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CATALOG of INDUSTRY RELATED SAFETY, CRAFT, & DOL APPROVED APPRENTICESHIPS PROGRAMS

ELECTRICAL BOILERMAKER MILL WRIGHT PIPEFITTING CRANE OPERATOR CARPENTRY CSST

RIGGING WELDING INSTRUMENTATION PROJECT SUPERVISION CREW LEADERSHIP DRYWALL MECHANIC NCCER CORE

CONSTRUCTION AND MAINTENANCE EDUCATION FOUNDATION 2950 EAST X STREET, LA PORTE, TX 77571 WWW.ONLINECMEF.ORG | 281-478-3900



NCCER Accredited Testing and Training Center





THANK YOU FOR CHOOSING CMEF!

CMEF Delivers... Free Enterprise means opportunity for ALL the Merit Shop takes you further.

Thank you for taking the steps forward to get better trained, your skills tested, and validated to show that you are the best of the best and ready to move forward in your career.

As Texans, we lead the way. We suited up and worked safely work through a pandemic. We get results because our country needs us to work so that we can produce what America needs to keep moving forward and keep our jobs right here in the Houston, TX area. The leadership and staff of Construction & Maintenance Education Foundation (CMEF) are up to the challenge of delivering new and innovative ways to deliver the much-needed training that is the key to unlocking your future.

As you review the catalog, you will notice that we have added more classes at our state-of-the-art facility. We are thankful for the continued support from our Training Contributor Partners to make this all a reality. These construction industry leaders pledge six cents per jobsite manhour invest in a community-based training fund. Many of the large industrial owners in our community also participate in this program. Students at CMEF who are employed by one of the Training Contributor Partners are eligible for a substantial tuition discount. A listing of these Partners, as well as more information about the Training Contributor Agreement, can be found in this catalog.

CMEF MISSION STATEMENT

To develop and administer cost effective training, skills assessments, and other workforce development programs that will increase the quality and availability of construction and maintenance employees, communicate career opportunities, promote a positive image for the industry, and satisfy the needs of Owners, Contractors, and their employees in the Greater Houston area.

CMEF ADMITS STUDENTS OF ANY RACE, COLOR, AND NATIONAL OR ETHNIC ORIGIN.



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CONSTRUCTION & MAINTENANCE EDUCATION FOUNDATION (CMEF)



GENERAL INFORMATION



WHAT IS CMEF?

Construction & Maintenance Education Foundation, Inc. (CMEF) is the educational affiliate of ABC Greater Houston. In 1988, CMEF began as a joint partnership between industrial owners and contractors working together to solve the skilled labor shortage facing the Greater Houston construction industry.

CMEF is a non-profit 501 (c3) devoted to serving the workforce development needs of the contractor community. CMEF is accredited by the NCCER, and all courses are taught using the nationally standardized NCCER curriculum.

CMEF believes that a community approach to training is fundamental to developing a skilled and educated craft workforce within the entire industry. CMEF offers competency-based craft training in a variety of areas. Students will progress at their own pace through a combination of classroom, laboratory instruction and performance testing. Hundreds of students a year enroll in craft training through CMEF.

OFFICE HOURS

Administration, Testing, and Services: Monday – Thursday: 8am to 5pm, Friday: 8am to 1pm.

Craft Training Classes:

Daytime: Monday – Thursday: 8am to 4pm. Evening: Monday – Thursday: 6pm to 10pm.

Study Hall:

Monday – Thursday: 8am to 4pm, Friday: 8am to 11am.

CONTACT US

Construction & Maintenance Education Foundation

2950 East X St., La Porte, TX 77571
www.onlinecmef.org | 281-478-3900

COMMITTEES

Industrial Training Committee (ITC)

Chair: Blair Williamson, Ref-Chem

Construction Careers Youth Committee (CCYC) Chair:

Carla Thompson, Turner Industries

EQUAL EDUCATION OPPORTUNITY POLICY

Construction & Maintenance Education Foundation, Inc. (CMEF) is committed to providing equal educational opportunities regardless of gender, race, color, religion, age, national origin or disability.

