electrical, and plumbing systems.



# **Course Objectives:**

- Introduction to Masonry
- Masonry Unit and Installation Techniques
- Floor Systems
- · Ceiling Joist and Roof Framing
- Roofing Applications
- Wall Systems
- Exterior Finishing
- Basic Stair Layout
- Electrical Safety
- Residential Electrical Services

- Introduction to HVAC
- Introduction to Drain, Waste and Vent (DWV) System

Course length: 425 hours

- Plastic Pipe Fittings
- Copper Pipe Fittings
- Cabinetmaking
- Cabinet Installation
- Introduction to Construction Equipment

Pre-requisite: N/A



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Power Line Worker: Substations (2 Levels)

#### **Course Description:**

This exceptionally produced trainee guide features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Introduction to Substations, Managing Electrical Hazards, Alternating Current and Three-Phase Systems,



Conductors and Cables, Cable Tray, Conduit Bending, Conductor Installations, Conductor Terminations and Splicing, Grounding Systems, Grades, Concrete Work, Mechanical Construction Methods and Materials, and Intermediate Rigging.

#### **Course Objectives:**

- Introduction to Substations
- Managing Electrical Hazards
- Alternating Current and Three-Phase Systems
- Conductors and Cables
- Cable Tray
- Conduit Bending
- Conductor Installations
- Conductor Terminations and Splicing
- Grounding Systems
- Grades
- Concrete Work

- · Mechanical Construction Methods and Materials
- Intermediate Rigging
- Temporary Grounding
- Advanced Drawing Reading
- Medium and High Voltage Equipment Installation
- Control House
- Connectors, Conductor Terminations, and Splicing
- Equipment Testing and Maintenance
- System Protection and Control
- Fundamentals of Crew Leadership

Pre-requisite: N/A Course length: 348 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- Prepares student for an exam that leads to certification

# Power Line Worker: Transmission (2 Levels)

# **Course Description:**

This exceptionally

features a highly illustrated design, technical hints and tips from industry experts, review questions and a whole lot more! Key content includes: Alternating Current and Three-Phase Systems, Transmission Structure Rigging, Transmission Structure Erection, Transmission Equipment Installation. and Transmission System Maintenance.



# Course Objectives:

- Alternating Current and Three-phase Systems
- Transmission Structure Rigging
- Transmission Structure Erection
- Transmission Equipment Installation
- **Transmission System Maintenance**
- Construction, Maintenance, and Repair-Liveline Barehand
- **Reconductoring Transmission Lines**
- Construction, Maintenance, and Repair-Hot Stick
- Lift Planning

Pre-requisite: N/A Course length: 375 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Solar Photovoltaic Systems

# **Course Description:**

The solar power industry is a rapidly growing field that is expected to help ease human dependence on the use of fossil fuels. Solar panels are now rated to produce up to 600 volts of electricity, and the cost of purchasing and installing these panels for residential purposes has been reduced considerably. Because of this, the need for solar photovoltaic installers has increased and is projected to grow with the demand for solar installations.



# Course Objectives:

- Introduction to Solar Photovoltaics
- Site Assessment
- System Design

- System Installation and Inspection
- Maintenance and Troubleshooting

Pre-requisite: N/A

Course length: 218 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Wind Energy (2 Levels)

#### **Course Description:**

While harnessing the wind to power machinery and transportation is nothing new, the interest in developing this and other renewable technologies to reduce our dependence on fossil fuels has never been more fervent. The wind industry's impact is not limited to energy production, however. As the construction and ongoing maintenance of turbines and wind farms increases, so do the employment possibilities and the need for educated and well-trained technicians. This program is the first in a series of curriculum supporting a three-year training program based



upon the American Wind Energy Association (AWEA) Core Skill Set for Wind Turbine Service Technicians, as well as the Department of Labor's apprenticeship standards for wind turbine technicians. Topics covered in this curriculum include Introduction to Wind Energy, Wind Turbine Safety, and Climbing Wind Towers.

### Course Objectives:

- Introduction to Wind Energy
- Introduction to Wind Turbine Safety
- Climbing Wind Towers
- Introduction to Electrical Circuits
- Electrical Theory
- Electrical Test Équipment
- Electrical Wiring
- Alternating Current and Three-Phase Systems
- Circuit Breakers and Fuses
- Switching Devices
- Wind Turbine Power Distribution Systems
- Fasteners and Torquing
- Introduction to Bearings
- Lubrication
- Introduction to Hydraulic Systems

Pre-requisite: N/A Course length: 308 hours



# **Project Management**









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to PMP certification

# Certified Associate in Project Management (CAPM) Exam Prep

### **Course Description:**

Individuals who do not have project experience but are interested in project management can benefit from this certification because it demonstrates their professional knowledge. Individuals who contribute specialized skills to a project team can benefit from this certification as well by allowing them to align their work with that of project managers. This knowledge can be applied to on-the-job experiences that help develop growing levels of competence in the practice of



project management. Individuals who carry the CAPM designation after their name enjoy a high level of credibility from PMP certification holders, project managers, employers and peers.

### **Course Objectives:**

- Introduction to Project Management
- Project Environment
- Role of the Project Manager
- Project Integration Management
- Project Scope Management
- Project Schedule Management
- Project Cost Management

- Project Quality Management
- Project Resource Management
- Project Communication Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to PMP certification

# Project Management Professional (PMP) Certification Exam Prep

# **Course Description:**

This intensive exam preparation course provides participants with the knowledge and guidance needed to pass the current Project Management Institute's (PMI's) Project Management Professional (PMP) examination.

Always up to date with the framework of knowledge outlined by PMI's PMBOK Guide, this course includes hands-on learning activities, the exam "textbook" and a full-scale sample examination. The instructor, a certified PMP and PMI member, will share test-taping tips and study strategies in



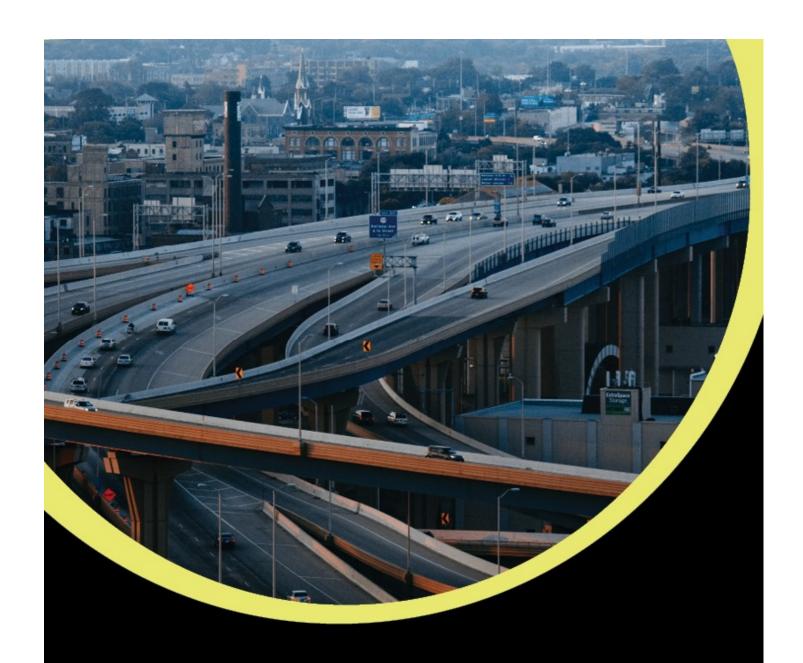
addition to covering material essential to passing the exam. Note: This course meets the pre-exam training requirement.

# **Course Objectives:**

- Apply PMI-recognized tools, techniques and methods to the five process groups
- Comprehend and appreciate PMI methodologies and definitions
- Demonstrate project management skills as a professional level
- Appreciate and manage the triple constraints with respect to project performance
- Exhibit the essential skills necessary for

- project managers
- Evaluate the importance of effective management for the project life cycle
- Demonstrate the core project management competencies
- Be comfortable with the examination format and typical question styles
- Understand application and audit steps and prepare for exam day

Pre-requisite: N/A Course length: 35 hours



# Road and Bridge Construction









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Applied Construction Math**

#### **Course Description:**

Just seeing the word "math" strikes fear and frustration in the heart and mind of most students. **Teachers** also understand that a math lesson gets the same reception of any other dreaded chore: "eat



your brussels sprouts, take out the garbage, and learn your MATH". Students and teachers must see the relevance in learning before they will invest the time and commitment needed to master the subject.

# **Course Objectives:**

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Introduction to Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Material Handling

Pre-requisite: N/A Course length: 73 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Concrete Construction (2 Levels)

#### **Course Description:**

Filled with technical hints and tips from industry experts and review questions, this two-level curriculum covers a range of specific content such as the characteristics of concrete, using concrete as a building material and the process of curing concrete.

Note: Concrete Construction was previously titled Concrete Finishing.



#### Course Objectives:

- Introduction to Concrete Construction
- Concrete Safety
- Fall Protection Orientation
- Concrete Tools and Equipment
- Preparing for Placement
- Reinforcing Concrete
- Foundation and Slabs-0n-Grade
- Vertical Formwork
- Horizontal Formwork
- Site Concrete
- Finishing Concrete

- Curing and Protecting Concrete
- Properties of Concrete
- Estimating Concrete Quantities
- Tilt-Up Wall Systems
- Architectural Finishes
- Industrial Floors
- Superflat Floors
- Surface Treatments
- Troubleshooting and Quality Control
- Concrete Repair

Pre-requisite: N/A Course length: 416 hours



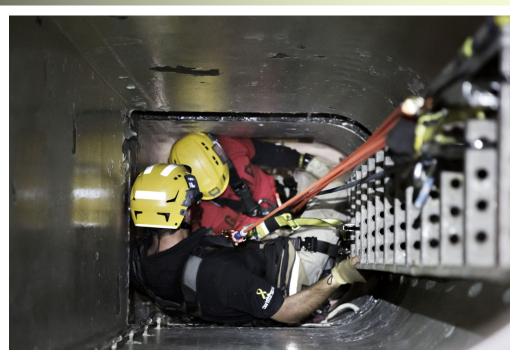
- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (OSHA card)
- ☐ Prepares student for an exam that leads to certification

# **Confined Space**

### **Course Description:**

This course will cover:

- Confined space definitions and hazards
- Assessment process and identification of spaces
- Entry requirements for nonpermit confined spaces
- Entry requirements for permit-required confined spaces
- Alternate entry procedures
- Confined space personnel duties and responsibilities
- Precautions and preplanning before entry
- Rescue plan/provisions
- Proper safety equipment for confined space entry
- Hot work and the use of chemicals in a confined space
- Contractor-performed work



# Course Objectives:

- Understand confined space definitions
- Understand the differences between confined space types
- Recognize hazardous air quality in confined spaces, and other hazards
- Understand when an entry permit is required
- Understand alternative entry techniques
- Understand the duties of confined space duties and responsibilities
- Plan for entry and taking precautions
- Recognize when a rescuer is required

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Construction Workforce Development Professional

# **Course Description:**

Now more than ever, the construction industry needs qualified construction workforce development professionals to manage the growing need for a skilled workforce.

NCCER's new Construction Workforce Development Professional assessment evaluates and validates the knowledge and skills of your organization's workforce development professionals.

The Construction Workforce
Development Professional training
and certification program is the first of
its kind in the construction industry.
Raise the standard and make sure
your workforce development
professionals are trained today.



# **Course Objectives:**

For more information on this training, please contact Sheila Blair (see contact information below).

Pre-requisite: N/A Course length: TBD



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Fall Protection**

# **Course Description:**

Workers are exposed to many potentially lifethreatening hazards on job sites, and death by falling is one of the greatest risks. Proper training of every craft professional, coupled with enforcement of safety regulations and standards, is the most effective way to reduce this risk and protect the lives and well-being of the construction workforce.



# Course Objectives:

- Fundamental Safety
- Hazard Recognition
- Introduction to OSHA
- Causes of Falls
- Costs of Falls
- Consequences of Falls

- Proper Use of Fall Protection Equipment
- Stairs
- Ladders
- Scaffolds
- Aerial Lifts

Pre-requisite: N/A

Course length: 8 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Field Safety**

# **Course Description:**

To help prevent accidents, a safety program must be in place. This curriculum will provide you with the rules and safeguards you need to work safely on any job site. Safety must be incorporated into all phases of the job and involve all employees at every level, including management. Field Safety covers topics such as Hazard Communication, Fall Protection, and Forklift Safety.



### Course Objectives:

- Introduction to Safety
- Confined Spaces and Excavations
- Work-zone Safety
- Electrical Safety
- Working from Elevations

- Steel Erection
- Heavy Equipment, Forklift, and Crane Safety
- Concrete and Masonry
- Introduction to Materials Handling

Pre-requisite: N/A

Course length: 45 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Fundamentals of Crew Leadership

# **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has demonstrated leadership qualities. To become an effective leader, it helps if a trainee has



natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.

# Course Objectives:

- Basic leadership skills
- Leadership Styles
- Communication

- Delegating
- Problem Solving
- Jobsite Safety

- Project Planning
- Scheduling
- Estimating

Pre-requisite: N/A

Course length: 22.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Heavy Equipment Operations (3 Levels)

#### **Course Description:**

Heavy equipment operators (HEO) not only work on regular construction building jobs, but also on infrastructure projects (roads, bridges, and ports, otherwise called non-building construction), and in mining and timber operations. A trained and experienced equipment operator provides necessary skills for any project that requires moving and transporting heavy materials, or that demands any kind of earthmoving.

NCCER offers a three-level curriculum which will guide the trainee through modules covering each major piece of



heavy equipment, as well as topics such as Civil Blueprint Reading, Soils, and Paving.

# Course Objectives:

- Orientation to the Trade
- Heavy Equipment Safety
- Identification of Heavy Equipment
- Basic Operational Techniques
- Utility Tractors
- Introduction to Earthmoving
- Grades
- Vertical-Mast Sit-Down

- Counterbalance Forklifts
- Rough Terrain Forklifts
- On-Road Dump Trucks
- Excavation Math
- Interpreting Civil Drawings
- Site Work
- Soils
- Skid Steers
- Leaders

- Scrapers
- Finishing and Grading
- Compaction Equipment
- Backhoes
- Off-Road Dump Trucks
- Dozers
- Excavators
- Motor Graders

Pre-requisite: N/A

Course length: 555 hours

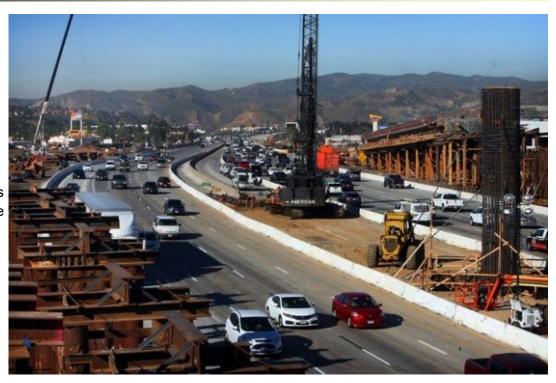


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Heavy Highway Construction (2 Levels)

# **Course Description:**

Heavy Highway
Construction
professionals build the
infrastructure, working on
roads, bridges and ports,
otherwise called nonbuilding construction. A
trained heavy highway
construction worker needs
math skills and knowledge
of heavy equipment
operations, safety,
earthmoving, hand tools
and traffic regulations.



### Course Objectives:

- Orientation to the Trade
- Identification of Equipment Used in Heavy Highway Construction
- Heavy Highway Construction Safety
- Work-Zone Safety
- Soils
- Site Work
- Excavation Math

- Interpreting Civil Drawings
- Rigging Practices
- Crane Safety and Emergency Procedures
- Basic Principles of Cranes
- Crane Communications
- Introduction to Earthmoving
- Finishing and Grading
- Trenching and Excavating
- Plant Operations

- Paving
- Horizontal Formwork
- Vertical Formwork
- Reinforcing Concrete
- Working with Concrete
- Trade Drawings One
- Structural Ironworking One
- Bridge Construction
- Bridge Foundations
- Bridge Formwork

Pre-requisite: N/A

Course length: 438 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Hydroblasting (2 Levels)

# **Course Description:**

Using the sheer force of water at pressures between 10,000 and 20,000 psi, or even ultra high-pressure water blasting up to 40,000 psi, a hydroblaster's job is not only risky, but irreplaceable once you receive proper training and experience. Jets of high-pressure water are used to clean tanks, boilers, remove paint, and perform numerous maintenance functions necessary for achieving high-quality operations at various industries.



This course describes the

safety procedures, basic techniques, and theory of hydroblasting, including confined spaces, manlifts, and the use of pumps and waterjet equipment.

# Course Objectives:

For more information, contact Sheila Blair (contact information below).

Pre-requisite: N/A

Course length: 438 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Industrial Maintenance Electrical & Instrumentation (4 Levels)

### **Course Description:**

Industrial maintenance electrical and instrumentation (IM E&I) technicians are needed in every industry that uses machinery, from automotive assembly plants to computer manufacturers. Not only do they repair and maintain electrical instruments and equipment, they also install and dismantle them. Every time a new appliance leaves a factory or a new car rolls off the line, a skilled electrical and instrumentation technician played a role in



### **Course Objectives:**

- Orientation to the Trade
- Tools of the Trade
- Fasteners and Anchors
- Oxyfuel Cutting
- Gaskets and Packing
- Craft-related Mathematics
- Construction Drawings
- Pumps and Drivers
- Valves
- Introduction to Test Instruments
- Material Handling and Hand Rigging
- Mobile and Support Equipment
- Lubrication
- Industrial Safety for E&I Technicians
- Introduction to the National Electrical Code
- Electrical Theory
- Alternating Current
- E&I Test Equipment

- Flow, Pressure, Level, and Temperature
- Process Mathematics
- Hand Bending
- Tubing
- Clean, Purge, and Test Tubing and Piping Systems.
- Instrument Drawing and Documents, Part One
- Conductors and Cables
- Conductor Terminations and Splices
- Hazardous Locations
- Electronic Components
- E&I Drawings
- Motor Controls
- Distribution Equipment
- Transformer Applications
- Conductor Selection and Calculation
- Temporary Grounding
- Layout and Installation of Tubing and Piping Systems

- Machine Bending of Conduit
- Hydraulic Controls
- Pneumatic Controls
- Motor-Operated Valves
- Standby and Emergency Systems
- Basic Process Control Elements, Transducers, and Transmitters
- Instrumentation Calibration and Configuration
- Pneumatic Control Valves, Acuators, and Positioners
- Performing Loop Checks
- Troubleshooting and Commissioning a Loop
- Process Control Loops and Tuning
- Data Networks
- Programmable Logic Controllers
- Distributed Control Systems

Pre-requisite: N/A Course length: 703 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Ironworking (3 Levels)

#### **Course Description:**

This curriculum provides a basic foundation in ironworking safety, tools, welding, cranes, rigging, forklifts, and survey equipment are included, as well as trade drawings, steel joists, and structural steel. It also includes updated technology and practices, helping trainees be safer and more effective on the job site. The trainee will also learn how to apply practical applications of mathematical principles on the job site.



This training is a rich source of knowledge and experience that will give each trainee a competitive edge as he or she grows in this profession.

#### Course Objectives:

- Introduction to the Trade
- Trade Safety
- Tools and Equipment of the Trade
- Fastening
- Mobile Construction Cranes
- Rigging Equipment and Practices
- Trade Drawings
- Structural Ironworking
- Plumbing, Aligning and Guying
- Oxyfuel Cutting
- Introduction to Arc Welding

- Bar Joists and Girders
- Metal Decking
- Field Fabrication
- Trade Math
- Weld Quality
- Position Arc Welding
- Forklifts
- Intermediate Rigging
- Steel Joists and Joist Girders
- Tower Cranes
- Survey Equipment Use and Care
- Applied Trade Math

- Flux Core for Ironworking
- Stud Welding
- Advanced Rigging
- Precast/Tilt-Up Erection
- Special Application Hoisting Devices
- Pre-Engineered Systems
- Miscellaneous/Ornamental Ironworking
- Grating and Checkered Plate
- Air Carbon Arc Cutting and Gouging
- Demolition

Pre-requisite: N/A Course length: 548 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Mobile Crane Operations (3 Levels)

### **Course Description:**

The mobile crane may be the most powerful piece of equipment in the construction industry. With maximum mast heights of over 400 feet and lift capacities of hundreds of thousands of pounds, mobile cranes are essential in building and maintaining bridges, highways, buildings, pipelines and towers. Mobile crane operation requires physical coordination, stamina, focus and concentration.



# **Course Objectives:**

- Orientation to the Trade
- Basic Principles of Cranes
- Rigging Practices
- Crane Communications
- Crane Safety and Emergency Procedures
- Operating a Crane
- Computer Aids / Operator Aids
- Machine Power Flow

- Wire Rope
- Mobile Crane Maintenance and Inspections
- Load Dynamics
- Transporting Requirements
- On-site Equipment Movement
- Load Charts
- Lift Planning
- Telescopic Boom Attachment

- Setup and Assembly
- Lattice Boom Assembly and Disassembly
- Hoisting Personnel
- Advanced Operational Techniques

Pre-requisite: N/A

Course length: 458 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Pipelayer

# **Course Description:**

NCCER's Pipelayer curriculum covers all of the knowledge required for a Pipelayer to achieve success in their trade. In addition to addressing both the rigging, delivery and cutting of pipe, the Pipelayer books concentrate on other learning objectives important to the craft, including materials, elevation, site and trench safety, foundation stabilization, testing and maintenance.



# Course Objectives:

- Job Site Safety
- Tools and Equipment
- Rigging and Delivering Pipe and Associated Structures
- Cutting Pipe
- Gaskets, Joints, and Fittings
- Introduction to Elevations
- Trench Safety

- Foundation, Stabilization, Bedding, and Dewatering
- Testing Pipe

Pre-requisite: N/A

Course length: 185 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# **Project Supervision**

# **Course Description:**

Field supervisors play a major role in every construction company and every construction project. They are the frontline managers on the job, directly supervising workers and other field supervisors. They are both the engine and the anchor of the construction team, driving it toward effectiveness and efficiency, and stabilizing it with consistency and good judgment. To fill this role, field supervisors need more



than experience in the field. They also need management skills in problem solving, planning, estimating, safety supervision, scheduling, controlling costs and resources, and, perhaps most important, managing people.

#### Course Objectives:

- Orientation to the Job
- Human Relations and Problem Solving
- Safety
- Quality Control

- Contract and Construction Documents
- Document Control and Estimating
- Planning and Scheduling
- Resource Control and Cost Awareness

Pre-requisite: N/A

Course length: 85 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Reinforcing Ironwork (2 Levels)

# **Course Description:**

Concrete is arguably our most important construction material. Properly installed and reinforced, it can safely serve as the supporting structures for large buildings, bridges, dams, and roads. This curriculum teaches the basics of reinforcing materials, along with various tasks related to placing reinforcing materials.