TRAINING CONTRIBUTING COMPANIES

CMEF is partially funded by donations made through the Training Contributor Agreement. Contractors agree to contribute \$0.06 per jobsite work hour in exchange for discounted rates on applicable training and workforce development programs. See more info on page 21.

HOW TO REGISTER

Individual Registration

Registration forms can be found at:

onlinecmef.org

Your CMEF Registration form must be filled out completely and brought into the CMEF office or

Emailed to:

craftraining@cmefhouston.org

- Make sure you indicate on your form which Course you wish to take along with the days of the week the class is on, and the time.
- Once your form has been filled out and approved by CMEF staff you will then need to make your payment in order to be enrolled in your chosen class. (This payment can be made in person by coming into the CMEF office (2950 East X St La Porte, TX 77571) OR payment can be made over the phone with a Credit Card (281-478-3900).
- Payments must be made in full, and you will not be registered for the course until payment has been made.
- Once payment has been made and CMEF has signed off on your registration form you will then be enrolled upon class availability.

Students who do not owe a co-pay:

Your companies Authorized rep will e-mail the registration form to **craftraining@cmefhouston.org** OR this form may be delivered in person or by Fax (281-478-3924).

Students who owe a co-pay:

- Your CMEF registration form must be filled out completely and signed by your company's authorized representative.
- If you do not know who your authorized representative is please contact Michele Prestigomo at 281-478-3900
- Make sure you indicate on your form which Campus you wish to attend along with the name of the course, and days of the week the class is on.
- Once your form has been filled out and approved by your authorized representative, you will need to make your co-pay in order to be enrolled in your chosen class. Co-pay can be made in person by coming into the CMEF office (2950 East X St La Porte, TX 77571) OR payment can be made over the phone with a Credit Card (281-478-3900).
- Once payment has been made and CMEF has approved your registration form, you will be enrolled upon class availability.



CMEF Drop Policy:

- Students may be dropped by the 3rd class date with no charge to the employer.
- If a student has 5 or more total absences CMEF has the right to drop that student and no refund will be issued.
- If there is an individual issue causing absenteeism, then the company may notify us and we may work with the student depending on the circumstances.



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What we do

Austin Industrial delivers premier maintenance, construction, and soft craft services to leading industrial companies across the U.S.

What we offer



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401K

Austin ESOP
Building Pride and Responsibility

ESOP
(Company's Employee Stock Ownership Plan)



Training and Advancement Opportunities



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AustinCraftJobs.com



CALL FOR MORE INFO
281.478.0805



APPLY IN PERSON
406 West X St. Deer Park, TX 77536



COURSE DESCRIPTIONS

BOILERMAKER

Boilermaker Phase 1

This module explains the types of boilers and the various applications in which they are used. The module also introduces the main components of a boiler and describes the career opportunities available to boilermakers.

Boilermaker Phase 2

This module describes boiler configurations, boiler applications, and boiler components. It also looks at the different methods used to heat the water and convert it into steam.

CONSTRUCTION SITE SAFETY TECHNICIAN (CSST)

Construction Site Safety Technician (CSST) training is designed to prepare an individual to assume the responsibility of construction site coordination and project safety. This 120 hour course complies with OSHA requirements in onsite management and safety technology.

CRANE OPERATOR

Crane Operator 1

Designed to assist individuals seeking a career as a Crane Operator. It is also the perfect module for individuals desiring to broaden their knowledge base according to present industry standards.

Crane Operator 2

Students will upgrade from the Industrial All Purpose Crane to a Fixed Control Cab Crane for their primary hands on training while continuing to get seat time on the carry deck. Students will also be studying a variety of load charts focused on the fixed cab and studying machine maintenance and preventive care, wire rope, computer and operator aids, load dynamics and on-site equipment movement.

Crane Operator 3

Students studies focus on all types of Load Charts, Assembly and Disassembly of Telescopic Boom Attachments and Lattice Booms, Advanced Operational Techniques, Lift Planning, Hoisting Personnel, Emergency Procedures, and Transporting Requirements. Also included is lots of seat time for the Swing Cab Crane along with the Industrial All Purpose Crane, and Fixed Control Crane.

ELECTRICAL

NCCER Electrical Level 1

Level 1 is the first level in the NCCER Electrical training program. Included in this level are occupational overview of 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, and electrical test equipment.

NCCER Electrical Level 2

Included in this level is alternating current, motor 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.

NCCER Electrical Level 3

Included in this level are conductor selection and calculations, practical applications of lighting, hazardous locations, over-current protection, distribution equipment, transformers, motor calculations, and motor controls

NCCER Electrical Level 4

Level 4 is the last level in the NCCER Electrical training program. Included in this level are load 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, motor operation and maintenance, medium-voltage terminations/splices, special locations, and fundamentals of crew leadership.

PIPEFITTING

Pipefitting Level 1

Take the first step towards becoming a Journeyman Pipefitter! This course includes each module of Pipefitting Level 1 and Core Curriculum, helping you gain a well-rounded understanding of the information included on the NCCER Assessment.

Pipefitting Level 2

Identify Various Piping Systems; Chemical, Compressed Gas, Oil, and Water, Understand Pipe Drawings and Using Detail Sheets, Identify and Install Various Valve Types, Use Trade Math to Perform Piping Lay-Outs, Thread Pipe Using Fit-Up and Take-Offs, Prepare Pipe and Fittings for Both Socket and Butt Welds, Introduce Excavation Safety Systems, Shoring, Pipe Sloping, and Grade Elevations.

Pipefitting Level 3

Identify and describe the uses of common rigging hardware and equipment. Perform a safety inspection on hooks, slings, and other rigging equipment. Describe common slings and determine sling capacities and angles. Select, inspect, use, and maintain special rigging equipment, including simple block and tackle, chain hoists, comealongs, jacks, and tuggers. Inspect heavy rigging hardware. Tie knots used in rigging.

Pipefitting Level 4

This module covers P&IDs, plan views, section views, isometric drawings, and spool drawings. It teaches the trainee to work through a set of drawings and extract the information from one drawing that is necessary to interpret other drawings. It explains how to use plan views to draw isometrics and use isometrics to put together spools. The drawings supplied fit together to design a main steam line for a power plant.



CONSTRUCTION



WE'RE BUILDING A BETTER FUTURE

HERE'S YOUR CHANCE TO BE PART OF IT

AT PCL INDUSTRIAL CONSTRUCTION CO. we value and support our workforce because we couldn't build the future without them. We offer both NCCER training and a PCL Certified program for all craft. For more details and to get started, use the QR code below to search our job openings and fill out a craft profile.

▶ **TOGETHER WE BUILD SUCCESS**

281-249-8001 | pcl.com/houston



COURSE DESCRIPTIONS



CREW LEADERSHIP

Crew Leadership has been designed to assist the recently promoted crew leader, but it is beneficial for anyone in management. The course covers basic leadership styles, communication, delegating, and problem solving. Jobsite safety and the crew leader's role in safety are discussed, as well as project planning, scheduling, and estimating.

FALL PROTECTION

The Fall Protection module provides an orientation to jobsite hazards, regulations and standards that govern safe work practices, and fall protection equipment. It includes essential procedures associated with ladders and scaffolds, elevated work environments, the safe use of personal fall-arrest systems, and rescue after a fall.

FLANGE MAKE-UP

The Flange Make-Up provides a refresher of general yet essential guidelines for the craftsman to assure consistent flange joint engagement on piping and vessel systems. The prevention of any unintentional failure and subsequent release of any gasses or liquids is the ultimate intent. The craftsman has ultimate control of the job task and while utilizing a helper is always encouraged, the craftsman should be present and overseeing each step of the flange to gasket makeup.