# **Course Objectives:**

- Concrete Reinforcement
- Concrete Reinforcement Safety
- Rigging Equipment
- Rigging Practices
- Commercial Blueprints
- Oxyfuel Cutting

- Foundations and Flatwork
- Concrete Forms
- Handling and Placing Concrete
- Manufactured Forms
- Metal Decking
- Introductory Skills for the Crew Leader

Pre-requisite: N/A Course length: 309 hours

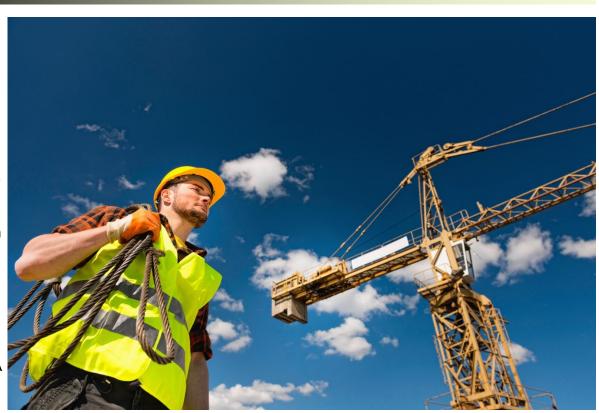


- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Rigger (3 Levels)

# **Course Description:**

In 2010, OSHA updated the crane regulations to include additional training and qualifications for riggers. In response, NCCER has restructured and added to its existing curriculum to create a threelevel rigger course that meets or exceeds the current requirements found in the OSHA 29 CFR Part 1926 Amendment.



# Course Objectives:

- Rigging Practices
- Crane Safety and Emergency Procedures
- Basic Principles of Cranes
- Crane Communications
- Intermediate Rigging
- Load Dynamics
- Wire Rope

- Telescopic Boom Attachment Setup and Assembly
- Lattice Boom Assembly and Disassembly
  - Advanced Rigging
- Load Charts
- Lift Planning
- Hoisting Personnel

Pre-requisite: N/A

Course length: 338 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

Course length: 50 hours

# Signal Person

# **Course Description:**

In 2010, OSHA updated the crane regulations to include additional training and qualifications for signal persons. In response, NCCER has enhanced its existing curriculum to create a signal course that meets or exceeds the



current requirements found in the OSHA 29 CFR Part 1926.1400 Amendment.

# Course Objectives:

- Crane Communications
- Basic Principles of Cranes
- Crane Safety and Emergency Procedures

Pre-requisite: N/A



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

# AWS D1.1 Structural Steel Welding Code

#### **Course Description:**

This is an 8 hour practical welding test only covering AWS D1.1, Structural Steel Welding Code; there is no classroom time. The first hour will be dedicated to instruction in safety and review of the applicable Welding Procedure Specification (WPS) governing the test.

#### Students will:

- Have a chance to familiarize themselves with the machine and the settings.
- Be asked to properly set up a plate with the correct root opening (with/without backing) and place it in the proper position.
- Apply a hot pass to be inspected by a test supervisor - and applying additional passes as needed to fill the joint to the weld plate.
- First possess the skills necessary to produce a sound weld that is visually acceptable and meets the testing requirements.
- Demonstrate acceptable welding techniques by following a set of written instructions contained in the Welding Procedure Specification (WPS) to produce the weld specimen for testing.

#### Our instructor will:

- Ensure that you have applied a sound root weld before asking you to move forward.
- Give a final visual inspection of the plate to see if the test piece is acceptable for the destructive testing portion of the AWS Welding Certification.
- Guide you through the preparation process of the pieces and assembly, and periodically check your progress to ensure conformity to the Code and Standards of the AWS Certified Welder Test.

The testing procedure requires you to make a weld under supervision that is then tested by an inspector, to ensure the weld conforms to a particular Code, Standard, or written Welding Procedure Specification. Testing methods include Visual Inspection, and may involve either Destructive or Non-Destructive Testing.







- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

# Sustainable Construction Supervisor

# **Course Description:**

This module was developed to instruct construction supervisors on sustainable management techniques, especially as they relate to construction-phase LEED points targeted for their projects. A collaborative effort of the Green Building Certification Institute (GBCI), the Myers-Lawson School of Construction at Virginia Tech, the University of Florida, and Subject Matter Experts from the

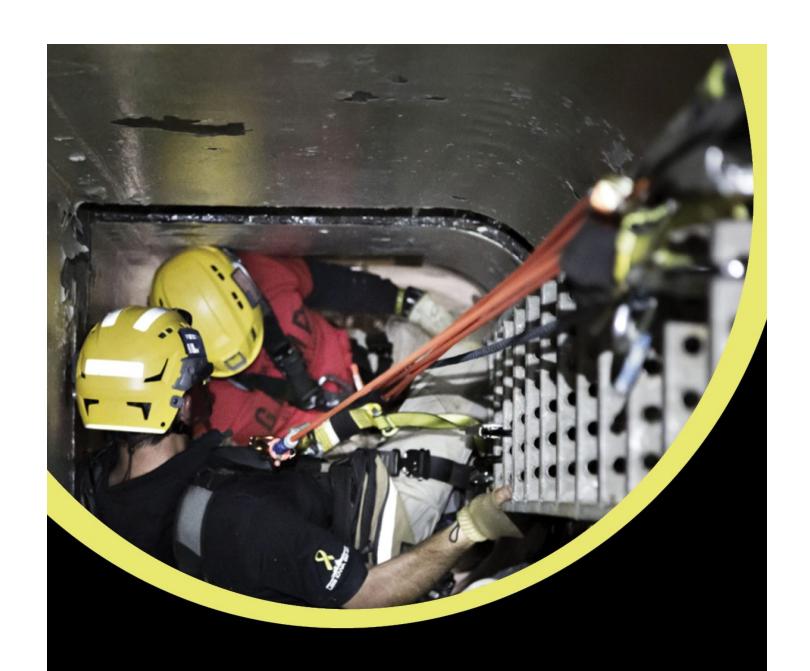


Top 100 Green Contractors in the United States, this module covers a topic not addressed until now—sustainable construction management for front-line supervisors. This module has been endorsed by GBCI and approved by the US Green Building Council for 20 GBCI general and LEED-specific Continuing Education (CE) Hours for LEED Professionals. Topics covered in Sustainable Construction Supervisor include Project Sustainability, Green Building Materials, and Green Building Methods.

#### **Course Objectives:**

- Project Sustainability Goals
- Green Building Materials and Technologies
- Green Building Methods and Processes

Pre-requisite: N/A Course length: 15 hours



# Safety Skills









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (OSHA card)
- ☐ Prepares student for an exam that leads to certification

# **Confined Space**

### **Course Description:**

This course will cover:

- Confined space definitions and hazards
- Assessment process and identification of spaces
- Entry requirements for non-permit confined spaces
- Entry requirements for permit-required confined spaces
- Alternate entry procedures
- Confined space personnel duties and responsibilities
- Precautions and preplanning before entry
- Rescue plan/provisions
- Proper safety equipment for confined space entry
- Hot work and the use of chemicals in a confined space
- Contractor-performed work



### Course Objectives:

- Understand confined space definitions
- Understand the differences between confined space types
- Recognize hazardous air quality in confined spaces, and other hazards
- Understand when an entry permit is required
- Understand alternative entry techniques
- Understand the duties of confined space duties and responsibilities
- Plan for entry and taking precautions
- Recognize when a rescuer is required

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (American Heart Assoc. Card)
- ☐ Prepares student for an exam that leads to certification

## CPR/First Aid/AED/Bloodborne Pathogens

#### **Course Description:**

This course is designed to prepare student to provide CPR and First Aid and use an automated external defibrillator (AED) in a safe, timely and effective manner. Additionally, this course covers bloodborne pathogens and proper biohazard cleanup.

These courses are intended for anyone with little to no medical training who needs a course completion card.



#### Course Objectives:

- Describe how high-quality CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when someone needs CPR
- Perform high-quality CPR for an adult alone or as a team member during multi-rescuer CPR (child and infant CPR modules are optional)
- Give effective breaths using mouth-to-mouth or a barrier device for all age groups
- Demonstrate how to use an AED on an adult
- Describe when and how to help a choking adult
- List the priorities, roles, and responsibilities of the first aid rescuer
- Describe the key steps in first aid

- Describe the assessment of and first aid actions for the following life-threatening conditions: heart attack, difficulty breathing, choking, severe bleeding, shock, and stroke
- Use an epinephrine pen
- Control bleeding
- Recognize elements of common injuries and illnesses
- Recognize the legal questions that apply to first aid rescuers
- Avoid infection during biohazard cleanup
- Understand the importance of wearing personal protective equipment

Pre-requisite: N/A Course length: 8 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **Fall Protection**

#### **Course Description:**

Workers are exposed to many potentially lifethreatening hazards on job sites, and death by falling is one of the greatest risks. Proper training of every craft professional, coupled with enforcement of safety regulations and standards, is the most effective way to reduce this risk and protect the lives and well-being of the construction workforce.



#### Course Objectives:

- Fundamental Safety
- Hazard Recognition
- Introduction to OSHA
- Causes of Falls

- Costs of Falls
- Consequences of Falls
- Proper Use of Fall Protection Equipment
- Stairs
- Ladders
- Scaffolds
- Aerial Lifts

Pre-requisite: N/A

Course length: 8 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Field Safety

#### **Course Description:**

To help prevent accidents, a safety program must be in place. This curriculum will provide you with the rules and safeguards you need to work safely on any job site. Safety must be incorporated into all phases of the job and involve all employees at every level, including management. Field Safety covers topics such as Hazard Communication. Fall Protection, and Forklift Safety.



#### Course Objectives:

- Introduction to Safety
- Confined Spaces and Excavations
- Work-zone Safety
- Electrical Safety
- Working from Elevations
- Steel Erection

- Heavy Equipment, Forklift, and Crane Safety
- Concrete and Masonry
- Introduction to Materials Handling

Pre-requisite: N/A

Course length: 45 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## **HAZWOPER 8 Plus GHS Hazardous Communication**

#### **Course Description:**

The HAZWOPER 8 hour training program is a refresher course only and will teach students how to protect workers when in hazardous situations. Our courses are designed to comply with the extensive federal regulations (29 CFR 1910.120 and EPA 165.5) to ensure the safety and the health of workers.



#### **Course Objectives:**

- Recognize and recall OSHA regulations and requirements.
- Identify the principles of hazardous materials.
- Understand the different containers required for various hazardous materials.
- Understand and react to ones own exposure potential.
- Understand and perform emergency response procedures.
- Properly manage hazardous materials incidents

Pre-requisite: HAZWOPER 40 or 24

Course length: 8 hours



- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## HAZWOPER 24 Plus GHS Hazardous Communication

#### **Course Description:**

The HAZWOPER 24 hour training program at 360training.com will teach students how to protect workers when in hazardous situations.

Our courses are designed to comply with the extensive federal regulations (29 CFR 1910.120) to ensure the safety and the health of workers.



#### Course Objectives:

- Recognize and recall OSHA regulations and requirements.
- Demonstrate an understanding of Site Characterization.
- Identify the principles of toxicology and how they relate to various types of chemical exposures.
- Describe potentially hazardous situations involving corrosives, solvents, oxidizers, and reactive chemicals.
- Identify the uses for Personal Protective
   Equipment (PPE) and how to choose the correct
   PPE.
- Recognize the principles of decontamination

- methods as well as levels of decontamination.
- Define a Medical Surveillance Program and its purpose.
- Recall characteristics of the confined space permit system, such as main confined space atmospheric hazards and types of ventilation.
- Describe the medical concerns associated with confined spaces.
- Indicate the various considerations in an emergency situation and the importance of training and action for personal safety and the safety of others.

Pre-requisite: N/A Course length: 24 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## HAZWOPER 40 Plus GHS Hazardous Communication

#### **Course Description:**

This course covers 40 hours of instruction required by 29 CFR 1910.120(e)(3), OSHA's Hazardous Waste and Emergency Response training standard. This course is designed for General site workers engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances and health hazards. This course is comprised of 24 sections, covering topics pertaining to workplace hazards associated with Hazardous Waste Operations and Emergency Response (HAZWOPER). Upon successful completion of the course, you will receive a certificate of completion which is accepted by OSHA as documentation of training.



Topics covered include: Written safety and health program; Site characterization and analysis; Training program; Medical Surveillance; PPE; Sanitation of Temp.

Workplaces; Monitoring; Handling drums and containers; Decontamination and Emergency Response Plan.

#### Course Objectives:

- Read and understand OSHA regulations and requirements
- Summarize Site Characterization
- Understand the principles of toxicology and how they relate to various types of chemical exposures
- Describe potentially hazardous situations involving corrosives, solvents, oxidizers and reactive chemicals
- Understand Chemicals and the hazards they present in the workplace
- Summarize the components of OSHA's Hazard Communication Standard and the steps for any

Hazard Communication Program

- Identify radiation hazards and different types of radiation
- Identify different types of respiratory equipment
- Understand Protection Factors
- Identify the uses for Personal Protective
   Equipment (PPE) and how to choose the correct
   PPE
- Understand the characteristics of each work zone
- And more

Pre-requisite: N/A Course length: 40 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## Lockout/Tagout

#### **Course Description:**

The Lockout/Tagout standard establishes the employer's responsibility to protect workers from hazardous

energy. Employers are also required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures:

- Proper lockout/tagout (LOTO) practices and procedures safeguard workers from the release of hazardous energy. The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout) (29 CFR 1910.147) for general industry, outlines specific action and procedures for addressing and controlling hazardous energy during servicing and maintenance of machines and equipment. Employers are also required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures. Workers must be trained in the purpose and function of the energy control program and have the knowledge and skills required for the safe application, usage and removal of the energy control devices.
- All employees who work in an area where energy control procedure(s) are utilized need to be instructed in the purpose and use of the energy control procedure (s), especially prohibition against attempting to restart or reenergize machines or other equipment that are locked or tagged out.
- All employees who are authorized to lockout machines or equipment and perform the service and
  maintenance operations need to be trained in recognition of applicable hazardous energy sources in the
  workplace, the type and magnitude of energy found in the workplace, and the means and methods of
  isolating and/or controlling the energy. And more.

#### **Course Objectives:**

- Explain the contents and implications of 29 CFR 1910.147
- Understand the relationship between machine guarding and Lockout/Tagout
- Perform effective lockout tagout procedures

Pre-requisite: N/A Course length: 8 hours





- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Managing Electrical Hazards

#### **Course Description:**

This module introduces electrical hazards in the workplace and describes how to avoid electrical hazards and how to analyze and document shock and arc flash hazards; and how to plan and conduct work around



them. Includes examples of how to complete an energized electrical work permit, and how to select the specialized personal protective equipment required for electrical work.

#### **Course Objectives:**

- Accessing and Eliminating Shock
- Arc Blast
- Arc Flash Hazards
- Practical Safe Working Environments

- Energized Electrical Work Permit
- Safety Procedures
- Personal Protective Equipment

Pre-requisite: N/A Course length: 12.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion (OSHA card)
- ☐ Prepares student for an exam that leads to certification

Course length: 10 hours

## OSHA 10-hour General Industry

#### **Course Description:**

OSHA 10-hour training teaches basic safety and health information to entry-level workers in construction and

general industry. It is part of the OSHA Outreach Training Program, which explains serious workplace hazards, workers' rights, employer responsibilities and how to file an OSHA complaint.

This course is designed for entry-level workers in construction and general industry.

This course will cover the following topics: Introduction to OSHA, Walking



and Working Services, Fall Protection, Exit Routes, Emergency Action Plans, Fire Prevention Plans, Fire Protection, Identifying Electrical Hazards, Electrical Grounding and Protection Standards, Personal Protective Equipment (PPE), Respiratory Protection, Hazard Communication, Hazardous Materials, Machine Guarding, and OSHA Safety and Health Programs.

#### **Course Objectives:**

- Provide workers with information on how to identify, abate, avoid and prevent job-related hazards on a
  job site.
- Inform workers about their rights and their employer's responsibilities, and explain how to file a complaint with OSHA.
- Cover a variety of general industry safety and health hazards that a worker may encounter.

Pre-reguisite: N/A



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☐ Prepares student for an exam that leads to certification

## OSHA 30

#### **Course Description:**

This course is a guide to creating a culture of safety in the workplace. The course provides a comprehensive look at the policies, procedures and standards covered by OSHA 29 CFR 1910. Covered will be the basic elements of a workplace safety and health program and how to manage both. This includes understanding an employer's responsibilities for workers safety, as well as worker's rights to learn about the potential hazards of their job.

This course also covers all the hazards one might encounter in various industries, from scaffolding to bloodborne pathogens. Students will



learn about essential safety procedures like lockout/tagout protocols, machine guarding mechanisms, and industrial hygiene.

#### Course Objectives:

- Understand the importance of OSHA in regulating employee safety in the workplace
- Knowledge of employee's rights and employer responsibilities
- Recognize manufacturing processes, tasks and equipment
- Identify common hazards found in the workplace
- Follow OSHA General Industry standards
- Recommend prevention and correction strategies for violations and hazards found in the workplace
- Recognize role of the workforce and management in improving safety culture

Pre-requisite: N/A Course length: 30 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Safety Technology

#### **Course Description:**

Safety Technology provides instruction on how to implement and administer a company's safety program. This manual is designed for field managers, safety directors, safety committees, owner safety representatives, and insurance/



loss control representatives.

#### Course Objectives:

- Introduction to Safety Technology
- Positive Safety Communication
- Hazard Recognition, Environmental Awareness, and Occupational Health
- Job Safety Analysis and Pre-Task Planning
- Safety Data Tracking and Trending

- Site-Specific Safety Plans
- Safety Orientation and Safety Meetings
- · Permits and Policies
- Incident Investigations, Policies, and Analysis
- OSHA Inspections and Recordkeeping

Pre-requisite: N/A

Course length: 45 hours





- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Carpentry (4 Levels)

#### **Course Description:**

Carpenters make up the largest building trades occupation in the industry and those with all-around skills are in high demand.

Carpenters are involved in many different kinds of construction activities, from building highways and bridges to installing kitchen cabinets. Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials.

This four-level curriculum covers content such as Building Materials, Cabinet Fabrication, and Advanced Wall Systems.



#### Course Objectives:

- Orientation to the Trade
- Building Materials, Fasteners and Adhesives
- Hand and Power Tools
- Introduction Construction Drawings, Specifications and Layout
- Floor Systems
- Wall Systems
- Ceiling Joist and Roof Framing
- Introduction to Building Envelope Systems
- Basic Stair Layout
- Commercial Drawings
- Cold-Formed Steel Framing
- Exterior Finishing
- Thermal and Moisture Protection

- Roofing Applications
- Doors and Door Hardware
- Drywall Installation and Finishing
- Suspended Ceilings
- Window, Door, Floor and Ceiling Trim
- Cabinet Installation
- Properties of Concrete
- Rigging Equipment and Practices
- Trenching and Excavating
- Reinforcing Concrete
- Foundations and Slabs-on-Grade
- Vertical and Horizontal Formwork
- Handling and Placing

#### Concrete

- Tilt-Up Wall Systems
- Differential Leveling
- Angular and Distance Measurement
- Advanced Roof, Wall, and Stair Systems
- Introduction to Construction Equipment
- Introduction to Oxyfuel Cutting and Arc Welding
- Site Preparation
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 788 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Drywall (2 Levels)

#### **Course Description:**

Drywall applicators often install walls and ceilings, as well as place insulation, soundproofing, and firestopping materials behind and onto those walls and ceilings. They may also apply textures and trims to enhance both the interiors and exteriors of the buildings. The two-level curriculum for Drywall covers such subjects as Thermal and Moisture Protection, Steel Framing and Acoustical Ceilings.



#### Course Objectives:

- Orientation to the Trade
- Construction Materials and Methods
- Thermal and Moisture Protection
- Drywall Installation
- Drywall Finishing
- Commercial Drawings
- Steel Framing

- Acoustical Ceilings
- Interior Specialties
- Exterior Cladding
- Specialty Finishes

Pre-requisite: N/A

Course length: 292 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Electrical (4 Levels)

#### **Course Description:**

Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code and state and local codes.

To prepare trainees a career in the electrical field, NCCER offers a comprehensive, 4-level Electrical curriculum that complies with DOL time-based standards for apprenticeship.



#### Course Objectives:

- Occupational Overview: The Electrical Industry
- Safety for Electricians
- Introduction to Electrical Circuits
- Electrical Theory
- Introduction to the National Electrical Code
- Device Boxes
- Hand Bending
- Wireways, Raceways and Fittings
- Conductors and Cables
- Basic Electrical Construction Documents
- Residential Wiring
- Electrical Test Equipment
- Alternating Current
- Motors: Theory and Application
- Electric Lighting

- Conduit Bending
- Pull and Junction Boxes
- Conductor Installations
- Cable Tray
- Conductor Terminations and Splices
- Grounding and Bonding
- Circuit Breakers and Fuses
- Control Systems and Fundamental Concepts
- Lead Calculations—Branch and Feeder Circuits
- Conductor Selection and Calculations
- Practical Applications of Lighting
- Hazardous Locations
- Overcurrent Protection
- Distribution Equipment
- Transformers
- Commercial Electrical

#### Services

- Motor Calculations
- Voice, Data and Video
- Motor Controls
- Lead Calculations—Feeders and Services
- Health Care Facilities
- Standby and Emergency Systems
- Basic Electronic Theory
- Fire Alarm Systems
- Specialty Transformers
- Advanced Controls
- HVAC Controls
- Heat Tracing and Freeze Protection
- Medium-Voltage Terminations/ Splices
- Special Locations
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 668 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## HVAC (4 Levels)

#### **Course Description:**

The increasing development of HVAC (heating and air-conditioning systems) technology causes employers to recognize the importance of continuous education and keeping up to speed with the latest equipment and skills. Hence, technical school training or apprenticeship programs often provide an advantage and a higher qualification for employment.

NCCER's program has been designed by highly qualified subject matter experts with this in mind. Our four levels, **North American Technician Excellence (NATE)** recognized, present theoretical and practical skills essential to your success as an HVAC installer or technician.



#### **Course Objectives:**

- Trade Mathematics
- Basic Electricity
- Introduction to HVAC, Heating, Cooling, Air Distribution Systems, Hydronic Systems
- Basic Copper and Plastic Piping Practices
- Soldering and Brazing
- Basic Carbon Steel Piping Practices
- Alternating Current
- Compressors
- Refrigerants and Oils
- Leak Detection, Evacuation, Recovery and Charging
- Metering Devices
- Heat Pumps
- Basic Maintenance

Pre-requisite: N/A

- Chimneys, Vents and Flues
- Sheet Metal Duct Systems
- Fiberglass and Flexible Duct Systems
- Commercial Airside Systems
- Air Quality Equipment
- Fasteners, Hardware and Wiring Terminations
- Troubleshooting Control Circuit and Motor, Cooling, Heat Pumps, Gas Heating, Oil Heating, Accessories
- Zoning, Ductless and Variable Refrigerant Flow Systems
- Commercial Hydronic Systems
- Steam Systems
- Retail Refrigeration System
- Customer Relations

- Water Treatment
- Indoor Air Quality
- Energy Conservation Equipment
- Building Management Systems
- System Air Balancing
- System Startup and Shutdown
- Construction Drawings and Specifications
- Heating and Cooling System Design
- Commercial/Industrial Refrigeration Systems
- Alternative and Specialized Heating and Cooling Systems
- Fundamentals of Crew Leadership

Course length: 693 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Ironworking (3 Levels)

#### **Course Description:**

This curriculum provides a basic foundation in ironworking safety, tools, welding, cranes, rigging, forklifts, and survey equipment are included, as well as trade drawings, steel joists, and structural steel. It also includes updated technology and practices, helping trainees be safer and more effective on the job site. The trainee will also learn how to apply practical applications of mathematical principles on the job site.



This training is a rich source of knowledge and experience that will give each trainee a competitive edge as he or she grows in this profession.