INSTRUCTOR CERTIFICATION TRAINING PROGRAM (ICTP)

The Instructor Certification Training Program (ICTP) is a training program for individuals interested in teaching the NCCER curricula and offering the accompanying credentials. After completing the ICTP an individual is considered an NCCER Craft Instructor.

PIPEFITTER BLUEBOOK

The Pipefitter Blue Book is the most widely used book of its kind in the trades today, written by W.V. “Duffy” Graves, who taught pipe fitting at Lee College in Baytown, Texas. This course reviews the book and covers Common Piping Angles and Their Solutions, Known And Unknown Angles and Angle Chart, Solving Rolling Offsets, and more.

INSTRUMENTATION

NCCER Instrumentation Level 1

This module reviews the characteristics of four key process variables: temperature, pressure, level, and flow. It describes the basic features and principles of operation of various instruments that are used to measure these variables. It also explains how to work with mathematical formulas that are associated with temperature, pressure, level, and flow measurement.

Fast Track Specialties, LP is honored to support CMEF!



CONSTRUCTION & MAINTENANCE EDUCATION FOUNDATION (CMEF)

RIGGING

BASIC RIGGING

The Basic Rigger Course is an 8 week course designed to assist individuals seeking a career as a Rigger. It is also the perfect classroom for individuals working in General, Construction or Maritime Industry desiring to broaden their knowledge base according to present industry standards.

Individuals passing the written exams and satisfying the performance profiles will receive training recognition in the NCCER National Registry. Semester / Level 1: Includes but not limited to:

Identify and Proper use of Slings and Common Rigging Hardware, Inspection Techniques and Rejection Criteria, Basic Load-handling Safety Practices, Proper use of ASME Hand Signals
Proper Hitches Given Various Loads, Calculate Sling Capacities According to Various Angles
Use of Drum Hoist Tugger's / hoist grips associated with Bull Rigging, Determine the Center of Gravity of a Load, Sling Tension Calculations, and Determining Material Weights.

INTERMEDIATE RIGGER

The Intermediate Rigger Course is a single semester (16 week) course designed to assist individuals seeking a career as an Intermediate Rigger. It is also the perfect classroom for individuals working in General, Construction or Maritime Industry desiring to broaden their knowledge base according to present industry standards.

Individuals passing the written exams and satisfying the performance profiles will receive training recognition in the NCCER National Registry. Semester / Level 2: Includes but not limited to:

Lift Planning for Personnel Lifts, Range Diagrams, Crane Load Charts Calculations, Ground Pressure Matting Calculations
Jacks, Hoist, Rollers to Move Loads Laterally, Load Blocks and Sheaves, Pulley Calculations , Mobil Crane Reeving Patterns
Installing Wire Rope and End Terminations, Understanding D/d Ratio and making Calculations, Assembly / Disassembly of Long and Short Lattice Booms and Jibs, Extensions and Stowing Swing-away Booms, Understanding and Calculating Fleet Angle, and Working with Submerged Lifts.

ADVANCED RIGGER

The Advanced Rigger Course is a single semester (16 week) course designed to assist individuals seeking a career as an Advanced Rigger. It is also the perfect classroom for individuals working in General, Construction or Maritime Industry desiring to broaden their knowledge base according to present industry standards.

Individuals passing the written exams and satisfying the performance profiles will receive training recognition in the NCCER National Registry. Semester / Level 3: Includes but not limited to:

Load Dynamics associated with multi-crane lifts, Load movement calculations, Factoring crane stability
Calculating line pull associated with horizontal and inclined planes, Calculations using spreader bars and equalizer beams
Leverage and crane capacities, Load chart calculations associated with Telescopic and Lattice Boom Cranes, Applying load charts to crane lift capacities, Planning and implementing a lift plan, and ASME/OSHA requirements involving personnel lifting



MOBILE CRANE OPERATOR PROGRAM

The only one of its kind in the Greater Houston Area!!