#### Course Objectives:

- Introduction to the Trade
- Trade Safety
- Tools and Equipment of the Trade
- Fastening
- Mobile Construction Cranes
- Rigging Equipment and Practices
- Trade Drawings
- Structural Ironworking
- Plumbing, Aligning and Guying
- Oxyfuel Cutting
- Introduction to Arc Welding
- Bar Joists and Girders

- Metal Decking
- Field Fabrication
- Trade Math
- Weld Quality
- Position Arc Welding
- Forklifts
- Intermediate Rigging
- Steel Joists and Joist Girders
- Tower Cranes
- Survey Equipment Use and Care
- Applied Trade Math
- Flux Core for Ironworking
- Stud Welding

- Advanced Rigging
- Precast/Tilt-Up Erection
- Special Application Hoisting Devices
- Pre-Engineered Systems
- Miscellaneous/Ornamental Ironworking
- Grating and Checkered Plate
- Air Carbon Arc Cutting and Gouging

Course length: 548 hours

Demolition

Pre-requisite: N/A



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Masonry (3 Levels)

#### **Course Description:**

The study of masonry is one of the world's oldest and most respected crafts. Masonry construction existed for thousands of years. The remains of stone buildings date back 15,000 years, and the earliest manufactured bricks unearthed by archaeologists are more than 10,000 years old. These bricks were made of hand-shaped, dried mud. Among the most well known works of masons are the pyramids of ancient Egypt and Notre Dame Cathedral in Paris.

This three-level curriculum encompasses modules such as mortar, metalwork in masonry and estimating.



#### Course Objectives:

- Introduction to Masonry
- Masonry Safety
- Masonry Tools and Equipment
- Measurement, Drawings and Specifications
- Mortar
- Masonry Units and Installation Technique
- Residential Plans and Drawing Interpretation
- Residential Masonry
- Reinforced Masonry
- Masonry Openings and Metalwork
- Advanced Laying Techniques

- Effects of Climate on Masonry
- Construction Inspection and Quality Control
- Elevated Masonry
- Specialized Materials and Techniques
- Repair and Restoration
- Commercial Drawings
- Estimating
- Site Layout—Distance Measurement and Leveling
- Stone Masonry
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 548 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Millwright (5 Levels)

#### **Course Description:**

Since its humble beginnings in the construction of wood mills, the Millwright trade has expanded to include work in metal and machinery of everincreasing technology and precision. Millwrights install, align, and troubleshoot machinery in factories, power plants (particularly the precision machinery required in nuclear power plants), and other industrial sites. They install conveyor systems, connect machinery to power supplies and piping, direct hoisting and setting of machines, and adjust the moving and stationary parts of machines to certain specifications. Millwrights must be extremely skilled at



mathematics and interpreting blueprints and specifications to set machines at perfect measurements, sometimes working with clearances no bigger than thousandths of an inch.

#### Course Objectives:

- Orientation
- Millwright Hand Tools
- Fasteners/Anchors
- Basic Layout
- Gaskets and O-Rings
- Oxyfuel Cutting
- Intermediate Math
- Field Sketching
- Intermediate Blueprint Reading
- Specialty Tools
- Power Tools
- Riaaina
- Setting Baseplates and Soleplates
- Lubrication
- Bearings
- Advanced Math

- Precision Measuring Tools
- Installing Packing
- Installing Seals
- Mechanical Seals
- Removing and Installing Bearings
- Couplings
- Fabricating Shims
- Alignment Fixtures and Specialty Jigs
- Pre-alignment for Equipment Installs
- Installing Belt and Chain Drives
- Install Fans/Blowers
- Conveyors
- Troubleshooting and

- Repairing Conveyors
  Conventional
- Alignment
- Pumps
- Troubleshooting and Repairing Pumps
- Compressors and Compressor Maintenance
- Basic Pneumatic Systems
- Troubleshooting and Repairing Pneumatic Equipment
- Basic Hydraulic Systems
- Troubleshooting and Repairing Hydraulic Equipment

- Troubleshooting and Repairing Gearboxes
- Reverse Alignment
- Laser Alignment
- Advanced Blueprint Reading
- Optical Alignment
- Turbines
- Maintaining and Repairing Turbine Components
- Installing Electric Motors
- Preventive and Predictive Maintenance
- Vibration Analysis

Pre-requisite: N/A Course length: 773 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Pipefitting (4 Levels)

#### **Course Description:**

There are some who may consider pipefitting synonymous with plumbing, but these are really two very distinct trades. Plumbers install and repair the water, waste disposal, drainage and gas systems in homes and commercial and industrial buildings. Pipefitters, on the other hand, install and repair both high- and low-pressure pipe systems used in manufacturing, in the generation of electricity, and in the heating and cooling of buildings.



#### Course Objectives:

- Orientation to the Pipefitting Craft
- Pipefitting Hand Tools
- Pipefitting Power Tools
- Oxyfuel Cutting
- Ladders and Scaffolds
- Motorized Equipment One
- Piping Systems
- Drawings and Detail Sheets
- Identifying and Installing Valves
- Pipefitting Trade Math
- Threaded Pipe Fabrication
- Socket-weld Pipe Fabrication
- Butt-weld Pipe Fabrication
- Excavations
- Underground Pipe Installations
- Introduction to Basic Rigging

- Rigging Practices
- Standards and Specifications
- Advanced Trade Math
- Motorized Equipment Two
- Introduction to Aboveground Pipe Installation
- Field Routing and Vessel Trim
- Pipe Hangars and Supports
- Testing Piping Systems and Equipment
- Advanced Blueprint Reading
- Advanced Pipe Fabrication
- Stress Relieving and Aligning
- In-line Specialties
- Special Piping
- Hot Taps
- Maintaining Valves
- Fundamentals of Crew Leadership

Pre-requisite: N/A

Course length: 649 hours



- ☑ Can be taught face-to-face
- □ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Plumbing (4 Levels)

#### **Course Description:**

Most people are familiar with plumbers who come to their home to unclog a drain or install an appliance. In addition to these activities, however, plumbers install, maintain, and repair many different types of pipe systems. For example, some systems move water to a municipal water treatment plant and then to residential, commercial, and public buildings. Other systems dispose of waste, provide gas to stoves and furnaces, or supply air conditioning. Pipe systems in power plants carry the steam that powers huge turbines. Pipes also are used



in manufacturing plants, such as wineries, to move material through production processes.

#### Course Objectives:

- Introduction to the Plumbing Profession
- Plumbing Safety
- Tools of the Plumbing Trade
- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe/Fittings
- Copper Tube/Fittings
- Cast-iron Pipe and Fittings
- Steel Pipe/Fittings
- Introduction to Plumbing Fixtures
- Intro to Drain, Waste, Vent (DWV) Systems

- Introduction to Water Distribution Systems
- Plumbing Math Two
- Reading Commercial Drawings
- Structural Penetrations, Insulation, Firestopping
- Install/Test DWV Pipe
- Installing Roof, Floor, and Area Drains
- Installing and Testing Water Supply Piping
- Types of Valves
- Applied Math
- Sizing/Protecting the Water Supply System

- Portable Water Supply Treatment
- Types of Venting
- Sizing DWV and Storm Systems
- Sewage Pumps and Sump Pumps
- Corrosive-resistant Waste Piping
- Compressed Air
- Service Plumbing
- Business Principles for Plumbers
- Fundamentals of Crew Leadership
- Water Pressure Booster/Recirculation Systems

- Indirect and Special Waste
- Hydronic and Solar Heating Systems
- Codes
- Private Water Supply Well Systems
- Private Wastedisposal Systems
- Swimming Pools and Hot Tubs
- Plumbing for Mobile Homes and Travel Trailer Parks
- Introduction to Medical Gas and Vacuum Systems

Pre-requisite: N/A Course length: 698 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Welding (4 Levels)

#### **Course Description:**

Welding is a high-tech industry that can take you places all over the world. From ladders to aircraft carriers, from NASCAR to national defense, and from the laboratory to sales and repair, the varied welding industry impacts virtually every industry.

Technology is creating more uses for welding in the workplace. For example, new ways are being developed to bond dissimilar materials and non-metallic materials, such as plastics, composites, and



new alloys. Also, advances in laser beam and electron beam welding, new fluxes, and other new technologies and techniques all point to an increasing need for highly trained and skilled workers.

#### Course Objectives:

- Welding Safety
- Oxyfuel Cutting
- Plasma Arc Cutting
- Air-carbon Arc Cutting and Gouging
- Base Metal Preparations
- Weld Quality
- SMAW-Equipment and Setup
- SMAW Electrodes
- SMAW-Beads and Fillet Welds
- Joint Fit-up and Alignment
- SMAW-Groove Welds With Backing
- SMAW-Open Root Groove Welds-Plates

- Welding Symbols
- Reading Welding Detail Drawings
- Physical Characteristics and Mechanical Properties of Metals
- Preheating and Post heating of Metals
- GMAW and FCAW— Equipment and Filler Metals
- GMAW-Plate
- FCAW-Plate
- GTAW-Equipment and Filler Materials
- GTAW-Plate

- SMAW-Open Root Pipe Welds
- GMAW-Pipe
- FCAW-Pipe
- GTAW-Carbon Steel Pipe
- GTAW-Low Alloy and Stainless Steel Pipe
- SMAW-Stainless Steel Plate and Pipe Groove Welds
- GMAW-Aluminum Plate
- GMAW-Aluminum Pipe
- GTAW-Aluminum Plate
- GTAW-Aluminum Pipe
- Soldering and Brazing

Pre-requisite: N/A Course length: 1,229 hours



## **Supervision Skills**









- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Construction Workforce Development Professional

#### **Course Description:**

Now more than ever, the construction industry needs qualified construction workforce development professionals to manage the growing need for a skilled workforce.

NCCER's new
Construction Workforce
Development Professional
assessment evaluates and
validates the knowledge
and skills of your
organization's workforce
development
professionals.



#### The Construction

Workforce Development Professional training and certification program is the first of its kind in the construction industry. Raise the standard and make sure your workforce development professionals are trained today.

#### Course Objectives:

For more information on this training, please contact Sheila Blair (see contact information below).

Pre-requisite: N/A Course length: TBD



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Fundamentals of Crew Leadership

#### **Course Description:**

Work gets done most efficiently if workers are divided into crews with a common purpose. When a crew is formed to tackle a particular job, one person is appointed the leader. This person is usually an experienced craftworker who has



demonstrated leadership qualities. To become an effective leader, it helps if a trainee has natural leadership qualities, but there are specific job skills that each craftworker must learn in order to do the job well.

#### Course Objectives:

- Basic leadership skills
- Leadership Styles
- Communication
- Delegating

- Problem Solving
- Jobsite Safety
- Project Planning
- Scheduling

Estimating

Pre-requisite: N/A

Course length: 22.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **Mentoring for Craft Professionals**

#### **Course Description:**

The Mentoring for Craft
Professionals curriculum is
an important addition to
NCCER's workforce
development training. The
exchange in knowledge and
guidance from those who
are more experienced has
been an important part of
craft training and
apprenticeship. This
curriculum provides formal
guidance to the craft
professional entering a
mentorship role.



#### Course Objectives:

For course information, please contact Sheila Blair (contact information below).

Pre-requisite: N/A

Course length: 12.5 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## **Project Supervision**

#### **Course Description:**

Field supervisors play a major role in every construction company and every construction project. They are the frontline managers on the job, directly supervising workers and other field supervisors. They are both the engine and the anchor of the construction team, driving it toward effectiveness and efficiency, and stabilizing it with consistency and good judgment. To fill this role, field supervisors need more than experience in the field.



They also need management skills in problem solving, planning, estimating, safety supervision, scheduling, controlling costs and resources, and, perhaps most important, managing people.

#### **Course Objectives:**

- Orientation to the Job
- Human Relations and Problem Solving
- Safety
- Quality Control

- Contract and Construction Documents
- Document Control and Estimating
- Planning and Scheduling
- Resource Control and Cost Awareness

Pre-requisite: N/A

Course length: 85 hours



- ☑ Can be taught face-to-face
- ☐ Can be taught virtually with a live instructor
- ☑ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Sustainable Construction Supervisor

#### **Course Description:**

This module was developed to instruct construction supervisors on sustainable management techniques, especially as they relate to construction-phase LEED points targeted for their projects. A collaborative effort of the Green Building Certification Institute (GBCI), the Myers-Lawson School of Construction at Virginia Tech, the University of Florida, and Subject Matter Experts from the Top 100 Green Contractors in the United States, this module covers a topic not addressed until now-sustainable



construction management for front-line supervisors. This module has been endorsed by GBCI and approved by the US Green Building Council for 20 GBCI general *and* LEED-specific Continuing Education (CE) Hours for LEED Professionals. Topics covered in Sustainable Construction Supervisor include Project Sustainability, Green Building Materials, and Green Building Methods.

#### **Course Objectives:**

- Project Sustainability Goals
- Green Building Materials and Technologies
- Green Building Methods and Processes

Pre-requisite: N/A Course length: 15 hours



# Supply Chain and Logistics









- ☑ Can be taught face-to-face
- ☑ Can be taught virtually with a live instructor
- ☐ Successful completion earns certificate of completion
- ☑ Prepares student for an exam that leads to certification

## Certified Logistics Associate (CLA) & Technician (CLT)

#### **Course Description:**

To enhance the competency of the supply chain logistics workforce, these courses offer alignment with the Manufacturing Skill Standards Council (MSSC) standards. The CLA course provides students with the foundational broad knowledge they need to understand the world of supply chain and related core competencies. The course includes modules on the global supply chain, the logistics environment, safety, safe equipment operation, material handling equipment, quality control, workplace communication, teamwork and problem solving and using computers. The CLT course provides mid-level technical knowledge, including product



receiving, product storage, order processing, packaging and shipment, inventory control, safe handling of hazardous materials, evaluation of transportation modes, customs and dispatch and tracking operations.

#### **Course Objectives:**

- Explain how material handling affects a company's viability and profitability
- Cite examples of how logistics activities impact the environment
- Identify common automation systems for material handling
- Identify the principal federal safety organizations and their fundamental requirements
- Identify types, functionality and use of personal protective equipment
- Explain quality audits and how frontline workers support them

- Explain methods of effective communication between shifts
- List characteristics of an effective team member
- Identify commonly used computer systems and software applications in logistics
- Describe the principal elements of the global supply chain logistics life cycle
- Cite two common warehouse layout options
- List types of loading dock equipment
- And much more

Pre-requisite: N/A Course length: 70 hours

# Additional Certifications are available upon request.



#### Series Makes the Difference ...

Instead of attempting to piecemeal a training program together, try using our proven combination of courses to meet your specific needs:

#### **Business Communication Series:**

- Business Writing and Grammar
- Business Writing for Impact and Influence
- Effective Written Communication and Email
- Conquering Challenging Conversations.

#### **Effective Leadership Series:**

- Understanding Yourself as a Leader
- Coaching to Bring Out the Best in Others
- Controlling Chaos and Thriving Under Pressure
- Emotional Intelligence in Leadership
- Building Effective Communication and Feedback Skills
- Motivation and Employee Retention

#### **First Time Supervisor Series:**

- Making the transition from Co-Worker to Team Leader
- Principles of Supervision & Leadership
- Resolving Team Conflicts
- Conducting Effective Performance Evaluations

#### **Human Resources Master Series:**

- Employee Engagement and Retention Workshop
- Conducting an HR Audit
- Using Motivational Interviewing to Screen Job Candidates
- Maximizing Effectiveness in a Multi-Generational Workplace

#### Microsoft (MS) Office Master Series:

- MS Outlook levels 1 and 2
- MS Word levels 1, 2 and 3
- MS Excel levels 1, 2 and 3
- MS PowerPoint 1 and 2

#### **Performance Management Series:**

- Performance Management & Metrics
- Effective Performance Evaluations
- Giving and Accepting Feedback
- Gaining Commitment to Present Goals

#### **Personal Effectiveness Series:**

- Using Positive Influencing Skills in the Workplace
- Thriving in a Time of Change: Tools for Working in a Changing Organization
- Creative Problem-Solving and Decision-Making
- Conquering Stress and Anxiety through Mind/Body Awareness

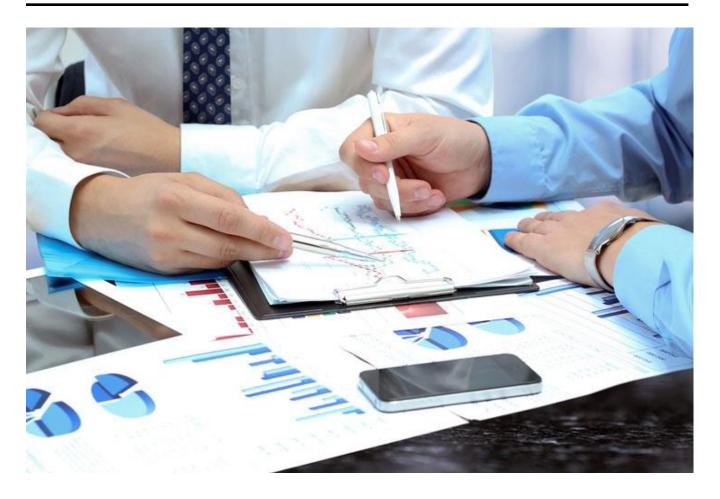
#### **Powerful Presentation Series:**

- PowerPoint 1
- PowerPoint 2
- Facilitation Excellence (2-day)

#### **Project Management Leadership Series:**

- Controlling Project Risks: Managing Threats and Promoting Opportunities
- Human Resources, Stakeholder and Communications Management
- Time Management and Scheduling
- Project Benefits Realization
- Ensuring Project Success

### **Business Analysis, Design & Agile**



- Agile for Business Analysts
- BA26 Requirements Eliciting
- Business Analysis
- Business Analysis and Requirements Gathering
- Business Analysis Essentials
- Business Analysis for IT Professionals
- Consulting Skills for the Business Analyst
- Finance for the Non-Financial Leader
- Finance in Capital Markets
- Gathering High Quality Business Requirements
- High-Quality Business Requirements
- Integrated Business Planning
- Market Analysis
- Modeling Techniques for the Business Analyst
- PBA04 PMI Professional in Business Analysis (PMI-PBA) Exam Preparation Course

- Preparation for the CBAP Certification Exam
- Preparation for the CCBA Certification Exam
- Project Management Skills for the Business Analyst
- Writing Effective Business Cases
- Writing Effective Requirements

## CAD/CAM/Product Life Cycle Management (PLM)

#### **AutoCAD**

- 2012 Advanced
- 2012 Basics
- 2012 Commercial Design
- 2012 Residential Design
- AutoCAD Beyond the Basics
- AutoCAD Essentials
- AutoCAD/AutoCAD LT Fundamentals
- Revit
- Revit Architecture

#### **CATIA**

- Design V5
- Fundamentals V6
- Manufacturing SmarTeam
- Manufacturing V6
- V5 Advanced Modeling
- V5 Fundamentals
- V5 Surface
- V6 ENOVIA

#### **Creo (formerly Pro/Engineer)**

- Advanced Assembly Design Using Creo Parametric 2.0
- Advanced Modeling Using Creo Parametric 2.0
- Detailing Using Creo Parametric 2.0
- Introduction to Creo Parametric 2.0
- Surfacing Using Creo Parametric 2.0
- Update to Creo Parametric 2.0 from Creo Elements/ pro 5.0
- Update to Creo Parametric 2.0 from Pro/ Engineer Wildfire 4.0

#### **Unigraphics NX**

- Advanced Assemblies
- Fundamentals
- Intermediate NX Design and Assemblies
- Large Assembly Management Manufacturing Fundamentals
- Mechanical Free Form Modeling Design for the Experienced CAD User
- NX Boot Camp for Managers Teamcenter Visualization Basic Design
- NX Drafting Essentials



- NX Free Form NX 7.5 Update Sketch Outline
- NX New User Training
- NX Overview for Moderate Users
- Synchronous Modeling and Parametric Design

#### Windchill

- Building Publication Structures with Windchill Service Information Manager 10.1
- Building Windchill Structures with Windchill Service Information Manager 10.1
- Business Administration of Windchill Service Information Manager 10.1
- Configuring Parts List with Windchill Service Parts 10.1
- Introduction to Windchill Quality Solutions 10.1
- Introduction to Windchill Service Information Manager 10.1

#### **Communication & Business Effectiveness**

- Building Effective Communication & Feedback Skills
- Business Writing & Grammar
- Business Writing for Impact & Influence
- Challenging Conversations
- Communications & Interpersonal Skills
- Conflict Management Workshop
- Conquering Stress and Anxiety through Mind/Body Awareness
- Constructive Conversations
- Continuous Improvement for Superior Results
- Corporate Social Responsibility: Influencing Positive Change in You
- Creative Problem-Solving and Decision-Making
- Creative Techniques for the Classroom
- Critical Conversations
- Critical Thinking and Creative Problem-Solving
- Designing Documents for Busy Professionals
- Developing Professional Presentations
- Effective Meetings

- Effective Presentation Skills
- Facilitation Skills for IT Professionals JAD and Business Requirements Gathering Validation
- Giving and Accepting Feedback
- Handling High-Stakes Conversations Effectively
- Influencing Others Managing Expectations and Outcomes for IT Professionals
- Integrated Business Planning
- Internal Consulting Skills for Information Technology Professionals
- Managing Projects On-Time, On-Budget
- Managing Your Career for Short and Long-Term
- Personal Effectiveness through Emotional Intelligence
- Practical Tim and Workload Management
- The Art and Science of Evaluating Programs
- Time and Stress Management Workshop
- Using Social Media
- Writing Effective Business Cases
- Writing Effective Business Proposals
- Writing Effective Requirements



## Courseware Development, Technical and Business Writing

- Advanced Business Writing
- Advanced Workshop for Technical Writers
- Business Writing & Grammar
- Business Writing for Impact and Influence
- Business Writing for Managers
- Collaborative Business Writing
- Conducting a Successful User Needs Analysis
- Creating a Great Webinar
- Critical Conversations
- Critical Thinking Skills
- Documenting Business and Technical Requirements
- Fostering Accountability in Self & Others
- Maintaining a Positive & Proactive Attitude
- Organizational Skills for the Overwhelmed
- Practical English Grammar Skills
- Proofreading and Editing
- Proposal & Report Writing

- Proposals with the Competitive Edge
- Solutions for a Simpler Life
- · Technical and Legal Writing
- Technical Writing Concise and Precise Language, Tone and Format
- Train the Trainer
- User Guides That Get Used
- Writing Effective Briefing Notes
- Writing for the Web and Mobile Devices
- Writing Strategies for the Web
- Writing Technical Descriptions, Requirements & Procedures
- Writing Technical Information Effectively
- Writing Testable Software Requirements and Use Cases



## **Environmental Safety**

#### **Industrial Safety**

- 10 Hour OSHA Certificates
- 30 Hour OSHA Certificates
- Accident and Incident Investigation
- Aerial Lift
- Affected Lockout
- Back and Lifting
- Behavior-Based Safety
- Bloodborne Pathogens
- Confined Space
- Cranes and Slings
- Cranes, Rigging, Scissor Lift and Heavy Truck Safety
- DOT Shipping of Hazardous Materials
- Drug and Alcohol Training for Supervisors
- Electrical Excavations
- Fall Protection
- Fire Prevention
- First Aid CPR Trainer
- Forklift Operator Certification
- Hand and Power Tools
- Hazard Communication GHS

- HAZWOPER
- Hot Work Permit
- Job Hazard Analysis
- Ladder
- Lockout Affected
- Lockout Tagout
- Machine Guarding
- Materials Handling
- Noise and Hearing Protection
- OSHA Recordkeeping
- Personal Protective Equipment
- Powered Industrial Trucks
- Rigging and Machine Leveling
- Safety Committee
- Safety in the Workplace
- Scaffolding
- Slips, Trips and Falls
- Tagout Machine Guarding
- Trenching and Excavation
- Universal Safety Practices
- Walking and Working Surfaces
- Welding and Cutting