MOBILE CRANE OPERATOR 1

This program consists of classroom and laboratory settings. This course covers all NCCER's Mobile Crane Operations Level 1 modules (6), all NCCER's Core Curriculum modules (8), and OSHA 10. This curriculum NCCER covers topics such as Crane Safety, Load Charts and Emergency Procedures. The Level 1 curriculum uses a 9-ton carry deck crane to learn and operate. There are approximately 40 hours of seat / crane time associated with this level. Upon successful completion, students will receive an NCCER Mobile Crane Operations Level 1 Completion and an OSHA 10 Certification.

MOBILE CRANE OPERATOR 2

This program consists of classroom and laboratory settings. This course covers all NCCER's Mobile Crane Operations Level 2 modules (7). This curriculum NCCER covers topics such as Crane Safety, Load Charts and Emergency Procedures. The Level 2 curriculum uses a 20-ton fixed cab crane to learn and operate. There are approximately 40 hours of seat / crane time associated with this level. Upon successful completion, students will receive an NCCER Mobile Crane Operations Level 2 Completion

MOBILE CRANE OPERATOR 1

This program consists of classroom and laboratory settings. This course covers all NCCER's Mobile Crane Operations Level 2 modules (6). This curriculum NCCER covers topics such as Crane Safety, Load Charts and Emergency Procedures. The Level 3 curriculum uses a 35-ton swing cab crane to learn and operate. There are approximately 40 hours of seat / crane time associated with this level. Upon successful completion, students will receive an NCCER Mobile Crane Operations Level 3 Completion. Also, upon successful completion, students will receive an industry related personal protective equipment kit.

Crane Courses Sponsored in part by:



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CONSTRUCTION & MAINTENANCE EDUCATION FOUNDATION (CMEF)

Schedule & Registration

Please go to

onlineCMEF.org

To find the most current
schedules and download the
registration form



TESTING



RIGGER AND SIGNAL PERSON

NCCER's Rigger and Signal Person Certification Program includes: quickly-scored written and evaluated exam and practical; three-level rigger certifications (basic, intermediate and advanced) and a signal person certification; and industry-recognized and portable credentials. The individual employer or craft professional must determine what level meets the requirements for the task being performed. The certification is valid five years from the date of certification. CMEF's assessment and evaluation are both held at the La Porte location.

PRACTICAL EXAMS

Practicals are performed on an appointment basis. Exam times and dates are subject to change. For rates or to register, please contact the CMEF office at 281-478-3900 or email test@cmefhouston.org.

SKILLS ASSESSMENTS

CMEF Skills Assessments are designed to assess the knowledge of craft workers who are not currently enrolled nor have they ever enrolled in formal craft training. The assessment is not a "pass/fail" test, but rather an evaluation of the craft worker's knowledge gained from their field experience.

After the assessment, both the employee and employer will receive a score report along with a "training prescription" which identifies those areas in which training is recommended.

Assessments are Monday through Friday from 8:00am to 1:00pm. (On Fridays, Pipefitting, Millwright, and Crane assessments stop at 12:00pm) All NCCER ASSESSMENTS are given at the CMEF Office located at 2950 East X Street, La Porte TX 77571. For rates and to pre-schedule assessments call 281-478-3900 or email: test@cmefhouston.org

CONSTRUCTION & MAINTENANCE EDUCATION FOUNDATION (CMEF)



POWERED BY PEOPLE

THE PEOPLE AT ISC are what set our work apart. From the beginning, we've put safety and quality at the forefront of every project—its a commitment ingrained in our DNA. Our culture is one of safety, teamwork and supreme quality and it comes from a universal drive to see ourselves, our peers, and our company succeed.