## **Facilitators & Training Personnel**



- Adult Learner
- Advanced Facilitation Skills for Trainers
- Body Language Skills
- Creating a Great Webinar
- Creative Techniques for the Classroom
- Conducting a Successful User Needs Analysis
- Delivering Training with Impact
- Designing and Delivering High-Impact Training
- Designing Performance-Based Instruction
- Effective Team Facilitation
- Facilitation Skills
- Facilitation Skills for IT Professionals: JAD and Business Requirements
- Getting Your Ideas Across
- Identifying Training Needs
- · Measuring Results from Training

- mLearning
- Powerful Presentations
- Presentation and Communication Skills for the IT Professional
- Presentation Skills
- Presentation Skills for IT Professionals
- Presenting for Success
- Public Speaking
- Social Learning
- Strategic Facilitation
- Strategically Managing the Training Function
- Survey Design: "Using Surveys Polling for Information" Taking Corrective Action
- The Art and Science of Evaluating Programs
- Train the Trainer

## Healthcare

- 5S for Healthcare A Foundation for Excellence
- A3 Problem Solving for Healthcare
- Addiction: National Trends, Treatment Approaches and Employer Strategies to Address this National Epidemic
- Certified Nurse Aid
- Clinical medical Assisting with CMA Certification.
- Clinical Support/Nurse Technician
- Corporate Compliance
- Dental Assisting with RHS Certificate.
- Effective Grant Writing
- EKG/ECG Technician
- Emergency Medical Technician
- Federally Qualified Health Centers and Other Safety Ned Organizations: Roles, Responsibilities, Funding and Impact
- Fraud and Abuse: Prevention, Trends and What's Next
- HIPAA
- How to Write an Effective Community Health Needs Assessment
- Impacts of Trauma and PTSD in the Workplace: How to Recognize It and What to do to Help Your Employees

- Integration of Physical and Behavioral Health: Where are We with All This? Models, Best Practices and Impacts
- Kaizen Event for Healthcare
- Lean Bronze Certification/Healthcare
- Lean Healthcare
- Medical Coding with CPC National Certification.
- Medical Office Specialist & Medical Billing with CMAA Certification.
- Medical Transcription.
- Occupational Therapy Assistant
- Patient Care Specialist/Technician
- Patient Care Technician
- Pharmacy Technician with PTCB Certification.
- Phlebotomy with CPT Certification.
- Population-based, Social Determinants of Health: What are We Seeing and What Can Employers do to Start or Expand Wellness.
- Registration Technician with CCS CertificatonPrograms and Related Initiatives
- Practical Nursing
- SBIRT (Screening, Brief Intervention, Referral and Treatment) for Health and Social Service Organizations
- Six Sigma Greenbelt for Healthcare
- Strategic Planning: Current Models,



## **Human Resources**

### **General Human Resources**

- Addiction: National Trends, Treatment Approaches and Employer Strategies to Address this National Epidemic
- Addiction in the Workplace: Cost Impacts and Best Practice Strategies to Address This Health Challenge
- Basics of People Leadership
- Behavioral Interviewing and Onboarding:
   How to Select and Retain "Good" Employees
- Business Acumen
- Business Succession Planning
- Compensation Models: It's Not Just About the Money (What Employees are Really Looking For)
- Clarifying Team Roles and Responsibilities
- Civility in the Workplace
- Coaching for a High Performance Team
- Coaching for Performance
- Coaching Skills for the IT Professionals
- Coaching with GROW
- Compensation Packages to Attract and Retain a Qualified Workforce Without Putting Organizations in the Red
- Conducting an HR Audit
- Conducting Annual Employee Review
- Conflict Management in the Workplace
- Corporate Compliance
- Corporate Social Responsibility: Influencing Positive Change in You
- Creating Solid Onboarding Protocol and Mentorship that Keeps Employees Engaged for the Long Haul
- Dealing with Difficult People
- Delivering Constructive Criticism
- Designing One Culture Out of Many for Maximum Employee Commitment
- Developing Corporate Behavior
- Developing Creativity
- Developing New Managers
- Digital Citizenship
- DiSC Profile
- Diversity & Inclusion
- Diversity Awareness Workshop
- Effective Appraisal of Employee Performance
- Effective Discipline
- Emotional Intelligence

- Employee Engagement and Retention
- Employee Recognition
- Employee Recruitment
- Employee Termination Processes
- Employee Turnover: What the Research is Showing Us and What We Can Do About It
- Employment Interviewing
- Entrepreneurial Spirit: Operational Ownership Establishing Performance
- Generation Gaps
- Generations in the Workplace
- Giving and Accepting Feedback
- Harassment & Discrimination
- Health and Wellness at Work
- HIPAA
- Hiring Practices to Ensure Long-Term Employee Retention
- Hiring Strategies
- Human Dynamics of Change and Transition
- Human Resource Management
- Improving Supervisor Effectiveness
- I'm Not Okay; You're Not Okay: How to Create an Environment of Accountability and Establish/Sustain Positive Teams
- Interview Techniques: "The Fact Finding Mission"
- Knowledge Management & Succession Planning
- Leadership Architecture
- Management and Succession Planning
- Manager Management
- Managing by Metrics
- Managing Individual Performance
- Managing Skills for Non-Managers
- Managing the Human Dynamics of Change & Transition
- Managing Workplace Anxiety
- Maximizing Effectiveness in a Multi-Generational Workforce
- Millennial Onboarding
- Motivational Interviewing: What Is It and How to Bring It Into the Workplace
- Networking Within the Company
- Organization Development
- Performance Management & Metrics
- Powerful Negotiation Skills
- Recruitment & Interviewing Techniques for Managers
- Sexual Harassment in the Workplace

## **Human Resources (continued)**



- Strategic Planning: Current Models,
   Timeframes and Best Practice Approaches
- Stress Management: What are Some Employers Doing to Address This?
- Survey Design: "Using Surveys Polling for Information" Taking Corrective Action
- Talent Management
- Team Building for Chemistry
- Team Building for Managers
- The Art and Science of Evaluating Programs
- Using Positive Influencing Skills in the Workplace
- Unacceptable Employee Behavior
- What are the Social Determinant of Health and How Does That Impact Employers and Communities? What Can We Do to Address These Challenges?
- What Does an Effective Onboarding Process Really Look Like? Models, Impacts and How to Sustain It

### **Team & Organizational Development**

 Compensation Packages to Attract and Retain a Qualified Workforce Without Putting Organizations in the Red

- Creating Solid Onboarding Protocol and Mentorship that Keeps the Employees Engaged for the Long Haul
- Designing One Culture Out of Many for Maximum Employee Commitment
- Developing Teams that Function Effectively
- Diversity & Inclusion
- Harassment & Discrimination
- High-Functioning Teams and Team Goal-Setting
- Hiring & Developing Ideal Employees
- Hiring Practices that Ensure Long-term Employee Retention
- How to Become a Healthy Organization
- Human Performance Improvement
- Identifying Work Priorities & Setting Goals
- Managing Conflict
- Managing Virtual Teams
- Organizational Development
- Performance Metrics
- Research-Based Workforce Retention Strategies and Leadership Succession Planning
- Sexual Harassment in the Workplace
- Turning Managers into Leaders to Keep Quality Employees

## **Interpersonal & Personal Development**

- Active Listening Skills
- Advanced Facilitation Skills for Trainers
- Assertiveness and Conflict Resolution
- Body Language Skills
- Building Effective Communication & Feedback Skills
- Communicating to Collaborate
- Communication for First-Line Supervisors
- Communication for Technical People
- Communication Strategies
- · Communication: Oral, Written and Email
- Conducting an HR Audit
- Conflict Management Workshop
- Conquering Stress and Anxiety through Mind/ Body Awareness
- · Creative Problem-Solving and Decision-Making
- Critical Thinking and Creative Problem-Solving
- Dealing with Difficult People
- Developing Personal Presentations
- DiSC Profile
- Effective Communication and Feedback Skills
- Effective Oral and Written Communication
- Effective Written Communication and Email
- ESL: Accent Improvement Training
- Five Star Customer Service Excellence
- Generations in the Workplace
- Growth Mindset
- How to Manage Stress
- Improving IT Service Response to Business Demands
- Influencing Others to Achieve Results
- Interpersonal Skills
- Managing Change without Pain

- Managing Skills for Non-Managers
- Managing the Human Dynamics of Change and Transition
- Negotiation Skills for IT Professionals
- People Skills for Project Managers
- Powerful Negotiation Skills
- Powerful Presentations
- Practical Time and Workload Management
- Presentation and Communication Skills for IT Professionals
- Presenting for Success
- Proofreading and Editing
- Speechwriting
- Survey Design: "Using Surveys Polling for Information" Taking Corrective Action
- Telephone and Telecommuting
- Telephone Skills for Superior Customer Satisfaction
- Thriving in a Time of Change: Tools for Working in a Changing Organization
- Thriving on Change
- Time and Stress Management Workshop
- Understanding Yourself as a Leader
- Using Positive Influencing Skills in the Workplace



## Leadership, Supervisory and Technical Skills

#### **Executive-Level Skills**

- Art and Science of Evaluating Programs
- Building Collaborative Relationships with Your Peers
- Building Strong Teams
- Business Ethics Skills
- Business Succession Planning
- Certified Executive Coaching for Current and Next-Level Succession Planning
- Coaching for the Supervisor
- Coaching: Bringing Out the Best in Others
- Communication Strategies
- Communication: Oral, Written and Email
- Conflict Resolution and Crisis Management
- Contract Management
- Creation of Balanced Scorecard and Strategy Map
- Creative Problem-Solving and Decision-Making
- Crises Management
- Developing Corporate Behavior
- Developing New Managers
- Effective Appraisal of Employee Performance
- Effective Discipline
- Effective Oral and Written Communication
- Effective Written Communication and Email
- Emotional Intelligence in Leadership
- Employee Recruitment
- Enterprise Architecture
- Expectations Executive Level
- Finance for the Non-Financial Leader
- High Performance Teams (Non-Remote)
- High Performance Teams (Remote)
- Human Dynamics of Change and Transition
- Information Technology Executive and Managerial Skills
- Integrated Business Planning
- Knowledge Management & Succession Planning
- Leadership and Executive Coaching
- Leadership and Influence
- Leadership and Self-deception
- Leadership Architecture
- Leadership, Executive Coaching and Strategy
- Leading and Coaching a High Performance Organization
- Manager Management
- Managing Change without Pain



- Managing in Difficult and Challenging Times
- Managing the Human Dynamics of Change & Transition
- Masterful Leadership and Motivation
- Powerful Negotiation Skills
- Setting and Achieving Metrics and Milestones
- Speaking, Image, Crisis
- Talent Management
- Technical Leadership: Business, Strategic, and Operational Value
- Think Tank (primary and secondary research, white papers)
- Thriving on Change
- Top Management RENEWAL: Vision, Mission, Values, Guiding Principles Technical Teambuilding & Technical Leadership Development Using DISC Methodology
- Women in Leadership

# Leadership, Supervisory and Technical Skills (continued)

### **General Leadership & Supervisory Skills**

- Basics of People Learning
- Be an Effective Manager/Supervisor
- Building a Collaborative Relationships with your Peers
- Building a Constructive Relationship with Your Manager
- Building Better Working Relationships
- Building High-Performing Teams
- Clarifying Team Roles & Responsibilities
- Civility in the Workplace
- Coaching for a High-Performance Team
- Coaching for Optimal Performance
- Coaching for Performance
- Coaching for the Supervisor
- Coaching Skills for the IT Professionals
- Coaching to Bring Out the Best in Others
- Coaching: Bringing Out the Best in Others
- Coaching with GROW
- Collaborative Relationships
- Communication Oral, Written and Email
- Communication Strategies
- Conflict Management and Coaching
- Conflict Resolutions and Crisis Management
- Controlling Chaos & Thriving Under Pressure
- Dealing with Emotional Behavior
- Delegating Skills for the Workplace
- DiSC Profile
- Effective Oral and Written Communication
- Effective Problem Solving
- Effective Team Facilitation
- Effective Written Communication and Email
- Emotional Intelligence
- Emotional Intelligence in Leadership
- Enterprise Architecture
- Entrepreneurial Spirit Operational Ownership
- Establishing Performance Expectations
- Finance for the Non-Financial Leader
- Frontline Leadership
- Fundamentals for Production: Front-Line Leader Tool Set
- Gaining Commitment to Preset Goals
- Getting Your Ideas Across
- Giving and Accepting Feedback
- Identifying Work Priorities and Setting Goals

- Integrated Risk Management
- Leadership for IT Professionals
- Leading Others Through Change
- Leadership Skills for Everyone
- Maintaining a Positive and Productive Attitude
- Making the Transition from Co-Worker to Team
   Leader
- Managing by Metrics
- Managing Change
- Managing for Superior Results: The Fundamentals of Supervision
- Managing in Difficult and Challenging Times
- Managing Individual Performance
- Masterful Leadership and Motivation
- Motivation and Employee Management
- Multi-Generational Teamwork
- Performance Management
- Personal Productivity
- Principles of Supervision and Leadership
- Proactive Listening
- Problem Solving and Decision Making
- Recruitment and Interviewing Techniques for Managers
- Resolving Team Conflicts
- Setting and Achieving Metrics and Milestones
- Taking Corrective Action
- Teaching Managers to Become Leaders
- Teambuilding
- Technical Leadership: Business, Strategic and Operational Value
- Time Management
- Unacceptable Employee Behavior
- Understanding Yourself as a Leader

#### **Marketing Skills**

- Internet Marketing
- Media and Public Relations
- Social Media Marketing
- Internet Marketing
- Marketing Basics
- Marketing the IT Organization Internally

## Leadership, Supervisory and Technical Skills (continued)

### **Supervisory & Management**

- Active Listening Skills
- Appreciative Inquiry
- Budgets and Financial Support
- Building a Constructive Relationship with Your Manager
- Building Collaborative Relationships with Your Peers
- Building High-Performing Teams
- Building Strong Teams
- Business Ethics Skills
- Business Requirements Management
- Business Writing for Managers
- Clarifying Team Roles and Responsibilities
- Coaching and Mentoring
- Coaching for a High Performance
- Coaching for First-line Supervisors
- Coaching for Optimal Performance
- Coaching for Performance
- Coaching for the Supervisor
- Coaching Salespeople
- Coaching Skills for the IT Professionals
- Coaching: Bringing Out the Best in Others
- Collaborative Relationships
- Communicating to Collaborate
- Communication for First-Line Supervisors
- Communication Strategies
- Communication: Oral, Written and Email
- Conducting Annual Employee Review
- Conflict Management
- Conflict Management and Coaching
- Conflict Management Workshop
- Conflict Resolution and Crisis Management
- Constructive Criticism & Discipline Skills for Managers
- Contract Management
- Corporate Social Responsibility: Influencing Positive Change in You
- Creative Problem-Solving and Decision-Making
- Crises Management
- Critical Thinking and Creative Problem-Solving
- Dealing with Difficult People
- Delivering Constructive Criticism
- Delivering Training with Impact

- Designing and Delivering High-Impact Training
- Designing Performance-Based Instruction
- Developing Creativity
- Developing New Managers
- Effective Appraisal of Employee Performance
- Effective Communication and Feedback Skills
- Effective Discipline
- Effective Oral and Written Communication
- Effective Problem Solving
- Effective Team Facilitation
- Effective Written Communication and Email
- Emotional Intelligence
- Emotional Intelligence in Leadership
- Employee Motivation
- Employee Recognition
- Employee Recruitment
- Employee Termination Processes
- Employment Interviewing
- Finance for the Non-Financial Leader
- Fostering Accountability in Self and Others
- Front-line Leadership
- Fundamentals for Production: Front-line Leader Tool Set
- Gaining Commitment to Preset Goals
- Generation Gaps
- Generations in the Workplace
- Getting Your Ideas Across
- Goal Setting and Getting Things Done
- Health and Wellness at Work
- High Performance Teams (Non-Remote)
- High Performance Teams (Remote)
- Identifying Training Needs
- Improving Supervisor Effectiveness
- Improving Team Effectiveness
- Influencing Others to Achieve Results
- Influencing Others: Managing Expectations and Outcomes for IT Professionals
- Information Technology Executive and Managerial Skills
- Integrated Risk Management
- Interview Techniques: "The Fact Finding Mission"

# Leadership, Supervisory and Technical Skills (continued)

## **Supervisory & Management (continued)**

- Kepner-Tregoe Decision Making: Structured Problem Solving Techniques
- Knowledge Management
- Leadership and Executive Coaching
- Leadership and Influence
- Leadership and Self-deception
- Leadership Architecture
- Leadership for First-Line Supervisors
- Leadership for IT Professionals
- Leadership, Executive Coaching and Strategy
- Legal Matters for Supervisors
- Maintaining a Positive and Proactive Attitude
- Making the Transition from Co-Worker to Team Leader
- Management and Succession Planning
- Manager Management
- Managing by Metrics
- Managing Change
- Managing Change without Pain
- Managing for Superior Results I: The Fundamentals of Supervision
- Managing in Difficult and Challenging Times
- Managing Individual Performance
- Managing Remote Workers
- Managing Supplier Partnerships
- Managing the Human Dynamics of Change & Transition
- Managing with Metrics
- Market Analysis
- Masterful Leadership and Motivation
- Middle Managers
- Motivating Your Sales Team
- Motivation and Employee Management
- Multi-Generational Teamwork
- Negotiating Skills
- Networking Within the Company
- Office Politics for Managers
- Operations Management
- Performance Management
- Personal Effectiveness through Emotional Intelligence
- Powerful Negotiation Skills
- Powerful Presentations

- Practical Time and Workload Management
- Principles of Supervision and Leadership
- Principles of Workflow Management
- Proactive Listening
- Problem Solving and Decision Making
- Recruitment and Interviewing Techniques for Managers
- Resolving Team Conflicts
- Safety in the Workplace
- Self-Leadership
- Servant Leadership
- Setting of Annual and Quarterly Goal and Action Plans
- Speaking, Image, Crisis
- Strategic Facilitation
- Strategic Leadership for Emerging Leaders
- Strategically Managing the Training Function
- Stress Management
- Supervising Others
- Team Building for Chemistry
- Team Building for Managers
- Team Delegation Skills for the Workplace
- Teambuilding
- Teambuilding Adventure Challenge
- Team-Oriented Problem Solving: Eight Disciplines Workshop
- Teamwork and Team Building
- Technical Leadership for Architects
- Technical Leadership: Business, Strategic, and Operational Value
- The Art and Science of Evaluating Programs
- Time Management
- TSP Coach Training
- Using Positive Influencing Skills in the Workplace
- Value Stream Mapping Walkthrough Project
- Virtual Team Building and Management
- Women in Leadership
- Workplace Diversity
- Workplace Harassment
- Workplace Violence

# **Logistics and Supply Chain Management**

## Certification Preparation Courses

- APICS
- Certified in Production and Inventory Management (CPIM)
- Certified Logistics Associate
- Certified Logistics Technician
- Certified Production Technician:



- Certified Supply Chain Professional
- Manufacturing Skill Standards Council
- The Certified Professional in Supply Management (CPSM)
- The Institute for Supply Management

### **Introduction to Logistics**

- Budgets and Financial Support
- Business Acumen
- Business Ethics Skills
- Business Etiquette
- Business Succession Planning
- Documentation
- Exporting Process
- Geography in Logistics
- Importing and Exporting Flow
- Importing Process
- Interpersonal Skills in Global Logistics
- Logistics Overview
- Managing Personal Finances
- Metric System and Dimensional Weight
- Technology in Logistics
- Trade Agreements



## **Manufacturing and Service Industry Specific**

- Best Practice Process
- Business Process Analysis and Improvement
- Compliance Management in a Global Environment including Conflict Diamond, Lacey Act, etc.
- Developing and Delivering a Successful Business Case or Proposal
- Going Global Successfully
- Just-In-Time Principles and Flow Manufacturing
- Just-In-Time: Supply Chain, Logistics, Inventory and Production
- Manufacturing Resource Planning (MRPII)
- Material Requirements Planning (MRP)
- Risk Management
- Supply Chain Awareness
- The Outsourcing Process
- Total Quality Management
- Understanding Material Requirements Planning
- Value Stream Mapping Supply Logistics, Engineering, Manufacturing and Procurement

# **Logistics and Supply Chain Management (continued)**

## **Materials Management**

- Commodity Management
- Introduction to Materials Management
- Inventory Management and Control
- Just-In-Time: Supply Chain, Logistics, Inventory and Production
- Principles of Purchasing/Supply Management
- Production Planning, Scheduling and Forecasting for Manufacturing and Service Industries
- Quality in Materials Management
- Technology in Materials Management
- Transportation and Logistics
- Warehousing

## **Supply Chain Management Certificate Program**

- Best Practices in Supply Chain Management
- Case Studies in Supply Chain Management
- Materials Management Overview
- Principles of Supply Chain Management
- Supply Chain
- Supply Chain Management The Future and Profit Generation
- Taking the Supply Chain Global
- Technology in Supply Chain Management

## **Supply Management/Purchasing Skill Development**

- Building Safety and Diversity in Supply Base
- Buying Services
- Campus Location and Supplier Communities of Excellence
- Compliance Management
- Contract Management and Administration
- Cross-Docking, Routes and Modes
- Error-Proofing and Supply Chain (RFID, ILS, Bar Code)
- Finance for Supply Professionals
- Freight, Shipping and Tax
- Fundamentals of Purchasing/ Supply Management
- Global Supply Chain: Business and Regulatory Considerations
- International Supply and Demand Foundations
- International Supply Chain Management
- Lead Time Reduction
- Leadership: Buyer and Lead Buyer Best Practices
- Leveraging the Enterprise Resource Planning (ERP)
   Software and Process
- Logistics and Supply Chain

- Logistics: 3rd and 4th Party Solutions and Lead Logistics Providers
- Making Informed Supply Decisions
- Metrics and Indicators for GP & S
- Negotiations in the 21st Century
- Negotiations with Suppliers
- Planning and Implementing a Cost Management Program
- Powerful Negotiation Skills
- Problem Solving, Decision Making, Critical Thinking Development
- Process Innovation and Procurement
- Purchasing Law, Ethics and Social Responsibility
- Scale and Robust Supply Chain Principle
- Stochastic Models and Value Management
- Statement of Work Development
- Strategic Sourcing
- Supplier Certification Process
- Supplier Scorecard: Quality, Cost, Timing, Risk and Innovation Gains
- Supply Base Management
- Supply Chain Management: Process, Methods and Strategy
- Supply Chain Management: Software and Process Excellence
- Supply Chain: Globalization and Localization
- Supply Chain: Risk vs. Lean
- Terms and Cost of Capital
- Total Cost of Ownership and Cost/Price Analysis
- Understanding and Working Successfully with Other Cultures
- Value Analysis and Value Engineering
- Value Stream Mapping Supply Logistics, Engineering, Manufacturing and Procurement
- Volume Discounts and Length of Deal
- World-wide JIT Principles
- Writing Successful Request for Bids and Proposals

## **Non-Profit Management**

- Nonprofit Board Governance
- HIPAA
- Corporate Compliance
- Where are We With Our Policies and Procedures? Why this is Important to Employers and Why Bad Policies (or a Lack of Policies) are Costing You Money?
- Strategic Planning: Current Models,
   Timeframes and Best Practice Approaches
- Effective Grant Writing
- The Art and Science of Evaluating Programs
- Powerful Negotiating Skills
- Thriving in a Time of Change: Tools for Working in a Changing Organization
- Entrepreneurial Spirit: Operational Ownership

- Knowledge Management and Succession Planning
- Managing in Difficult and Challenging Times
- Nonprofit Governance: Trends Among Nonprofit Boards
- Recruitment and Interviewing Techniques for Managers
- Technical Leadership: Business, Strategic and Operational Value



## **Manufacturing Technology and Processes**

#### **Blueprint & GD&T**

- Blue Print Reading
- Blue Print Reading and Schematics and Metrology
- GD&T and Metrology
- GD&T for Design
- Geometric Dimensioning and Tolerancing (GD&T)
- Shop Math and Blueprint Reading

## **Computer Numerical Control (CNC)**

- Basic G code
- Basic M code
- CNC Machine Operation
- CNC Machine Setup
- CNC Programming
- CNC Tooling
- CNC Tube Bending Design
- Computer Literacy
- Manual Lathe
- Manual Mill
- MasterCam
- Siemens CNC-D Series Controls

#### Electrical

- AC/DC Electrical Diagrams, Components, Test Equipment and Troubleshooting
- AC/DC Electronics
- Arc Flash
- Cables and Wires
- Electrical Print Reading
- Electrical Troubleshooting
- Electricity and Electronics Fundamentals
- Electromagnetic Compatibility (EMC)
- Medium Voltage Circuit Breaker Maintenance
- Motor Controls and Relay Logic Circuits
- Optimizing Speed and Feeds
- Power Generation Protective Relay Maintenance
- Power Transmission
- Process Control Fundamentals
- Protective Relay Maintenance
- Smart Grid Power Distribution

#### Hydraulic/Pneumatic

- Automotive Fundamentals
- Fluid Power
- Hydraulics Fundamentals
- Pipefitting
- Pipefitting and Tube Bending
- Pneumatic Gage
- Pneumatics and Hydraulics
- Pneumatics Fundamentals

## **Manufacturing Quality**

- 5S
- CMMI
- Design for Manufacturability (DFM)
- Error Proofing of the Assembly
- Excel for Industry: Developing SPC, GRR, Capability Template, Scrap
- Kanban
- Lean Manufacturing (FMEA)
- Measurement Uncertainty
- Poka Yoke Processes
- Principles of Manufacturing
- Process Optimization
- Quality
- Root Cause Analysis
- Statistical Process Control (SPC)



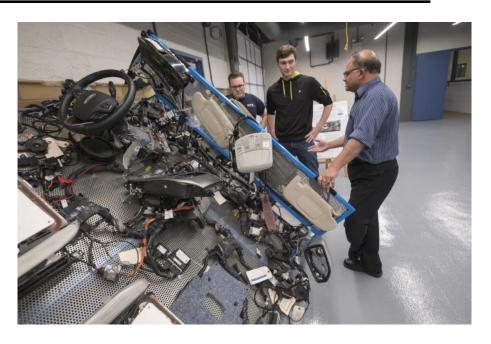
## **Manufacturing Technology and Processes (continued)**

#### Mechanical

- Advanced Precision Measuring Instruments
- Basic Mechanical Concepts
- Boiler Plant Operations and Maintenance
- Conveyor Transfer Systems
- Cranes and Hoists
- Fans and Blowers
- Fork Lift
- Hand Tools
- HVAC/R
- Industrial Vacuum Technology
- Injection Mold Process
- Lubrication Systems
- Machine Tool
- Maintenance and Repair
- Mechanical Systems and Drives
- Mechanical Systems and Drives and Power Transmission
- Mechatronics Curriculum
- Piercing Fixtures
- Precision Measuring Instruments
- Predictive and Preventative Maintenance
- Pump Repair
- Pumps, Seals, Bearings and Lubrication
- Rigging and Machine Leveling
- Rigging and Winch Equipment
- Rigging/Heavy Truck
- Shaft Alignment
- Sheet Metal Fabrication
- Skilled Trades Mathematics
- Thermoforming
- Welding and Certifications

## Millwright Basics Program (400 hrs.)

- AC/DC Electrical Fundamentals
- Basic Industrial Safety
- Basic Shop Math
- Blueprint Reading/Schematics and Metrology
- Fluid Power Fundamentals
- Machine Tool Basics
- Mechanical Drives/Power Transmission
- Rigging, Shaft Alignment and Machine Leveling



Welding and Fabrication Basics

# MSSC Certified Production Technician (CPT) Curriculum

- Maintenance Awareness
- Manufacturing Processes & Production
- Quality Practices & Measurement
- Safety

## **NCCER Trades Training**

- Carpentry
- Construction & Maintenance (Numerous Topics)
- Construction Craft Laborer
- Construction Project Supervision
- Core Curriculum
- Drywall
- Electrical Industrial
- Heavy Equipment Construction
- HVAC
- Industrial Maintenance Mechanic
- Insulation
- Ironworking
- Masonry
- Millwright
- Painting
- Plumbing/Pipefitting
- Sheet Metal

## **Manufacturing Technology and Processes (continued)**

### **PLC**

- PLC and Communication Devices
- PLC, Communication Devices and Power Transmission
- PLC and Control RS Logix 5000
- PLC Fundamentals
- PLC Maintenance and Troubleshooting RSLogix 5000
- PLC Program Design
- PLC Programming Software AB, Siemens, Mitsubishi etc.
- PROFIBUS and NET PRO Introduction
- RS LOGIX5000 and Communications
- Siemens SIMATIC S5 to S7
- Siemens SIMATIC S7 and Communication Devices

- Robotics: Operations and Programming
- Robots Operation: Mechanical and Electrical Troubleshooting
- Robotic or Manual Sealant Applications: Urethane, Adhesive, Foam

## **Process Technology (Oil & Gas)**

- Computer Applications
- Instrumentation Systems
- Pipeline Operations
- Pipeline Production
- Process Systems
- Quality and Safety
- Refining and Petrochemical Industry Equipment

#### **Robotics**

- Fanuc Operations and Spot Tool Programming
- Robotics
- Robotics: Advanced Fanuc
   Operations and
   Programming
- Robotics: Electrical Trouble shooting
- Robotics: Mechanical Troubleshooting



# **Project and Program Management**

## **Microsoft Project Management Tools**

- Microsoft Project 2013, Level 1
- Microsoft Project 2013, Level 2
- Microsoft Project 2016, Level 1
- Microsoft Project 2016, Level 2
- MOC 55054 A Mastering Microsoft Project 2013 (or 2016)
- MOC 55077 A Project Server 2013 Development (or 2016)
- MOC 55107 A Managing Projects with Project Server 2013 (or 2016)

## **PM Certification**

- General Project Management to PMP Certification
- PBA04 PMI Professional in Business Analysis (PMI-PBA) Exam Preparation
- PfMP Exam Prep
- PgMP Exam Prep
- PMI Agile Certified Practitioner Exam Prep
- PMI-RMP Exam Prep
- Preparation for the CAPM Exam
- Preparation for the PMP Exam
- PMI-SP Exam Prep



## **Project and Program Management (continued)**

## **Program and Project Management**

- Applied Project Management with Risk Management
- Breakthrough Planning
- Business Analysis for IT Professionals
- Business Process Modeling Business Process Reengineering
- Construction Project Management
- Continuous Improvement
- Controlling Project Risk: Managing Threats and Promoting Opportunities
- Customer Relationship Management (CRM)
- Defining and Managing User Requirements
- Enterprise Architecture
- Essentials of Program Management
- Essentials of Project Portfolio Management
- Estimating and Cost Control
- Formulating and Controlling Project Requirements
- Function Point Training
- General Project Management to PMP Certification
- Getting Project Results without Authority
- High Quality Business Requirements Information Technology Project Management Innovation and Practical Problem Solving
- Human Resources
- Human Resources, Stakeholder and Communications Management
- Implementing Practical Project Portfolio Management
- Innovation and Practical Problem Solving
- IT Project Management
- Keeping Focus: Building Trust and Accountability
- Leadership Skills for the Project Professional
- Managing a Project with Your Team
- Managing Change Initiatives
- Managing Projects On-Time, On-Budget
- Managing Projects Well
- Manufacturing Project Management
- Negotiating for Results
- Operational Finances
- Organization Development
- People Skills for Project Managers

- PMO and Portfolio Management: Setting Up the Office for Strategic Negotiation & Assertiveness Skills
- Politics of IT Project Management
- Preparation for the CBAP Certification Exam
- Principles of Workflow Management
- Procurement, Contract and Cost Management
- Professional and Career Development
- Program and Project Management
- Program Management Fundamentals
- Project Estimating and Scheduling
- Project Leadership/Team Effectiveness
- Project Management Foundations
- Project Management I Fundamentals
- Project Management and Business Analysis
- Project Management and IT Application Rollout
- Project Management Fundamentals for IT Proiects
- Project Management Institute: Project Management Leadership Skills
- Project Management Leadership Skills
- Project Management Principles and Techniques
- Project Management Professional (PMP) Preparation
- Project Management Skills for the Business Analyst Project Management Managing IT Projects
- Project Planning
- Project Requirements Management
- Project Scope and Risk Management
- Quality Management and Project Integration
- Reach Your Strategic Goals: Getting the Most Out of Projects
- Requirements Analysis
- Rescuing Troubled Projects
- Reviewing Requirements and Design Adequacy
- Risk Assessment and Management
- Risk Management
- Setting and Achieving Metrics and Milestones
- Time Management
- Time Management and Scheduling
- Twenty One Ways to Review Requirements Adequacy
- When Good Projects Go Bad

## **Project and Program Management (continued)**

## **Project Management Advanced**

- Advanced Project Management
- Advanced Project Management for the Experienced Practitioner Controlling Project Risk:
   Managing Threats and Promoting Opportunities Project Scope and Risk Management
- Advanced Project Topics for the Business Manager
- Design and Implementation of the Next Generation PMO Leadership Skills for the Project Professional
- Design of Experiments (DOE 1)
- Emotional Intelligence and Leadership for PMs
- Executive IT Portfolio and Program Management
- Executive's Guide to Project Portfolio Management
- Human Resources, Stakeholder and Communications Management
- Implementing an Agile Project
- Integrated Risk Management
- Managing Change Initiatives
- Managing Projects Well
- Managing SW Projects Using Scrum
- Planning and Managing Agile Projects
- PM25 Tools for Conducting Effective Meetings
- Procurement and Cost Management
- Project Management Boot Camp
- Project Performance Management
- Project Portfolio Management: What Every Executive Must Know
- Project SME Support (strategic, financial, operations)
- Project Team Improvement Using "5 Dysfunctions of Teams" and DISC Approach Teambuilding Training Intervention
- Time Management and Scheduling
- What Project Portfolio Management Can Do for Your Business
- When Good Projects Go Bad: Rescuing Troubled Projects
- Writing Successful Request for Bids and Proposals

### **Project Management Foundations**

- Essentials of Program Management
- Executive IT Portfolio and Program Management
- Getting Project Results without Authority
- Influencing Others to Achieve Results
- Managing a Project with Your Team
- · People Skills for Project Managers
- PgMP Bootcamp
- Portfolio Management
- Project Management 101
- Project Management for Executives
- Project Management Fundamentals
- · Quality Management and Project Integration

### **Project Management Office**

- Design and Implementation of the Next Generation PMO
- PMO and Portfolio Management: Setting Up the Office for Strategic Negotiation & Assertiveness Skills
- Setting Up a New PMO
- The PMO Function

## **Project Portfolio Management**

- Essentials of Project Portfolio Management
- Executive's Guide to Project Portfolio Management
- Implementing Practical Project Portfolio Management
- Project Portfolio Management: What Every Executive Must Know
- Reach Your Strategic Goals: Getting the Most out of Projects
- What Project Portfolio Management Can Do for Your Business

# ISO/Lean/Quality/Six Sigma

#### ISO

- AS 9100-2004 Management Overview
- Implementing AS 9100-2004 Workshop
- Implementing ISO TS 16949-2002 Workshop
- Implementing ISO 9001-2008 Workshop
- Implementing ISO 13485-2003 Workshop
- Implementing ISO 14001-2004 Management Overview
- Implementing ISO 14001-2004 Workshop
- ISO 9001-2000
- ISO 9001 Quality Management System
- ISO 9001-2008 Internal Auditor Workshop
- ISO 9001-2008 Management Overview
- ISO 13485-2003 Management Overview
- ISO 13485 Medical Device Standard
- ISO 14001 Executive Overview
- ISO 14001 Environmental Management System—Responsible Care
- ISO 14001 Environmental Management Systems—Construction Projects
- ISO 14001 Integrating QMS—Automotive

### Industry

- ISO 14001-2004 Internal Auditor Workshop
- ISO 14001-2004 Management Overview
- ISO 16949 Automotive Standards
- ISO 17025 Calibration Laboratories
- ISO 18001 Accident Reduction and Prevention
- ISO 20000 IT Service Management
- ISO 27001 IT Security Techniques
- ISO 29001 Petrochemical Industry
- ISO TS 16949-2002 Internal Auditor Workshop
- ISO TS 16949-2002 Management Overview
- Understanding ISO TS 16949-2002
- Understanding ISO 9001-2008



# ISO/Lean/Quality/Six Sigma (continued)

#### Lean

- 3P's
- 5S
- 5S for Office
- 8 Deadly Wastes
- Advanced Lean: Kaizen
- Autonomous Maintenance
- Business Process Reengineering
- Cost of Poor Quality COPQ
- · Creating Continuous Flow
- Design Thinking
- Heijunka
- Hoshin-Kanri: Aligning Strategy and Operations
- · Implementing pull systems
- Jidoka
- Kaizen
- Kaizen: Conducting a Lean Improvement On-site
- Kanban
- Kata
- Lean Accounting
- Lean Bronze Certification (silver, gold)
- Lean Bronze Test Prep and Lean Foundations
- Lean Engineering
- Lean ERP
- Lean Finance
- Lean Government
- Lean Health Care
- Lean IT
- Lean Management Systems
- Lean Manufacturing
- Lean Marketing
- Lean Maturity Model
- Lean Office and Corporate Assessment
- Lean Overview
- Lean Principles and Tools
- Lean Process and Six Sigma
- Lean Services, Call Center and Banking
- Lean Simulation
- Lean Six Sigma
- Lean Six Sigma Black Belt
- Lean Six Sigma Green Belt
- Lean Six Sigma Yellow Belt
- Lean Tools
- Lean Toolset Overview
- Lean Overview



- Learning to See
- One Piece Flow
- Organization Around Lean: 5S
- SMED/QCO
- Standard work
- Total Productive Maintenance
- TWI Training Within Industry
- Value Stream Mapping

### **Quality Management System**

- AS9100 Internal Auditor
- AS9100 Lead Auditor
- IATF Gap Analysis
- IATF Internal Auditor
- IATF Lead Auditor
- Implementing AS9100
- Implementing IATF 16949
- Implementing ISO14001
- Implementing ISO9001
- ISO9001 Internal Auditing
- ISO9001 Lead Auditor

#### Six Sigma

- Lean and Six Sigma Certification for Sponsors
- Lean Bronze Test Prep and Lean Foundations
- Lean Process and Six Sigma
- Six Sigma Black Belt
- · Six Sigma Green Belt
- Six Sigma Green Belt Project
- Six Sigma Master Black Belt
- Six Sigma Overview
- Six Sigma the Human Side of Lean
- Six Sigma White Belt
- Six Sigma Yellow Belt

# ISO/Lean/Quality/Six Sigma (continued)

### Quality

- 5 S Workshop
- 7 Step Corrective Action Process
- Advanced Product Quality Planning (APQP)
  - How to Workshop
- Advanced Product Quality Planning (APQP)
  - Overview
- Ambiguity Analysis and Design
- Application LM Quality Center v11
- APQP & FMEA for Tooling and Equipment Manufacturing
- APQP, FMEA & Control Plans
- Automotive/Production Core Tools
- Business Improvement Processes
- Capturing Baseline Metrics
- Comprehensive Quality Overview for the Banking Industry
- Continuous Improvement
- Control Planning Workshop
- Control Plans and Planning
- Corrective Action Workshops
- Cost of Quality
- Design FMEA
- Design of Experiments
- Design Verification Plan and Report (DVP&R)
- Developing ST Strategies and Cases
- Effective Problem Solving Corrective Actions, Root Cause Analysis, 8D, 7 Step
- Error Proofing Workshop
- First Piece Inspection
- FMEA Potential Failure Mode and Effects Analysis
- FMEA Workshop
- GDT for Design
- Geometric Dimensioning and Tolerancing (GD&T)
- Introduction to Statistical Process Control
- Measurement Systems Analysis (MSA)
- OHSAS 18001
- Point of Cause: Fishbone Diagram and the "Five Whys"
- PPAP Overview
- Problem Identification and Trouble Shooting
- Process FMEA with Control and Reaction

#### Plans

- Process Improvement Simulation
- Process Mapping Workshop
- Production Part Approval Process (PPAP)
- Quality Assurance and Control
- Quality Assurance Fundamentals
- Quality Function Deployment
- Root Cause Analysis
- Seven Wastes: Identifying and Removing "Muda"
- Special Process Assessment
- Statistical Process Control (SPC)
- Sustainability of Value Capture
- The Capability Maturity Model
- Integrated Value Stream Mapping
- Total Productive Maintenance and Reliability
- Voice of the Customer



## **Sales and Customer Service**

#### **Call Center**

- Call Center Overview
- Call Center Training
- Customer Satisfaction: Excellence in Dealing with Emotional Behavior
- Five Star Customer Service Excellence
- Motivating Your Sales Team
- Negotiating Skills
- Telephone Etiquette
- Telephone Skills for Superior Customer Satisfaction

### **Customer Service**

- Achieving Service Excellence
- Business Ethics Skills
- Business Etiquette
- Communication Strategies
- Conducting a Successful User Needs Analysis
- Connecting with Customers
- Conquering Customer Conflicts
- Customer Satisfaction: Excellence in Dealing with Emotional Behavior
- Customer Service
- Customer Service Excellence Workshop
- Customer Support
- Developing Customer Service Skills with IT Professionals
- Exceptional Customer Service
- Five Star Customer Service Excellence
- Guiding Customer Conversations
- Handling a Difficult Customers
- Handling Challenging Customers Effectively
- Healing the Customer Relationship
- Mastering Service
- Reaching for Stellar Service
- Resolving Issues that Impact the Customer
- Telephone Etiquette
- Telephone Skills for Superior Customer Satisfaction
- The Service Difference
- Voice of the Customer



## <u>Sales</u>

- Budget and Financial Support
- Business Acceleration and Growth Through SPIN Selling
- Business Acumen
- Business Ethics Skills
- Business Etiquette
- Coaching Salespeople
- Collaboration and Negotiation
- Contract Management
- Customer Satisfaction: Excellence in Dealing with Emotional Behavior
- Five Star Customer Service Excellence
- Four-Phase Sales Process
- How to Expand Your Dealer Base & Increase Market Share
- In-person Sales
- Internet Marketing
- Marketing Basics
- Meeting the Unspoken Customer Needs
- Motivating Your Sales Team
- Negotiating for Results
- Overcoming Sale Objectives
- Proposal and Report Writing
- Sales and Customer Service
- Sales Fundamentals
- Sales Training
- Selling and Marketing
- Strategic Selling Skills
- Telephone Etiquette
- Telephone Skills for Superior Customer Satisfaction
- Top 10 Sales Secrets

## **Workplace Skills**



## **Administrative & Office Skills**

- Administrative Office Procedures
- Administrative Support Skills
- Archiving and Records Management
- Basic Bookkeeping Skills
- Effective Meetings
- Event Planning
- Meeting Management
- Meeting Techniques
- Networking Within the Company
- Organizational Skills
- Proposal and Report Writing

## **Agile Development**

- Agile for Business Analysts
- Certified Scrum Developer (CSD)
- Certified Scrum Master (CSM)
- Certified Scrum Product Owner (CSPO)
- Implementing an Agile Project

- Leading SAFe (SA)
- Managing SW Projects Using Scrum
- Managing the Agile Product Development Life Cycle
- Planning and Managing Agile Projects
- Professional Scrum Developer (PSD)
- Professional Scrum Foundations (PSF)
- Professional Scrum Master (PSM)
- Professional Scrum Product Owner (PSPO)
- SAFe Product Owner (SPMPO)
- SAFe Program Consultant (SPC) Training & Certification Course

# **Workplace Skills (continued)**

#### **All Employees**

- Assertiveness and Conflict Resolution
- Building a Constructive Relationship with Your Manager
- Building Collaborative Relationships with Your Peers
- Business Acumen
- Civility in the Workplace
- Conflict Management
- Conflict Management Workshop
- Conquering Stress and Anxiety through Mind/ Body Awareness
- Creative Problem-Solving and Decision-Making
- Critical Thinking and Creative Problem-Solving
- Cultural Competency
- Customer Satisfaction: Excellence in Dealing with Emotional Behavior
- Dealing with Difficult People
- Developing Corporate Behavior
- Digital Citizenship
- Diversity Awareness Workshop
- Effective Problem Solving
- Emotional Intelligence
- Entrepreneurial Spirit: Operational Ownership Establishing Performance
- Five Star Customer Service Excellence
- Front-line Leadership
- Fundamentals for Production: Front-line Leader Tool Set
- Generation Gaps
- Goal Setting and Getting Things Done
- Improving Mindfulness
- Maintaining a Positive and Proactive Attitude
- Managing Skills for Non-Managers
- Managing Workplace Anxiety
- Managing Your Career for Short and Long Term
- Networking Within the Company
- Organizational Skills
- Personal Effectiveness through Emotional Intelligence
- Personal Productivity
- Powerful Presentations
- Practical Time and Workload Management
- Problem Solving and Decision Making

- Public Speaking
- Safety in the Workplace
- Self-Leadership
- Social Intelligence
- Stress Management
- Telephone Etiquette
- Telephone Skills for Superior Customer Satisfaction
- Thriving in a Time of Change: Tools for Working in a Changing Organization
- Thriving on Change
- Time and Stress Management Workshop
- Universal Safety Practices
- Women in Leadership
- Workplace Diversity
- Workplace Harassment
- Workplace Violence

## **Data Modeling**

- Agile Database Design Techniques
- Collaborative Data Modeling Using ER/ Studio and Repository
- Collaborative Data Modeling Using ERwin R9.x
- Data Domains Master Data Management
- Foundations of Data Modeling and Design using ERwin R9.x
- Introduction to Data Modeling
- Introduction to Data Modeling and Design Using Embarcadero ER/Studio
- Introduction to Master Data Management Design

#### **Design Requirements**

- Gathering and Documenting Requirements with Use Cases
- Introduction to UML
- Object-Oriented Analysis & Design with UML
- Domain Analysis and Design using UML UML, OO, Java and RUP Fundamentals
- RUP Overview
- Use Case Workshop

## Workplace Skills (continued)

### **Personal Effectiveness**

- Body Language Skills
- Conflict Management Workshop
- Conquering Stress and Anxiety through Mind/ Body Awareness
- Continuous Improvement for Superior Results
- Corporate Social Responsibility: Influencing Positive Change in You
- Creative Problem-Solving and Decision-Making
- Creative Techniques for the Classroom
- Critical Thinking and Creative Problem-Solving
- Goal Setting and Getting Things Done
- Integrated Business Planning
- Job Search Skills
- Managing Projects On-Time, On-Budget
- Managing Your Career for Short and Long Term
- Personal Effectiveness through Emotional Intelligence
- Practical Time and Workload Management
- Telephone Etiquette
- The Art and Science of Evaluating Programs
- Time and Stress Management Workshop
- Using Social Media