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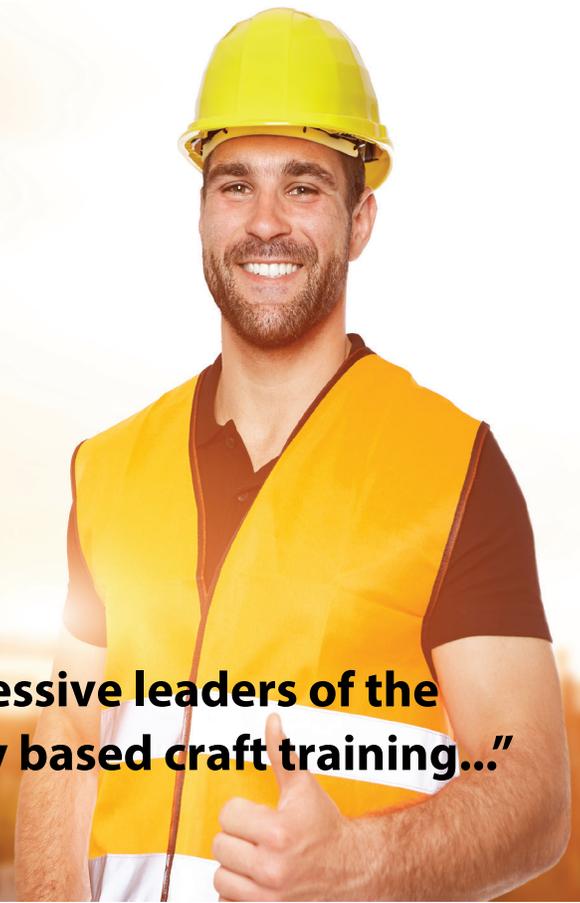
Custom **WELDING COURSES**



BECOME A



“Training Contributors are progressive leaders of the industry who support community based craft training...”



Training Contributors pledge their commitment to a safe, skilled and knowledgeable craft workforce by agreeing to participate as a CMEF Training Contributor. Training Contributors are progressive leaders of the industry who agree to commit a minimum of \$.06 per jobsite work hour to support community based craft training and workforce development programs provided through CMEF. As a Training Contributor Partner, Contributors experience greater training discounts, wider training availability, and customized training solutions. The money collected by CMEF from Training Contributors is used for CMEF craft training and workforce development programs. CMEF provides Training Contributors with reduced rates for all applicable training and programs featured in this catalog. CMEF also frequently publishes lists of the Training Contributors to the industry and the general public to help demonstrate the commitment of these outstanding companies. To learn more about the CMEF Training Contributor program, please contact Michael Richter at 281-478-3900 or via e-mail at m.richter@cmefhouston.org.



CURRENT TRAINING CONTRIBUTORS



Bayou City Industrial Contractors LTD.



CONSTRUCTION & MAINTENANCE EDUCATION FOUNDATION, INC.
The Educational Affiliate of Associated Builders & Contractors of Greater Houston
2950 East X Street • La Porte, Texas 77571
PH 281.478.3900 • FX 281.478.6782 • www.cmfhouston.org

2024 - PLEASE PRINT CLEARLY

Reduction of Force (ROF) Student Authorization

ATTENTION: Training Contributor Agreement Members

It is the policy of CMEF that ROF students are allowed to continue to attend training classes for up to six months after lay off under the fee schedule of their former employer. However, these students are still required to secure an authorization signature from the appropriate person within that company.

By signing this authorization form you are not obligating you or your company to pay registration fees, you are verifying that the student listed below was in your employ within the past six months. The student is personally responsible for any fees assessed at the time of registration.

Contractor Information HERE:

I _____, authorized representative of _____
Name Authorized Representative Company

verify that the following individual was employed by my company within the past six months and further that he/she was released from our employment and therefore qualifies for the reduced Training Contributor Agreement rates. I further understand that this individual is required to pay for training personally at the time of registration, and that my company will not be billed.

Please provide ROF Date: _____

Student Information: (Please Print)

Student Name

Social Security Number

College Attending