## **Professional & Personal Development**

- Active Listening Skills
- Anger Management Skills
- Assertiveness and Self-Confidence
- Conquering Stress and Anxiety through Mind/ Body Awareness
- Consulting Skills Refresher Sessions
- Corporate Social Responsibility: Influencing Positive Change in You
- Crises Management
- Critical Thinking and Creative Problem-Solving
- Developing Creativity
- Entrepreneurship
- Facilitation Skills for IT Professionals: JAD and Business Requirements
- Goal Setting and Getting Things Done
- Improving Mindfulness
- Increasing Self-Awareness
- Increasing Your Happiness
- Leadership and Influence
- Life Coaching Essentials
- Managing Personal Finances

- Managing Workplace Anxiety
- Managing Your Career for Short and Long Term
- Networking Outside of the Company
- Networking Within the Company
- Personal Productivity
- Self Leadership
- Social Intelligence
- Stress Management
- Telephone Etiquette
- Time and Stress Management Workshop
- Using Social Media
- Women in Leadership

## **Service-Oriented Architecture (SOA)**

- Introduction to SOA and Web Services
- Understanding SOA: A Technical Overview
- SOA Overview for Non-Technical Managers
- SOA Architecture and Design Principles
- Service-Oriented Modeling & Architecture (SOMA)
- SOA Analysis

#### **Social Media for Business**

- Facebook Strategies & Tactics for Business Success
- Google Search Strategies & Tactics for Business Success
- Internet Marketing
- LinkedIn Strategies & Tactics for Business Success
- mLearning
- Social Learning
- Social Media Marketing
- Social Networking Strategies & Tactics for Business Success
- Twitter Strategies & Tactics for Business Success
- Using Social Media
- Writing for the Web and Mobile Devices
- · Writing Strategies for the Web

## Workplace Skills (continued)

#### **Soft Skills**

- 10 Soft Skills You Need
- Active Listening Skills
- Anger Management Skills
- Assertiveness and Self-Confidence
- Body Language Basic Skills
- Business Etiquette
- Conflict Resolution
- Creative Problem Solving
- Crises Management
- Emotional Intelligence
- Improving Mindfulness
- Increasing Self-Awareness
- Interpersonal Skills
- Personal Productivity
- Practical Time and Workload Management
- Seeing and Taking Initiative
- Social Intelligence
- Stress Management
- · Teamwork and Team Building
- Telephone Etiquette
- Time Management
- Work-Life Balance

#### **Technical & Business Writing**

- Advanced Business Writing
- Advanced Workshop for Technical Writers
- Advanced Workshop for Technical Writers
- Business Writing
- Business Writing for Impact and Influence
- Business Writing for Managers
- Collaborative Business
   Writing
- Conducting a Successful User Needs Analysis
- Documenting Business and Technical Requirements
- Practical English Grammar Skills
- Proofreading and Editing
- Proposal and Report Writing
- Proposal and Report

#### Writing

- Proposals with the Competitive Edge
- Proposals with the Competitive Edge
- Technical and Legal Writing
- Technical Writing: Concise and Precise Language, Tone and Format
- · User Guides That Get Used
- Writing Effective Briefing Notes
- Writing for the Web and Mobile Devices
- Writing Strategies for the Web
- Writing Technical Descriptions, Requirements & Procedures
- Writing Technical Information Effectively

### <u>User Interface/User Experience- UI/UX</u>

- Applied Project: UX A-Z with Real Deliverables
- Design Thinking for Mobile Innovation
- Mobile Usability Testing
- Mobile User Research
- UI/UX Interaction Design Intensive
- UI/UX Mobile Design Foundational: Fast Track
- Usability Testing: Desktop (social/web/web app)
- User Research: Desktop (Social/Web/Web App)
- UX Webinars: Special Topics in UX UI/UX



## **Computer and Information Technology**

### **Authorized HP Education:**

## **Authorized VMware**

- H1L98S VMware Center Configuration Manager for Virtual Infrastructure
- H6D01S VMware vSphere: Install, Configure, Manage (V5.5) H6D02S VMware vSphere: Optimize and Scale (V5.5) HL237S VMware vSphere 5.x: Design Workshop
- H6D03S VMware vSphere: Fast Track (V5.5)
   H4S50S vSAN Deploy and Manage [V5.5]
- Management

#### **Blades & ProLiant**

- HE643S: Introduction to HP ProLiant Servers
- HE646S HP BladeSystem Administration
- HK758S HP Virtual Connect
- HP Big Data
- H6C60S Hadoop for Systems Administrators

## **HP Business Analysis**

- HE541S Managing IT Projects
- HE551S Principles of Business Analysis
- HP Cloud Computing
- H0DS3S Docker
- H6C68S Introduction to OpenStack Foundations
- H6LF7S HPE Deep Dive training for Microsoft Azure Stack
- H8Q14S HPE Helion OpenStack

#### **HP Integrity**

HK713S HP Integrity Superdome 2 Administration

#### **HP Networking**

- HOLK65 Deploying the Mobile-First Campus using Aruba OS-Switches
- H4C81S HP FlexNetwork Fundamentals (00870186)
- H8D07S Migrating from Cisco to HPE FlexNetworks
- H8D09S Fast Track for Deploying HP FlexNetwork Comware Technologies
- HL048S IMC Essentials for Network Administrators

#### **HP NonStop**

 U4147S Concepts and Facilities for HP NonStop Systems

#### **HP Storage**

- H9P97S Managing HPE 3PAR
- HK364S HP StoreVirtual 4000 Storage Administration and Configuration
- HK766 Managing HP StoreOnce Backup Solutions (00811836)
- HK902S Managing HP 3PAR StoreServ I
- HK904S Managing HP 3PAR StoreServ II (00776792)
- HK910S HP StoreFabric B-Series Switch Administration
- HK911S HP StoreFabric B-Series Fabric Professional

#### **HP - Unix & Linux**

- 51434S UNIX Fundamentals
- H7091S Linux System Administration I

#### HP-IIX

- H3064S HP-UX System and Network Administration I
- H8P04S HPE Integrity Superdome X Administration



## Business Analysis, Agile/Scrum & DevOps:

### **Agile & Leadership**

- Agile & Leadership Coaching Skills for the Agile Workplace
- Agile for Managers
- Certified Agile Leadership
- Leading to Real Agility

## **BRM**

- Agile for Business Analysts
- Business Relationship Management (BRM)
   Foundation
- Business Relationship Management Professional (BRMP)

### **Business Analysis**

- Business Analysis and Requirements Gathering
- Business Analysis for IT Professionals
- Business Analysis Overview
- Business Analysis: Concepts, Tools and Techniques
- Business Process Analysis
- Consulting Skills for the Business Analyst
- Design and Facilitate Agile Requirements
   Workshops
- Essentials of Business Analysis
- High Quality Business Requirements
- PMI Professional in Business Analysis (PMI-PBA) Exam Preparation Course
- Preparation for the CBAP
- Project Management Skills for the Business Analyst
- Requirements Eliciting
- Writing Effective Business Cases

#### **Data Modeling**

- Advanced Data Modeling Using Erwin R9.7
- Agile Database Design Techniques
- Collaborative Data Modeling Using IDERA ER/ Studio and Repository
- Comprehensive Data Modeling and Design Using Erwin R9.7
- Data Domains Master Data Management
- Data-Driven Decision Making

- Foundations of Data Modeling and Design Using IDERA ER/Studio
- Introduction to Master Data Management Design

### **Design Requirements**

- Gathering and Documenting Requirements with Use Cases
- Introduction to UML
- Object Oriented Analysis & Design with UML
- RUP Overview

## **DevOps & Continuous Integration**

- Continuous Delivery and Integration
- Continuous Deployment in Practice
- Continuous Integration with Jenkins
- Developing Modern Application Architectures with OpenStack
- DevOps Master Certificate Program
- DevOps Continuous Delivery Architect (CDA) Certificate Program
- DevOps Foundation Certificate Program (with Exam)
- DevOps Implementation Boot Camp
- DevOps Professional Certificate Program
- DevOps Test Engineering
- MOC 40500 A: DevOps Workshop Supporting the Microsoft Professional Program

### **DevOps Tools**

- Advanced Git
- Ansible
- Chef
- Comprehensive JIRA
- Docker
- Effective DevOps with Ansible, AWS and Docker
- Introduction to Git and GitHub
- Kubernetes Administration
- OpenShift Enterprise Administration
- Puppet

## Business Analysis, Agile/Scrum & DevOps (continued):

#### Kanban

- Kanban Management Professional (KMP II)
- Kanban System Design (KMP I)
- Team Kanban Practitioner (TKP)

#### <u>SAFe</u>

- Leading SAFe Certification
- SAFe for Teams
- Scaled Agile: Leading SAFe 4.5 with SA Certification

## **Scrum Development**

- Advanced Certified ScrumMaster (A-CSM)
- Agile Scrum Developer
- Agile Scrum Foundation Certificate Program
- Certified Scrum Developer (CSD)
- Certified Scrum Product Owner (CSPO)
- Certified ScrumMaster (CSM)
- Compelling Communication
- Introduction to Agile and Scrum
- Professional Scrum Developer (PSD)
- Professional Scrum Foundations (PSF)
- Professional Scrum Master (PSM)
- Professional Scrum Product Owner (PSPO)
- Writing Product Backlog Items

# <u>Service Oriented Architecture (SOA)</u>

- Service Oriented Architecture and Web Services
- Service-Oriented Architecture SOA Analysis
- Service-Oriented Modeling & Architecture (SOMA)
- SOA Architecture and Design Principles
- SOA Overview for Non-Technical Managers

Understanding SOA: A Technical Overview

## User Interface/User Experience- UI/UX

- Applied Project- UX A-Z
- Design Thinking for Mobile Innovation
- Mobile Usability Testing
- Mobile User Research
- UI/ UX Mobile Design Foundational
- UI/UX Foundational
- UI/UX Interaction Design Intensive
- Usability Testing- Desktop (Social/Web/Web App)
- User Research- Desktop (Social/Web/Web App)
- UX Webinars: Special Topics in UX



## Cisco, TCP/IP & Networking Technologies:

### **Cisco Routing & Switching**

- CCNP Bootcamp (ROUTE, SWITCH, and TSHOOT)
- Configuring BGP on Cisco Routers v4.0 (BGP)
- Implementing Cisco IP Routing v2.0 (ROUTE)
- Implementing Cisco IP Switched Networks v2.0 (SWITCH)
- Implementing Cisco MPLS v3.0 (MPLS)
- Interconnecting Cisco Networking Devices Accelerated 3.0 (CCNAX)
- Interconnecting Cisco Networking Devices Part 1v3.0 (ICND 1)
- Interconnecting Cisco Networking Devices Part 2 v3.0 (ICND 2)
- Troubleshooting and Maintaining Cisco IP Networks (TSHOOT)

#### **Cisco Contact Center**

- Administering Packaged Contact Center Enterprise 10 (APCCE)
- Administering Unified Contact Center Enterprise Part 1 v10.x (AUCCE 1)
- Administering Unified Contact Center Enterprise Part 2 v10.x (AUCCE 2)
- Advanced Contact Center Express Scripting Labs v11.0 (ACCXSL)
- Cisco Contact Center Enterprise Fundamentals (CCCEF)
- CVP Development and Scripting (CVPDS Part 1)
- CVP Development and Scripting (CVPDS Part 2)
- Deploying Cisco Unified Contact Center Express v4.0 (UCCXD)
- Deploying Unified Contact Center Enterprise v10 (DUCCE)

#### **Cisco Unified Communications**

 Administering Cisco UC Mgr and Unity Connection v8 w/AUC (ACUCM)

- Adv. Administration for Unified Communications Manager and Features (AAUCMF)
- Cisco Meeting Server 1 (CMS1) / Acano Certified Expert Training 1 (ACE1)
- Implementing Cisco Collaboration Devices (CICD)
- Implementing Cisco Emergency Responder 9.0 (ICER)
- Implementing Cisco IP Telephony & Video, Part 1v1.0 (CIPTV 1)
- Implementing Cisco IP Telephony & Video, Part 2 v1.0 (CIPTV 2)
- Implementing Cisco Quality of Service v2.5 (QoS)
- QOS Implementing Cisco Quality of Service 2.5
- SIP 1.0 Trunk Operations (SIPTO)
- Troubleshooting Cisco IP Telephony & Video v1.0 (CTCOLLAB)

## **Cisco Security**

- ASA Essentials v3.0 (ASAE)
- Implementing Advanced Cisco ASA Security (SASAA)
- Implementing and Configuring Cisco Identity Services Engine (SISE)
- Implementing Cisco Cybersecurity Operations (SECOPS)
- Implementing Cisco Edge Network Security Solutions v1.0 (SENSS)
- Implementing Cisco IOS Network Security v3.0 (IINS)
- Implementing Cisco Secure Access Solutions v1.0 (SISAS)
- Implementing Cisco Secure Mobility Solutions v1.0 (SIMOS)
- Implementing Cisco Threat Control Solutions (SITCS)
- Implementing Core Cisco ASA Security (SASAC)
- Understanding Cisco Cybersecurity Fundamentals (SECFND)

## Cisco, TCP/IP & Networking Technologies (continued):

#### **Cisco Data Center & Storage**

- ACI Field Engineer Implementation (ACI-FEI)
- ACI Operations & Troubleshooting Bootcamp (ACI OT BC)
- Configuring Cisco Nexus 9000 Series Switches in ACI Mode v2.0 (DCAC9K)
- Implementing Cisco Data Center Infrastructure (CDII)
- Implementing Cisco Data Center Unified Computing v6.0 (DCUCI)
- Introducing Cisco Data Center Networking v6.1 (DCICN)
- Introducing Cisco Data Center Technologies v6.1 (DCICT)

## **Cisco Wireless**

- Cisco UWN Bootcamp: Deploying Cisco Wireless LANs (CUWNBC)
- Deploying Cisco Wireless Enterprise Networks (WIDEPLOY)
- Implementing Cisco Wireless Network Fundamentals v.1 (WIFUND)
- Managing Cisco Wireless LANs v1.2 (WMNGI)
- Managing Enterprise Networks with Cisco Prime Infrastructure v3.1 (NMENPI)

## Cisco Video

- Cisco Video Infrastructure Implementation (VII)
- Implementing Cisco Video Network Devices, Part 1 & 2 (CIVND 2)

## **Certified Juniper**

- Advanced Junos Enterprise Routing (AJER)
- Advanced Junos Enterprise Switching (AJEX)
- Advanced Junos Security (AJSEC)
- Advanced Junos Service Provider Routing (AJSPR)
- Juniper Introduction to the Junos Operating System (IJOS)
- Juniper Junos Intermediate Routing (JIR)
- Juniper Networks Certified Professional Enterprise Routing & Switching Bootcamp,
   AJER & AJEX

- Juniper Networks Certified Specialist Enterprise Routing and Switching Bundle, JIR and JEX (JNCIS-ENT)
- Junos Enterprise Switching (JEX)
- Junos Layer 3 VPNs (JL3V)
- Junos MPLS Fundamentals (JMF)
- Junos Security (JSEC)
- Junos Service Provider Switching (JSPX)

#### **EC-Council**

- EC-Council Certified Encryption Specialist (ECES)
- EC-Council Certified Incident Handler (ECIH)
- EC-Council Certified Network Defense Architect (CNDA)
- EC-Council Certified Secure Computer User (CSCU)
- EC-Council Certified Secure Programmer
- EC-Council Certified Secure Programmer Java (ECSP)
- IEC-Council Certified Security Analyst (ECSA)
- EC-Council Chief Information Security Officer (CCISO)
- EC-Council Computer Hacking Forensic Investigator Certification v9 (CHFI)
- IEC-Council Disaster Recovery Professional (EDRP)



## Cisco, TCP/IP & Networking Technologies (continued):

## **F5**

- F5 Networks Administering BIG-IP v12 or v13
- F5 Networks Configuring BIG-IP AFM v12: Advanced Firewall Manager
- F5 Networks Configuring BIG-IP AFM v13: Advanced Firewall Manager
- F5 Networks Configuring BIG-IP APM v12: Access Policy Manager
- F5 Networks Configuring BIG-IP ASM v13: Application Security Manager
- F5 Networks Configuring BIG-IP DNS v12: Domain Name System
- F5 Networks Configuring BIG-IP LTM: Local Traffic Manager
- F5 Networks Troubleshooting BIG-IP LTM v12

## **Hacking**

Advanced Hacker Methodologies for Security Professionals

- Hacker Methodologies for Security Professionals
- Hacking with Python

## **Palo Alto**

- Palo Alto Traps 4.0: Deploy and Optimize (EDU-285)
- Palo Alto Traps 4.0: Install, Configure, and Manage (EDU-281)

## TCP/IP & VOIP

- Advanced Enterprise TCP/IP
- Advanced IPv6 Migration
- Introduction to Enterprise TCP/IP
- Introduction to IPv6
- TCP/IP Networking Concepts and z/OS Configuration



## **Cybersecurity:**

#### **OS Security**

- System Forensics for Incident Responders
- Understanding Operating Systems

### Cybersecurity

- CCSP Certification Prep Course
- Certified Authorization Professional (CAP)
- CISSP Certification Prep Course
- CSSLP Certification Prep Course
- Cyber Intelligence Training
- Data Privacy and Cyber Security Program Considerations
- Enterprise Wi-Fi Security (CWSP)
- HCISPP Certification Prep Course
- Introduction to Secure Sockets Layer
- Introduction to Cyber Security
- RESILIA® Foundation
- SSCP Certification Prep Course
- Wireless LAN Administration (CWNA)

#### **EC-Council**

 EC-Council Certified Ethical Hacker (CEHv10)

### **IT Auditing**

- Applying the NIST Risk Management Framework
- Conquering the Risk Universe Imple-

- menting the ISACA IT Risk Framework
- Information Security Essential for Auditors
- ISACA Certification Review: CRISC
- ISACA Certification Review: CISA
- ISACA Certification Review: CISM
- Looking Within: Refining the Audit Process

## **Malware Analysis**

- Advanced Malware Analysis
- Malware Analysis: Assembly for Reverse Engineers
- Malware Analysis: Behavioral Malware Analysis
- Malware Analysis: Malware Reverse Engineering

## **Mobile Security**

- · Android Attack & Defend
- Apple iOS Attack and Defend
- · Securing Mobile/Wireless Technology

#### **Network Threats**

- Advanced Network Traffic Analysis
- Cyber Threat Detection and Mitigation
- Malicious Network Traffic Analysis
- Network Traffic Analysis
- Python for Network Defenders



## **Databases & Business Intelligence:**

## **Big Data**

- Advanced Hadoop for Developers
- Big Data Foundation Certification
- Big Data Overview
- Hadoop for Administrators
- Hadoop for Business Analysts
- Hadoop for Developers
- HDP Administration Fast Track
- NoSQL for Developers (Cassandra)
- NoSQL for Developers (Hbase)

### Cognos

- Advanced Reporting on the Web (Report Studio) with IBM Cognos 10
- Advanced Reporting with IBM Cognos Analytics
- Analysis on the Web IBM Cognos 10
- Creating Reports from Multidimensional Data (Report Studio) with IBM Cognos 10
- Data Modeling with IBM Cognos 10 Framework Manager
- IBM Cognos 10 Creating Data Models with Transformer
- Introduction to Active Reports IBM Cognos 10
- Introduction to IBM Cognos 10 Business Insight
- Introduction to IBM Cognos 10 Business Insight Advanced
- Introduction to Reporting in Cognos Analytics
- Queries on the Web IBM Cognos 10
- What's New with IBM Cognos 10

## **Data Mining & Data Warehousing**

- Applied AI & Machine Learning Comprehensive Experience
- Applied AI & Machine Learning Design
- Applied AI & Machine Learning Development
- Designing the Data Warehouse
- Implementing Data Warehousing and ODS
- Introduction To Data Mining
- Introduction to Data Warehousing
- Predictive Analytics & Data Mining Strategic Implementation
- Predictive Analytics & Data Mining: Model Development
- The Data Warehouse ETL Toolkit

## **Data Science**

- Advancing the Analytics-Driven Organization
- Apache Spark for Developers
- Comprehensive Apache Spark 2.3 for Machine Learning and Data Science
- Comprehensive Programming for Apache Spark 2.3
- Data Analytics with R Programming
- Deep Learning Overview
- Deep Learning Theory: Hands-on Intro with TensorFlow and Keras
- Elements of Machine Learning With Spark and Python
- ELK and X-Pack
- Introduction to Data Analytics with Access
  Outline
- Making Data Science Pay
- MOC 20773 A: Analyzing Big Data with Microsoft R
- MOC 20774 A: Perform Cloud Data Science with Azure Machine Learning
- MOC 20775 A: Performing Data Engineering on Microsoft HD Insight
- Python 3.x for Engineers and Data Scientists
- Python v3 for Scientists
- Scala Fundamentals
- Solr for Developers

#### **Db2 for LUW**

- Db2 11.1 Administration Workshop for Linux (CL206G)
- Db2 Concepts and SQL for Mainframe & LUW
- Db2 LUW 11.1 New Features and Database Migration (CL315G)

# **Databases & Business Intelligence (continued):**

#### Db2 for z/OS

- Db2 11 for z/OS New Features
- Db2 Advanced SQL with Performance and Tuning for Programmers
- Db2 Application Programming and Design 11
- Db2 Concepts and Facilities
- Db2 for z/OS Database Administration
- Db2 SQL Stored Procedure Language
- QMF Query Management Facility

#### <u>Informatica</u>

- Informatica B2B Training: Data Exchange, Developer
- Informatica B2B: Data Transformation, Developer
- Informatica Business Glossary Training
- Informatica Data Integration Hub Developer 9.6
- Informatica Data Quality 9.x: Developer, Level 1
- Informatica Developer Tool 10.1: Big Data Management
- Informatica Metadata Manager 9.6
- Informatica PowerCenter 10: Administration
- Informatica PowerCenter 9.x/10.x: Developer, Level 1

- Informatica PowerCenter 9.x/10.x: Developer, Level 2
- Informatica PowerCenter Training Bootcamp
- Informatica PowerExchange Basics

## **Informix**

- Advanced Informix Performance Tuning
- Designing, Developing & Optimizing IBM Informix Databases
- Informix Enterprise Replication
- Informix for Database Administrators

#### <u>InfoSphere</u>

- IBM InfoSphere DataStage Advanced Training
- IBM InfoSphere DataStage Intermediate Training
- IBM InfoSphere DataStage Introduction Training
- IBM InfoSphere Info Governance Catalog v11.5: Building the Governance Catalog

#### <u>loT</u>

- Getting Started with the Internet of Things, AI & Machine Learning
- Internet of Things Foundation
- Leading the IoT Revolution



## **Databases & Business Intelligence (continued):**

#### Microsoft BI and Data Science

- MOC 10988 C: Managing SQL Business Intelligence Operations
- MOC 10994 B: Data Analysis Fundamentals using Excel
- MOC 20466 D: Implementing Data Modelsand Reports with Microsoft SQL Server
- MOC 20467 D: Designing Business Intelligence Solutions with MS SQL Server 2014
- MOC 20768 C: Developing SQL Data Models
- MOC 20778 B: Analyzing Data with Power BI
- MOC 20779 B: Analyzing Data with Excel
- MOC 55045 A Microsoft SharePoint 2013 Endto-End BI Bootcamp
- MOC 55049 A: PowerPivot, Power View, and SharePoint 2013 BI Center for Analysts
- MOC 55057 A SharePoint 2013 Performance-Point Services
- MOC 55120 A Quick Microsoft SQL Server 2012
   -2014 Integration Services
- MOC 55123 AC Writing Reports with Report Builder and SSRS Level 1
- MOC 55128 AC Writing Reports with Report Builder and SSRS Level 2
- MOC 55157 A: SharePoint 2016 Business Intelligence
- MOC 55158 A SharePoint 2013 Business Intelligence
- MOC 55163 A Data Modeling with SQL BISM Tabular Mode
- MOC 55164 A Quick Powerful Graphics with Power View, PowerPivot, Power Query, Power Map and Power BI
- MOC 55170 A Writing Reports with Report Designer and SSRS 2016 Level 2
- MOC 55198 A: MS SharePoint Server Content Mgmt for SharePoint 2013 & 2016
- MOC 55204 AC Writing Reports with Report Designer and SSRS Level 1



- MOC 55236 A: Writing Reports with Report Builder and SSRS Level 3
- MOC 55240 A: Writing Reports with Report Designer and SSRS Level 3

## Microsoft SQL Server Data Platform

- MOC 10986 B: Updating
   Your Skills to SQL Server 2016
- MOC 10998 A: Updating Your Skills to SQL Server 2017
- MOC 10999 A: SQL Server on Linux
- MOC 20761 C: Querying Data with Transact-SQL
- MOC 20762 C: Developing SQL Databases
- MOC 20764 C: Administering an SQL Database Infrastructure
- MOC 20765 C: Provisioning SQL Databases
- MOC 20767 C: Implementing a SQL Data Warehouse
- MOC 40074 A Microsoft SQL Server 2014 for Oracle DBAs
- MOC 40510 B: Microsoft Cloud Workshop: SQL Server Hybrid Cloud
- MOC 55246 A: SQL 2016 AlwaysOn High Availability

## **MicroStrategy**

- MicroStrategy Architect Advanced Project Design Training
- MicroStrategy Engine Essentials Training
- MicroStrategy Training: Advanced Data Warehousing
- MicroStrategy Training: Freeform SQL Essentials
- MicroStrategy Training: Report Services Dynamic Dashboards

# **Databases & Business Intelligence (continued):**

## **Oracle Administration**

- Advanced Oracle BI Repositories
- Mastering Automatic Storage Management (ASM)
- Oracle 12c Data Guard
- Oracle 18c DBA I (3 Day)
- Oracle 18c DBA I (5 Day)
- Oracle BI 11g: Create Analyses & Dashboards
- Oracle Database 12c New Features Part 1:
   Manage the Multitenant Architecture
- Oracle Database 12c: Administration Workshop
- Oracle Database 12c: Architecture
- Oracle Database 12c: Backup & Recovery Workshop
- Oracle Database 12c: Install & Upgrade Workshop
- Oracle Database 12c: Resource Manager & Scheduler
- Oracle Enterprise Manager 12c Cloud Control: Install & Upgrade Workshop
- Oracle Fusion Middleware 11g: WebLogic & BI Server Architecture & Installation
- Oracle Grid Control: Implementation & Administration
- Oracle on VMware Infrastructure and Implementation for Administrators
- Oracle Privacy Security Auditing
- Oracle Virtualization & Linux Administration QuickStart
- Oracle VM for Administrators
- Oracle VM Server for SPARC Administration
- Performance Tuning Oracle and RAC on Linux & UNIX
- Performance Tuning Oracle and RAC on Windows

#### **Oracle BI & Hyperion**

- Build Repositories for OBIEE
- Create Analyses And Dashboards using OBI-FF
- Designing Advanced Dashboards Using Hyperion Dashboard Studio
- Designing Advanced Queries and Reports

- for Hyperion
- Designing Dashboards Using Dashboard Builder
- Designing Dashboards Using Hyperion and Javascript
- Designing Queries and Reports for Hyperion
- Hyperion Reporting and Analysis Administration
- Hyperion SQR Production Reporting
- OBIEE 12c
- OBIEE Dashboard Fundamentals

## **Oracle Programming**

- Advanced Oracle SQL Tuning Tips and Techniques
- Advanced PL/SQL Tips and Techniques
- Introduction to Oracle using TOAD
- Oracle 18c PL/SQL
- Oracle Application Express v5.0
- Oracle Database 12c: Architecture & Internals
- Oracle Database 12c: PL/SQL I Introduction
- Oracle Database 12c: PL/SQL II Intermediate
- Oracle Database 12c: PL/SQL III Advanced Programming & Tuning
- Oracle Database 12c: SQL I Introduction
- Oracle Database12c: SOL II Intermediate
- Oracle SQL Tuning and Troubleshooting Techniques
- Oracle18c SQL

## **Databases & Business Intelligence (continued):**

#### **SAP Business Objects**

- Crystal Reports 2016: Part 1
- Crystal Reports 2016: Part 2
- MOC 55118 A Creating Report with SAP Crystal Reportsfor Developer with VS
- SAP BusinessObjects 4.x: Administration Bootcamp
- SAP BusinessObjects 4.x: Universe Design Tool (UDT)
- WebIntelligence 4.x: Advanced Reporting
- WebIntelligence 4.x: Intermediate Reporting
- WebIntelligence 4.x: Rich Client Reporting
- WebIntelligence 4.x: Basic Reporting

#### **SAP Technical**

- SAP Sales and Distribution
- SAP FICO
- SAP Security
- SAP Logistics with material management
- SAP Human Capital Management
- SAP Plant Maintenance
- SAP HANA
- SAP CRM

#### **SAS**

- Advanced Enterprise Guide
- Advanced SAS Programming with PROC SQL
- Generating Reports with the SAS System
- Introduction to SAS Programming With PROC SQL
- Introduction to the SAS Enterprise Guide 3.0
- Introduction to The SAS Macro Facility
- Manipulating Data with SAS Functions and Arrays
- SAS Business Intelligence Courses: Fast Track
- SAS I: Introduction to the SAS System
- SAS II: Data Manipulation With the SAS System
- SAS III: Accelerated and Efficient Programming Techniques

#### Splunk

- Advanced Splunk User
- Splunk Administration
- Splunk Data Onboarding
- Splunk Developer
- Splunk User

#### **SQL**

- Advanced SQL
- Intermediate SQL
- SQL Basics

#### Tableau

- Tableau Desktop Advanced
- Tableau Desktop Advanced Bootcamp
- Tableau Desktop Bootcamp
- Tableau Desktop Fundamentals
- Tableau Desktop II: Intermediate
- Tableau Server Administration Training
- Tableau Server Architecture Training
- Tableau Server Training: Essentials

#### Teradata

- Teradata Basics
- Teradata Database Administration
- Teradata SQL



# Front-End Web & Mobile Development:

#### **Angular**

- Advanced Angular 6
- Advanced AngularJS
- Comprehensive Angular 6
- Comprehensive AngularJS
- Introduction to Angular 6
- Introduction to AngularJS

#### HTML5 & JavaScript

- Advanced JavaScript
- Advanced Modern Web Development
- Advanced Node and React: Building a Secured SPA using REST APIs
- Comprehensive ColdFusion
- Core Backbone.js
- Dojo Development
- Ember.js Essentials
- Grunt.js Essentials
- HTML5 Bootcamp
- HTML5 Overview
- HTML5/CSS3/JavaScript Programming
- Introduction to Google Web Toolkit Training
- Introduction to JavaScript
- Introduction to Node.js
- Introduction to React
- Introduction to Vue.js
- jQuery
- Mastering Web Development using HTML5, CSS3, and jQuery
- Node.js / MEAN End-to-End Web Development
- Test Driven Development Using React.js and ES6

#### **Mobile Development**

- Advanced iOS Training with iOS 9
- Android Bootcamp
- Android Essentials
- Android Internals
- Android Overview
- Android Security
- Android Testing
- Functional Programming in Swift: Thinking Functionally in Swift 4.0



- Intro to iPhone & iPad Development w/ iOS11, Xcode 9 .x , Objective C 2, & Swift 4
- Ionic 2
- jQuery Mobile
- QA for Android OS
- Swifty iOS 11: Idiomatic iOS 11 Development with Swift 4
- · Testing for iOS Apps

#### PHP & MySQL

- Intermediate PHP & MySQL
- Introduction to PHP
- Introduction to PHP & MySQL for Non Programmers
- Tuning MySQL for High Performance

## **Python**

- Advanced Python
- Django Boot Camp
- Intermediate Python 2.x
- Intermediate Python 3.x
- Introduction to Python 2.x
- Introduction to Python 3.x
- Pro Django
- Python For Data Analysis
- Python Fundamentals 3.x

#### **Ruby & Rails**

- Advanced Rails
- Introduction to Ruby on Rails
- Ruby

# Help Desk, Apple and CompTIA:

## <u>Apple</u>

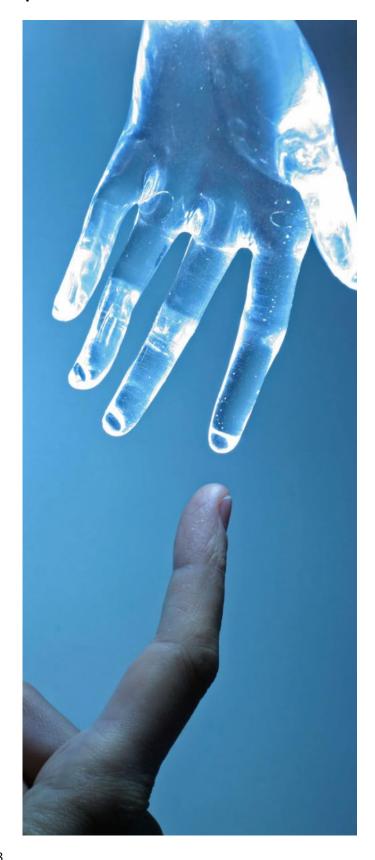
- Certified Wireless Technology Specialist (CWTS)
- Command Line for Mac OS X (CLI201)
- iOS Deployment Essentials
- iOS Deployment Workshop
- iOS Network Integration Workshop
- iOS Security and Privacy Workshop
- Mac Integration Basics 10.12
- macOS Server Essentials 10.13 (High Sierra 201)
- macOS Support and Server Essentials 10.13 (High Sierra 101 and 201)
- macOS Support Essentials 10.12 (Sierra 101)
- macOS Support Essentials 10.12 Exam
- macOS Support Essentials 10.13 (High Sierra 101)
- Managing Apple Devices 3.0
- Mobile Device Manager & Profile Manager (Lion 303)

#### CompTIA

- CompTIA A+ Certification: Comprehensive Approach (Exams 220-901 & 220-902)
- CompTIA Advanced Security Practitioner (CASP) (Exam CAS-002)
- CompTIA Cloud Essentials
- CompTIA Cybersecurity Analyst+ (CySA+)
- CompTIA Linux+ Powered by LPI (Exams LX0-103 and LX0-104)
- CompTIA Linux+ Powered by LPI (Exams LX0-103 and LX0 104)
- CompTIA Network+
- CompTIA Security+
- CompTIA Server+ Certification

### **Help Desk/Support**

- Call Center Technical Support Specialists Best Practices
- Customer Support Agent
- Support Operations Manager
- Support Operations Team LeadTier 1 Support Specialist



# **IBM Mainframe & Midrange:**

#### **Assembler**

- Advanced Assembler Language
- Intermediate Assembler Language
- Introduction to Assembler Language

#### CICS

- CICS/TS Advanced Application Programming Workshop
- CICS/TS Command Level Programming
- CICS/TS for System Programmers
- CICS/TS Internals and Workshop
- CICS/TS Structure & Problem Analysis

#### **COBOL**

- Advanced COBOL Programming
- COBOL Application Programming

#### **Easytrieve**

Introduction to Easytrieve Plus

#### <u>i5/OS & AS/400</u>

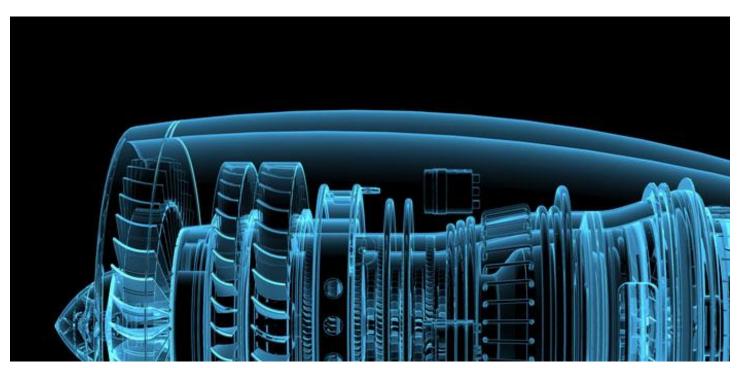
- IBM i (AS/400) Concepts and Facilities
- IBM i (AS/400) Concepts with Control Language
- IBM i (AS/400) System Operations Work-

#### shop

- IBM i (AS/400, iSeries) Expanded Operations Workshop
- IBM i (iSeries AS/400) Administration & Control
- IBM i (iSeries AS/400) Expanded Security Workshop
- IBM i (iSeries, AS/400) ILE Control Language Programming Workshop
- IBM i (iSeries, AS/400) QAUDJRN Auditing and Forensic Analysis Workshop
- IBM i (iSeries, AS/400) Security Audit and Vulnerability Assessment Workshop
- IBM i Defense Security and Recovery

#### **IMS**

- Advanced IMS Programming
- IMS Basic Programming Techniques
- IMS Teleprocessing Techniques





# **Mainframe Operations:**

## **Mainframe Operations**

- CICS/TS Concepts and Commands for Operations
- IMS Operator Training
- JES2 Operation
- JES3 Operation
- NetView for Operators
- VTAM Facilities and Operations
- z/OS Systems Operations

#### **REXX**

- Advanced REXX Programming
- Comprehensive REXX Programming for z/OS
- Intro to Rexx Programming
- ISPF Dialog Development

#### **VSAM**

- Introduction to VSAM
- VSAM COBOL Programming
- VSAM KSDS Performance and Tuning
- VSAM Structure & Design
- VSAM/IDCAMS Utility
- z/OS Core Skills
- Advanced MVS JCL and Utilities
- Introduction to TSO/ISPF
- Mainframe Developer Bootcamp
- MVS JCL Workshop
- MVS Skill Pack for z/OS (TSO/ISPF & JCL)
- z/OS UNIX Systems Services Introduction
- Performance Management using TMON/MVS
- Understanding Workload Manager (WLM)
- WLM GOAL Mode Migration

- z/OS Performance Tuning and Control with WLM
- z/OS WLM and Workload Licensing Changes

#### z/OS Security

- CA-ACF2 Basics
- CA-ACF2 CICS/TS Interface
- RACF Administration

#### z/OS Systems Programming

- HCD and IODF Fundamentals
- Parallel Sysplex Advanced Operations & Recovery
- \Parallel Sysplex Setup and Operation
- SMP/E Fundamentals
- z/OS Advanced Internals
- z/OS Architectural Changes
- z/OS Diagnostics and Debugging
- z/OS Installation
- z/OS Internals Bootcamp
- z/OS Operational Changes
- z/OS Parallel Sysplex Concepts for System Programmers
- z/OS Systems Programmer Bootcamp
- z/OS Technical Bootcamp
- z/OS Systems Programming
- z/OS UNIX Systems Services Implementation

## z/VM & Linux on System z

- z/VM and zLINUX Operations Workshop
- z/VM Systems Programming Workshop

# **IT Service Management Tools:**

#### **BMC Control**

- Introduction to Control-D
- Introduction to Control-M & Control-M/ Restart
- Introduction to Control-M Workload Automation

## CA OPS/MVS

- CA-Automation Point Notification Manager Essentials
- Constructing CA-OPS/MVS Applications
- Installing and Unleashing CA-Automation Point
- Installing CA-OPS/MVS
- Operating CA-OPS/MVS
- Securing CA-OPS/MVS
- Understanding & Using CA-OPS/MVS
- Understanding CA-OPS/MVS RDF & SSM

#### **CA-Operations Management**

- CA AutoSys Workload Automation r11 Fundamentals
- CA AutoSys Workload Automation r11.3
   Upgrade Readiness
- CA Output Management for End-users
- CA-1 Operations Overview
- CA-7 Operations Workshop
- CA-Deliver Administration
- CA-Jobtrac Concepts and Facilities
- CA-SYSVIEW Performance Mgt 15: Realtime Performance Monitoring 200
- CA-View Administration
- Exploiting SYSVIEW and GSS using REXX
- IMOD Processing and REXX Processing in SYSVIEW
- Unicenter NetMaster Network Management for TCP/IP

#### **IBM Tivoli**

- Introduction to Tivoli NetView Pipes
- Operating SA z/OS Managed Systems
- Tivoli System Automation for z/OS Essentials

#### **Symantec**

- Blue Coat Secure Sockets Layer Visibility (SSLv)
- ProxySG 6.6 Advanced Administration
- ProxySG 6.6 Basic Administration
- Symantec Advanced Threat Protection 2.x: Incident Response
- Symantec Altiris Asset Management Suite 7.1 Administration
- Symantec CloudSOC R1
- Symantec Content Analysis 2.x: Administration
- Symantec Control Compliance Suite 11.0: Administration (3 Day)
- Symantec Control Compliance Suite 11.0: Module Course Options
- Symantec Cyber Security Services Administration R1
- Symantec Data Center Security: Server Advanced 6.7 Administration
- Symantec Data Loss Prevention 15.0 Administration
- Symantec Deployment Solution 8.1: Administration
- Symantec Encryption Management Server 3.3 and Desktop 10.3: Install, Configure, and Deploy
- Symantec Endpoint Encryption 11.0.1: Install, Configure, and Deploy
- Symantec Endpoint Protection 14.x: Configure and Protect
- Symantec Endpoint Protection 14.x: Manage and Administer
- Symantec Endpoint Protection 14: Maintain and Troubleshoot
- Symantec Endpoint Protection 14: Plan and Implement
- Symantec Ghost Solution Suite 3.0: Administration
- Symantec IT Management Suite 8.1: Administration
- Symantec IT Management Suite 8.1: Administration
- Symantec Messaging Gateway 10.6: Administration
- Symantec Security Analytics 7.2.x Professional
- Symantec Validation and Identity Protection Service v1
- Symantec VIP Access Manager R1

# **IT Service Management Tools (continued):**

# **Veritas**

- Legal Discovery Using Veritas Enterprise Vault 12.2 Discovery Accelerator
- Veritas Backup Exec 16: Administration
- Veritas Data Insight 6.1: Administration
- Veritas eDiscovery Platform 8.2: For Administrators
- Veritas eDiscovery Platform 8.2: For Users
- Veritas Enterprise Vault 12.x: Administration 1
- Veritas Enterprise Vault 12.x: Implementation and Deployment
- Veritas InfoScale 7.3 Fundamentals for UNIX/Linux: Administration
- Veritas InfoScale Availability 7.3 for UNIX/ Linux: Administration

- Veritas InfoScale Storage 7.3 for UNIX/Linux: Administration
- Veritas NetBackup 8.0: Advanced Administration
- Veritas NetBackup 8.0: Maintenance and Troubleshooting
- Veritas NetBackup 8.1: Administration
- Veritas NetBackup Appliances 2.7.x: Configuration and Management



# ITIL, Governance and IT Service Management:

#### **Change Management**

- Change Management Combined Certificate Program
- Change Management Foundation Certificate Program
- Change Management Practitioner Certificate Program

#### **Governance & Best Practices**

- COBIT 5 Foundation Certification (with exam)
- ISO/IEC 2000® Practitioners
- ISO/IEC 20000 Foundation Certification Program
- ISO/IEC 27001® Information Security Foundation
- ISO/IEC 27002 Information Security Foundation (ISFS) Certification Program
- ISO/IEC 27005<sup>®</sup> Risk Manager
- Kepner-Tregoe Foundation
- Kepner-Tregoe Problem Management Course
- Kepner-Tregoe<sup>®</sup> High Severity Incident Management
- PRINCE2 Foundation
- PRINCE2 Practitioner
- TOGAF 9.1 Certified-Combined Program

#### **IT Professional**

- Business Acumen
- Business Analysis for IT Professionals
- Coaching Skills for the IT Professionals
- Communication for Technical People
- Consulting and Communication Skills for the IT Professional
- Consulting Skills for the IT Professional
- Developing Customer Service Skills with IT Professionals
- Digital Citizenship
- Facilitation Skills for IT Professionals: JAD and Business Requirements
- Improving IT Service Response to Business Demands
- Influencing Others: Managing Expectations and Outcomes for IT Professionals
- Information Technology Executive and Mana-

- gerial Skills
- Internal Consulting Skills for Information Technology Professionals
- IT Strategy, Enterprise Architecture and Marketplace Transformation
- Leadership for IT Professionals
- Lean IT
- Managing IT Projects
- Marketing the IT Organization Internally
- Negotiation Skills for IT Professionals
- Politics of IT Project Management
- Presentation and Communication Skills for the IT Professional
- Presentation Skills for IT Professionals
- Project Management and IT Application Rollout
- Project Management Fundamentals for IT Projects
- Time Management for IT Professionals
- Writing for the Web and Mobile Devices

#### **ITIL Foundations**

- ITIL 2011 Foundation Certification Program
- ITIL 2011 Awareness for Decision Makers
- ITIL 2011 Overview
- ITIL Service Capability Track
- ITIL 2011 Managing Across the Lifecycle (MALC)
- ITIL 2011 Operations Support Analysis (OSA) Certification Program
- ITIL 2011 Planning Protection & Optimization (PPO)
   Certification Program
- ITIL 2011 Release Control & Validation (RCV) Certification Program
- ITIL 2011 Service Offerings & Agreement (SOA) Certification Program
- ITIL 2011 Continual Service Improvement Certification Program
- ITIL 2011 Service Design Certification Program
- ITIL Service Lifecycle Track
- ITIL 2011 Service Operation Certification Program
- ITIL 2011 Service Strategy Certification Program
- ITIL 2011 Service Transition Certification Program

# Java, Java EE, Open-Source & Web Application Servers:

#### **Apache & JBoss Web Server**

- Administering JBoss EAP 6
- Administering the JBoss 7/ EAP 6 Application Server
- Administering the WildFly 11+ / JBoss EAP
   7.1Application Server
- Advanced JBoss 7 /EAP 6 Server Administration
- · Apache and Tomcat
- Apache Maven Fundamentals
- Apache Tomcat Administration
- Apache Web Server
- Apache with Mod\_Rewrite
- JBoss Administration Overview

#### Blockchain

- Blockchain Architecture Training
- · Blockchain Security Training
- Blockchain: An Overview for Business Professionals
- Developing on Hyperledger
- Ethereum Training: Blockchain Development Bootcamp

#### **C/C++ Development**

- Advanced C Programming
- Introduction to C Programming
- Introduction to C++ Programming

#### Frameworks & Tools

- AJAX for Java Developers
- Building Microservices using Spring
- Core Spring
- Hibernate
- Introduction to Spring 5 and JPA2
- Introduction to Spring 5, Spring MVC, and Spring REST
- Introduction to Spring Boot
- Introduction to the Spring 4 Framework
- Jakarta Struts
- JEE Web Application Programming with Velocity and Spring
- Programming Swing and the Java Foundation Classes (JFC)

- Selenium Bootcamp with Java, Python or Scala
- Spring and Hibernate

## Go Language, Julia & Rust Development

- Advanced Go Programming for Developers
- Concurrent Programming in Go
- Go Language Overview for Non-Programmers
- Go Test Driven Development
- Introduction to Go Programming for Developers
- Introduction to Julia Programming for Developers
- Introduction to Rust Programming for Developers

#### **Groovy & Grails**

- Gradle In-Depth
- Gradle In-Depth for Native C Applications
- Groovy for Java Developers
- Web Development using Grails

#### Java

- Design Patterns in Java Software 8
- Gentle Java and OO Development
- Intermediate/Advanced Java 8
- Introduction to Java Testing 8
- Java 8 and OO Development
- Java 8 and OO Essentials for COBOL, Mainframe, and non-OO Developers
- Java 8 Performance Tuning
- Java Programming Best Practices
- Java Test Driven Development with JUnit 5
- Java Test Driven Development with TestNG
- Java Wireless Programming
- JDBC Java Database Connectivity
- Modern Java 8, 9, 10 and Beyond
- Using Java 8's New Features (using Eclipse)

# Java, Java EE, Open-Source & Web Application Servers: (continued)

#### **Application Security**

- Building Secure Web Apps in Java/Java EE:
   Break 'em and Build 'em Biathlon
- Inside the Biggest Web Attacks and How to Defeat Them
- Introduction to Application Security
- Malware Analysis
- Overview of OWASP Top 10 Vulnerabilities
- Secure Java EE Development 7
- Secure Java Web Development 7
- Secure Web Application Development
- Securing Java Web Applications 7
- Securing Java Web Services 5
- Web Application Security Testing
- Web Application Security Workshop (3 Day)
- Writing Secure Code

#### Java EE

- Camel Development with Red Hat JBoss Fuse
- Core Web Services and SOA for J2EE Developers
- Developing Java EE Web Applications (JEE6/ JEE7), plus JPA and REST
- Developing RESTful Services with REST/JAX-RS
- EJB 3.2 (Java EE 7 level) and JPA2
- Java EE 6 Web Application Development using Java EE Indigo Eclipse and JBoss 7
- Java EE Development with JSF, EJB, and JPA
- JavaServer Faces 2 (JSF 2): Using JSF 2 to Build Java EE Web Apps
- jBOSS Drools
- Mastering Java EE with JSF2, EJB3, JPA, and Web Services
- Mastering JEE Design Patterns
- Servlets/JSP
- SOA and Java Web Services (JAX-WS)

#### Weblogic

- Developing Oracle Weblogic 10.3 Portal Applications
- Developing Web Services using BEA Web-Logic
- Introduction to BEA SOA Architecture

- J2EE Web Application Programming using BEA WebLogic
- Java Server Pages Programming with BEA Web-Logic
- Oracle WebLogic 12c Server System Administration
- WebLogic 12c Advanced Server System Administration

#### WebSphere/RAD/MQ

- Developing Applications in WebSphere ILOG
- Developing Rule and Event Based Solutions in WODM 7.5
- IBM WebSphere MQ Bootcamp for Application Programmers
- IBM WebSphere Transformation Extender 8.3 Fundamentals
- Programming Essentials for IBM WebSphere Commerce 7.0 Customization
- Technical Introduction to IBM WebSphere MQ
- Using RAD 8.0
- WebSphere Application Server 8.5.5 Administration
- WebSphere Message Broker 8 Workshop
- WebSphere MQ 7 Administration for LUW
- WebSphere MQ Advanced System Administration
- Websphere MQ Bootcamp for Systems Administrators
- WebSphere MQ for Programmers
- WebSphere MQ Problem Determination and Debugging
- WebSphere Portal 8 Development using RAD 8 5
- WebSphere WMQ Introduction for System Architects, Managers and Developers

#### **XML**

- Comprehensive XML
- Introduction to XML
- XML Executive Overview
- XML Programming using Java
- XML Schema v1.0.6

# Microsoft (MS) Infrastructure, Operating Systems & Desktop Applications:

#### **BizTalk**

- BizTalk Expert Series: EDI
- BizTalk Expert Series: ESB
- BizTalk Server 2016 Administrator Deep Dive
- BizTalk Server 2016 Administrator Immersion
- BizTalk Server 2016 Developer Deep Dive
- BizTalk Server 2016 Developer Immersion

## **Desktop Support & OS**

- MS Windows 10: Transition from Windows 7
- MOC 10982 C: Supporting and Troubleshooting Windows 10
- MOC 20697-1 D: Implementing and Managing Windows 10
- MOC 20697-2 C: Deploying and Managing Windows 10 Using Enterprise Services
- MOC 20698 B: Installing and Configuring Windows 10
- MOC 40398 A Mobility & Devices Fundamentals: MTA Exam 98-368
- Using MS Windows 10
- Exchange, Skype & Lync
- MOC20334 B: Core Solutions of MSSkype for Business 2015
- MOC20341 B Core Solutions of MS Exchange Server 2013
- MOC 20342 B Advanced Solutions of MS Exchange Server 2013
- MOC20345-1 A: Administering IVIS Exchange Server 2016
- MOC 20345-2 A: Designing and Deploying MS Exchange Server 2016
- MOC 40409 A: Deploying Voice Workloads for Skype for Business Online & Server 2015

#### **Forefront & Security**

- MOC 50382 B Implementing Forefront Identity Manager 2010
- MOC 50383 B Upgrading Identity Lifecycle Mgr 2007 to Forefront Identity Mgr 2010
- MOC 50402 B Implementing Forefront Unified Access Gateway 2010
- MOC 50509 A Implementing Forefront Endpoint Protection 2010
- MOC 55101 A Planning, Deploying and Managing MS Forefront TMG 2010

## Microsoft (MS) Azure

- MOC 10979 D: MS Azure Fundamentals
- MOC 10992 A: Integrating On-Premises Core Infrastructure with MS Azure
- MOC 10993 A: Integrating On-Premises Identity Infrastructure with MS Azure
- MOC 20532 D: Developing MS Azure Solution
- MOC 20533 D: Implementing MS Azure Infrastructure Solutions
- MOC 20535 A: Architecting MS Azure Solutions
- MOC 20537 B: Configuring and Operating a Hybrid Cloud with MS Azure Stack
- MOC40369 A: Cloud Fundamentals: MTA Exam 98-369
- MOC 40390 B: MS Azure for AWS Experts
- MOC 40457 A: MOC Workshop: Azure Developer Hackathon
- MOC40501 A: MS Cloud Workshop: Container and DevOps
- MOC 40503 B: MS Cloud Workshop: Enterprise Ready Cloud
- MOC 40504 B: MS Cloud Workshop: Intelligent Vending Machines
- MOC40505 B: MS Cloud Workshop: Internet of Things
- MOC 40506 A: MS Cloud Workshop: Lift and Shift/Azure Resource Manager
- MOC 40507-1 B MS Cloud Workshop: Microservices Architecture (Infrastructure Ed)
- MOC 40507-2 B: MS Cloud Workshop: Microservices Architecture (Developer Edition)
- MOC 40508 B: MS Cloud Workshop: Modern Cloud Apps
- MOC 40511 A: MS Cloud Workshop: Continuous Delivery in VSTS and Azure
- MOC 40513 A: MS Cloud Workshop: Building a Resilient laaS Architecture
- MOC 40515 A: MS Cloud Workshop: Enterprise-Class Networking in Azure
- MOC 40516 B: MS Cloud Workshop: Intelligent Analytics
- MOC 40519 A: MS Cloud Workshop: SAP on Azure
- MOC 40520 A: MS Cloud Workshop: SAP on Azure
- MOC 55224-1 A: Microsoft Azure Big Data Analytics Solutions
- MOC 55224-2 A: Operationalize Cloud Analytics Solutions with Microsoft Azure
- MOC 55247 A: Designing and Implementing Cloud Data Platform Solutions

# Microsoft (MS) Infrastructure, Operating Systems & Desktop Applications (continued):

#### **Microsoft Dynamics CRM**

- MOC 55168 A Customization and Configuration in MS Dynamics CRM 2015
- MOC 55169 A Installing and Deploying MS Dynamics CRM 2015
- MOC 55242 A: MS Dynamics 365 Customization and Configuration

#### **Microsoft System Center**

- MOC 10964 B Cloud & Datacenter Monitoring with System Center Operations Manager
- MOC 10965 D: IT Service Management with System Center Service Manager
- MOC 10981 A Infrastructure Provisioning with System Center Virtual Machine Manager
- MOC 10996 A: Hybrid Cloud & Datacenter Monitoring with Ops Mgt Suite (OMS)
- MOC 20694 B Virtualizing Enterprise Desktopsand Apps
- MOC 20695 C Deploying Windows Desktop and Enterprise Applications
- MOC 20703-1 A: Administering System Center Configuration Manager
- MOC 20703-2 A: Integrating MDM & Cloud Services w/ System Center Configuration Mgr
- MOC 20745 A: Implementing a Software-Defined DataCenter
- MOC 55007 A System Center 2012 Orchestrator

#### **Nintex**

- MOC 55219 A: Nintex Workflow and Forms for Office 365
- MOC 55220 A: Nintex Forms and Mobile
- MOC 55221 A: Nintex 2013 Administrator
- MOC 55222 A: Nintex 2013 End User (Workflow + Forms)
- MOC 55223 A: Nintex Workflow 2010/2013/2016

#### Office & Office 365

- Analyst Bootcamp: Excel Essentials
- MS Office 2016: Transition from Office

#### 2007/2010

- MS Office 365: Microsoft Office Web Apps and Collaboration
- MS Office Access 2016: Pt 1
- MS Office Access 2016: Pt 2
- MS Office Access 2016: Pt 3
- MS Office Excel 2016: Data Analysis with PivotTables
- MS Office Excel 2016: Data Analysis with Power Pivot
- MS Office Excel 2016: Part 1
- MS Office Excel 2016: Part 2
- MS Office Excel 2016: Part 3
- MS Office OneNote 2016
- MS Office Outlook 2016: Pt 1
- MS Office Outlook 2016: Pt 2
- MS Office PowerPoint 2016: Part 1
- MS Office PowerPoint 2016: Part 2
- MS Office Publisher 2016
- MS Office Word 2016: Part 1
- MS Office Word 2016: Part 2
- MS Office Word 2016: Part 3
- MS Visio 2016: Part 1
- MS Visio 2016: Part 2
- MOC 10968 B Designing for Office 365 Infrastructure
- MOC 10997 A Office 365 Administration and Troubleshooting
- MOC 20347 A: Enabling and Managing Office 365

## **Scripting & PowerShell**

- MOC 10961 C: Automating Administration with Windows PowerShell
- MOC 10962 C: Advanced Automated Administration with Windows PowerShell
- MOC 55039 B: Windows PowerShell Scripting and Toolmaking
- MOC 55133 A PowerShell for System Center Configuration Manager Administrators
- MOC 55202 A: PowerShell 5.0 and Desired State Configuration

# Microsoft (MS) Infrastructure, Operating Systems & Desktop Applications (continued):

#### **Windows Server**

- MOC 10967 A Fundamentals of a Windows Server Infrastructure
- MOC 10969 B Active Directory Services with Windows Server
- MOC 10971 A Storage and High Availability with Windows Server
- MOC 10972 B Administering the Web Server (IIS) Role of Windows Server
- MOC 20410 D Installing and Configuring Windows Server 2012
- MOC 20411 D Administering Windows Server 2012
- MOC 20412 D: Configuring Advanced Windows Server 2012 Services
- MOC 20740 C: Installation, Storage, and

- Compute with Windows Server 2016
- MOC 20741 B: Networking with Windows Server 2016
- MOC 20742 B: Identity with Windows Server 2016
- MOC 20743 C: Upgrading Your Skills to MCSA: Windows Server 2016
- MOC 20744 C: Securing Windows Server 2016
- MOC 50255 E: Managing Windows Environments with Group Policy
- MOC 55071 A Microsoft Software Asset Manager
- MOC 55152 A Fundamentals of Active Directory
- Updating Support Skills for Windows Server



# **NET Application Security**

# Microsoft Visual Studio .NET and SharePoint:

- Secure .Net Coding
- Securing .Net Web Applications
- Web App Security Defending Against OWASP Top 10 Exploits

#### **SharePoint Design and Development**

- MOC 20488 B Developing MS SharePoint Server 2013 Core Solutions
- MOC 20489 B Developing MS SharePoint Server 2013 Advanced Solutions
- MOC 55048 B No-Code SharePoint 2013-2016 Workflows with SharePoint Designer
- MOC 55249 A: Developing with the Share-Point Framework
- MOC 20331 B Core Solutions of MS Share-Point Server 2013

## **SharePoint System Administration**

- MOC 20332 B Advanced Solutions of MS SharePoint Server 2013
- MOC 20339 1/2: Planning, Administering & Adv Technologies of SharePoint 2016
- MOC 20339-1 A: Planning and Administering SharePoint 2016
- MOC 20339-2 A: Advanced Technologies of SharePoint 2016
- MOC 55037 A SharePoint 2013 Search Inside Out
- MOC 55066 A PowerShell for SharePoint Administrators

#### **SharePoint User and Site Administration**

- MS SharePoint 2016: Advanced Site Owner with Workflow Administration
- MS SharePoint 2016: Site Owner
- MS SharePoint 2016: Site User
- MS SharePoint Foundation 2013: Site User
- MOC 55026 A Upgrading your End User Skills to SharePoint 2013
- MOC 55029 B Intro to SharePoint 2013 for Collaboration & Document Mgt
- MOC 55033 A SharePoint 2013 Site Collection and Site Administration
- MOC 55035 B MS SharePoint Server 2013

- for the Site Owner/Power User
- MOC 55141 A SharePoint 2013 Search for Power Users
- MOC 55193 A Intro to SharePoint 2016 for Collaboration & Document Mgt
- MOC 55197 A: MS SharePoint Server 2016 for the Site Owner/Power User
- MOC 55199 A SharePoint 2016 End User Training
- MOC 55200 A SharePoint 2016 Power User Training
- MOC 55234 A: SharePoint 2016 Site Collections and Site Owner Administration

#### Visual Studio & .NET Framework

- ADO.NET Using C#
- MOC 10958 B Programming Fundamentals of Web Applications
- MOC 10975 A Introduction to .NET Programming
- MOC 20480 B: Programming in HTML5 with JavaScript and CSS3
- MOC 20481 C Essentials of Dev Windows Store Apps Using HTML5 & JavaScript
- MOC 20482 C Adv Windows Store App Development using HTML5 & JavaScript
- MOC 20483 B: Programming in C#
- MOC 20484 C Essentials of Developing Windows Store Apps Using C#
- MOC 20485 C Advanced Windows Store App Development Using C#
- MOC 20486 C: Developing ASP.NET MVC 5
  Web Applications
- MOC 20487 B: Developing Windows Azure and Web Services
- MOC 40410 A: JavaScript, HTML and CSS Web Development
- Windows Communication Foundation Using C#

# Microsoft Visual Studio .NET and SharePoint (continued):

# Visual Studio, ALM, TFS & Testing

- Administering
   Team
   Foundation Server 2017
- Application
   Lifecycle
   Management Using Visual
   Studio
   2017
- Continuous Delivery Using Visual Stu-

dio Team Services

- Developing High Quality Databases Using Visual Studio 2017
- Enterprise Development Using Visual Studio
- Managing Projects Using Visual Studio 2017 and Scrum
- Managing Projects Using Visual Studio Team Services
- Professional Software Testing Using Visual Studio 2017
- Team Foundation Server 2017 Developer Foundations (Git)
- Team Foundation Server 2017 Developer Foundations (TFVC)
- Test Case Management Using Visual Studio 2017
- Unit Testing in Visual Studio 2017

#### Xamarin

- MOC 40536 A: Build iOS Apps with C# and .NET using the Xamarin Tools for VS
- MOC 40537 A: Build Android Apps w/ C# and .NET using the Xamarin Tools for VS
- MOC 40538 A: Build Native Cross-Platform Mo-



plications with a Shared UI for iOS, Android, and UWP in C# .NET with Xamarin.Forms

bile

Ap-

- MOC 40539 A: Build iOS Apps with C#
   NET using the Xamarin Tools for VS
- MOC 40540 A: Build Android Apps with C#
   NET using the Xamarin Tools for VS
- MOC 40541 A: Build Native Cross-Platform Mobile Applications with a Shared C# Business Logic for iOS, Android, and UWP in C# .NET with Xamarin and Visual Studio
- MOC 40542 A: Build Native Cross-Platform Mobile Applications with a Shared UI for iOS, Android, and UWP in C# .NET with Xamarin.Forms

## **Software Quality, Testing & Tools:**

#### **Micro Focus**

- Advanced LoadRunner Analysis v12.x
- ALM Octane
- ALM/Quality Center v12 Business Models
- ALM/Quality Center v12 Migration
- ALM/Quality Center v12 Workflow
- ALM/Quality Center v12.5 Advanced Reporting
- ALM/Quality Center v12.5 Project Customization
- ALM/Quality Center v12.5 Site Administration
- ALM/Quality Center v12.5 Sprinter
- HP Performance Center
- HP UFT v14 Advanced Scripting
- Introduction to Mobile Center 1.x
- LoadRunner v12.5x Essentials
- LoadRunner v12.5x Essentials with Tru-Client Scripting
- StormRunner Essentials v2.x
- UFT Essentials v14.x
- Using ALM/Quality Center v12.5
- Using Performance Center

#### **Rational Products**

- Essentials of IBM Rational Functional Tester
- IBM Rational Advanced ClearCase Administration
- IBM Rational ClearCase Advanced Administration
- IBM Rational ClearCase Basic
- IBM Rational ClearQuest Administration
- Introduction to IBM Rational ClearQuest
- Requisite Pro Comprehensive

#### **Software Testing & Quality**

- Clean Code: Software Craftsman Advanced
- Effective Methods of Software Testing
- Fundamentals of Test Automation
- Introduction to Software Quality Assurance, Control and Management
- Subversion



## **UNIX, Linux and Perl:**

#### <u>AIX</u>

- AIX Basics
- AIX Performance Tuning
- AIX System Administration Essential Operations
- AIX Systems Administration Networking
- AIX Systems Administration Performance Concepts and Analysis
- AIX Systems Administration Security Features

#### Perl

- Advanced Perl Programming
- Introduction to Perl
- Perl CGI Programming

#### Red Hat

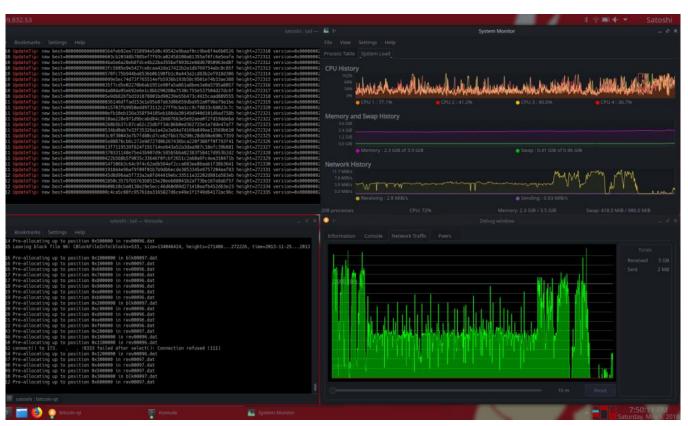
- Red Hat Enterprise Linux Systems Administration I v7
- Red Hat Enterprise Linux Systems Administration II v7
- RHCE Rapid Track Course
- RHCSA Exam Prep

#### **Solaris**

- Oracle Solaris 11 Advanced System Administration
- Oracle Solaris 11 Performance Management
- Oracle Solaris 11 Performance Monitoring
- Oracle Solaris 11 Security Administration
- Oracle Solaris 11 System Administration

#### **UNIX & Linux**

- Enterprise Linux Security Administration
- Enterprise Linux Server Hardening
- Enterprise Linux System Administration
- Linux for Experienced UNIX Administrators
- Linux Fundamentals and Support
- Linux Security
- Linux Shell Scripting
- MOC 55187 C: Linux System Administration
- Programming in the Linux Environment
- UNIX and Linux System Basics I
- UNIX and Linux System Basics II
- UNIX Shell Programming
- UNIX Systems Administration



## Virtualization, Cloud, VMware & Citrix:

#### **Amazon Web Services**

- Amazon Redshift Architecture and SQL
- AWS Essentials for AWS Cloud Practitioners
- Introduction to Amazon Web Services

#### Citrix NetScaler

- Citrix NetScaler Advanced Topics Secure Web Applications (CNS-318-1)
- Citrix NetScaler Advanced Topics -Security, Management, & Optimization (CNS-320-1)
- Citrix NetScaler Advanced Topics-Management and Optimization (CNS-319)
- Citrix NetScaler Essentials & Traffic Management (CNS-220-1)
- Citrix NetScaler Essentials and Unified Gateway (CNS-222-1)
- Citrix NetScaler Traffic Management (CNS-219-1)
- Citrix NetScaler Unified Gateway (CNS-221-1)

## Citrix XenApp & XenDesktop

- Citrix Enterprise Security Solutions (CTX-270)
- Citrix Provisioning Services 7.1x Administration (CXD -304-2)
- Citrix XenApp and XenDesktop 7.1x Advanced Administration (CXD-310-2)
- Citrix XenApp and XenDesktop Help Desk Support (CXD-105-1)
- Citrix XenApp and XenDesktop Service on Microsoft Azure (CXD-251)
- Citrix XenServer 7.1 LTSR Administration (CXS-301)
- Moving to the XenApp & XenDesktop Service on Citrix Cloud & MS Azure (CXD-252)
- Moving to XenApp and XenDesktop Service on Citrix Cloud (CXD-250)
- Securing Citrix Networking and Mobility Solutions (CTX-271)
- Securing Citrix Virtualization Solutions (CTX-272)
- XenApp & XenDesktop 7.1x Adv Mgt with App Layering, WEM, & HDX (CXD-303-2)
- XenApp & XenDesktop 7.1x Assessment, Design, & Adv. Configurations (CXD-410)
- XenApp and XenDesktop 7.1x Administration (CXD-210-3)
- XenApp and XenDesktop Current Release Update (CXD-230)

 XenApp, XenDesktop, & Provisioning Services 7.1x Admin (Fast Track) (CMB-310)

#### Citrix XenMobile & ShareFile

- Citrix ShareFile Enterprise Essentials (CSF-201-1)
- Deploying Enterprise Mobility Solutions with Citrix XenMobile (CXM-303-1)
- Managing and Supporting a Mobility Solution with Citrix XenMobile (CXM-202-1)

#### **Cloud Computing**

- Cloud Foundry Foundation Developer Training
- Cloud Service Manager
- Cloud Solutions Architec
- CompTIA Cloud+
- Google Cloud Fundamentals
- Introduction to Cloud Computing
- Introduction to Openstack Private Clouds
- Virtualization Essentials
- Web Application Development in the Cloud

### **Microsoft Virtualization**

MOC 40502 A: MS Cloud Workshop: Big Data and Visualization

#### **VMware**

- Desktop Virtualization with VMware Horizon View 6.0
- Virtualization, Private Clouds and Vmware vSphere
- VMware AirWatch: Configure and Deploy Integrated Solutions
- VMware NSX Install, Configure, Manage 6.2.
- VMware NSX: Troubleshooting and Operations v6.3
- VMware NSX: Design and Deploy v6.2
- VMware NSX: Install, Configure, Manage plus Troubleshooting & Operations Fast Track v6.2
- VMware vRealize Automation 7.3: Install, Configure, and Manage
- VMware vRealize Operations Manager: Install, Configure, Manage
- VMware vSphere 6.5 Optimize, Upgrade, Troubleshoot
- VMware vSphere 6.7 Boot Camp
- VMware vSphere 6.7 with ESXi and vCenter
- VMware vSphere 6.x with ESXi and vCenter Boot Camp
- VIMware vSphere: Optimize and Scale 6.0