



2020-2021 Course Descriptions


Training Schedules Will Be Completed and Posted on the 1st
business day after August 15, 2020

www.aoeett.org

Locations

Palmer Training Center, Anchorage Hall, Fairbanks Pipeline
Training Center, Juneau Hall, Kodiak

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Safety Courses

40 Hour HAZWOPER

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

Geared toward workers whose responsibilities may require dress out. Includes an introduction to Government regulations, Hazcom, SDS, DOT Emergency Response Guidebook, toxicology, blood borne pathogens, health and safety plans, medical surveillance, emergency response (HAZWOPER), job hazard analysis, hazard control measures, basic electricity, lockout/tag out, monitoring and instrumentation, heat and cold stress, respiratory protection, permit required confined spaces, radiation, drum handling, new technologies and Decon. The student will also be required to suit up in CPC with supplied air respirators and APR. Students will also be required to demonstrate proper decontamination procedures and proper donning and doffing of PPE.

Maximum number of students: 15

Minimum number of students: 3

Items students will be required to bring to class: Warm weather gear

Safety Courses

8 Hour HAZWOPER Refresher (Annual)

Course length: 1 Day (8 Hours)

Pre-requisite: Must have completed 40 Hour HAZWOPER Training and be current on annual refreshers.

Basic course description:

Annual update that addresses the required elements within the HAZWOPER standards, new equipment, technologies, and methodologies that have evolved over the past year that are essential for HAZWOPER site workers.

Maximum number of students: 24

Items students will be required to bring to class: 40 Hour HAZWOPER card or proof of 40 Hour HAZWOPER Training. If 40 Hour HAZWOPER and/or refresher training was provided by an organization other than the Local 302 Training Center, student **MUST** provide documentation of 40 Hour training **AND** refresher training showing certification is current.

Safety Courses

Certified Erosion & Sediment Control Lead (CESCL)

Note: This is a CESCL Certification class.

Course length: 2 Day (16 Hours)

Pre-requisite: None

Basic course description:

Educates students on topic terminology, standards, and regulations. Provides examples of properly installed control measures and information regarding permitting, recordkeeping, Best Practices, and related compliance issues. The three year CESCL certification is the only one accepted by the Alaska Department of Transportation.

Maximum number of students: 30

Items students will be required to bring to class: None

Safety Courses

CPR/First Aid (Adult)

Course length: ½ Day (4 Hours)

Pre-requisite: None

Basic course description:

This course teaches individuals to recognize and respond to sudden illnesses, injuries, breathing, and cardiac emergencies in **adults**. Course will familiarize students with use of an Automated External Defibrillator (AED) for victims of cardiac arrest. Attendees will practice **adult** CPR skills. Certification upon completion for First Aid/CPR and AED.

Maximum number of students: 12

Items students will be required to bring to class: None

Safety Courses

Forklift Certification

Course length: 1 Day (8 Hours)

Pre-requisite: None

Basic course description:

This course will introduce the members to the general principles of safe fork truck operation, the types of vehicle(s) being used in the workplace, the hazards of the workplace created by the use of the vehicle(s), and the general safety requirements of the OSHA standard. Trained operators must know how to do the job properly and do it safely as demonstrated by workplace evaluation. Formal (lecture, video, etc.) and practical (demonstration and practical exercises) training will be provided. **Employers** must also certify that each operator has received the training and evaluate each operator at least **once every three years**. Prior to operating the truck in the workplace, the **employer** must evaluate the operator's performance and determine the operator to be competent to operate a powered industrial truck safely. Refresher training is needed whenever an operator demonstrates a deficiency in the safe operation of the truck.

This course is to comply with *OSHA 29CFR 1910.178*. Training Requirements.

Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Safety Courses

Manlift Certification

Course length: 1 Day (8 Hours)

Pre-requisite: None

Basic course description:

This course will introduce the members to the general principles, responsibilities and hazards created by the use of the vehicle(s), OSHA standards, and safe operation of the AWP (Aerial Work Platform). Trained operators must know how to do the job properly and do it safely as demonstrated by a workplace evaluation. Formal (lecture, video, etc.) and practical (demonstration and practical exercises) training will be provided. Prior to operating the AWP in the workplace, the **Employer** must authorize each operator to operate the AWP. The operator shall be **retrained**, when so directed by the **user (Employer)**, based on the user's observation and evaluation of the operator.

This course is to comply with OSHA 29CFR 1910.67(c) (2) (ii), 1926.453(b) (2) (ii), and ANSI/SIA A92.2.

Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Safety Courses

MSHA Part 48B New Miner

Course length: 2 Days (16 Hours)

Pre-requisite: None

Basic course description:

Covers statutory rights of miners, responsibility of supervisors, care and maintenance of respiratory devices, transportation controls, communication systems, emergency plans, ground control, noise and dust hazards, job hazard analysis, electrical hazards, first aid, explosives, health and safety topics of tasks assigned as well as other applicable safety regulations. **This 16 hour course will cover the requirements of Part 46 & Part 48.**

Maximum number of students: 30

Items students will be required to bring to class: None

Safety Courses

MSHA Part 48B Refresher (Annual)

Course length: 1 Day (8 Hours)

Pre-requisite: Must have completed initial 16 Hour MSHA training and be current on annual refreshers if applicable.

Basic course description:

Annual refresher that addresses health and safety subjects relevant to mining operations. Subjects include statutory rights, respiratory devices, transportation controls, hazard recognition, explosives and job task hazard training.

Maximum number of students: 30

Items students will be required to bring to class: If previous training was provided by someone other than the Alaska Operating Engineers/Employers Training Trust you must bring proof of prior training.

Safety Courses

NSTC

Course length: 1 Day (8 Hours)

Pre-requisite: None

Basic course description:

The North Slope Training Co-operative (NSTC) is a joint effort between the North Slope unit owners and their contractors to ensure all employees have basic safety, health and environmental policy classes before going to work on the North Slope. The Unescorted program consists of the following six courses: Camps & Safety Orientation, Alaska Safety Handbook, Hazard Communication, HAZWOPER Awareness, Personal Protective Equipment, and Environmental Excellence. Anyone unsure of their current NSTC Card status please contact the Training Center.

Maximum number of students: 24

Items students will be required to bring to class: None

Safety Courses

OSHA 10 Hour Construction

Course length: 1 ½ Days (10 Hours)

Pre-requisite: None

Basic course description:

Trains workers in the construction field on 29CFR 1926 Construction standards, which include, OSHA Focus 4/PPE and lifesaving equipment/Hand & Power tools/Health Hazards in Construction/Cranes, Derricks, Hoists, Elevators and Conveyors/Excavations.

Maximum number of students: 25

Items students will be required to bring to class: None

Safety Courses

OSHA 30 Hour

Course length: 4 Days (30 Hours)

Pre-requisite: None

Basic course description:

This course covers numerous topics, including: Introduction to OSHA, competent person requirements, stairways and ladders, scaffolding, trenching and excavation, cranes, material handling, demolition, fall protection, personal protective equipment, basic electrical safety, confined spaces, power and hand tools, injury and illness record-keeping, and hazard communication.

Maximum number of students: 25

Items students will be required to bring to class: None

Safety Courses

Trenching & Shoring Awareness

Note: This is an awareness class only, no OSHA certifications are given.

Course length: 2 Days (16 Hours)

Pre-requisite: None

Basic course description:

This course will explain the basic concepts of soil mechanics and how environmental factors affect soil stability. It will also help attendees identify hazards related to excavations & equipment. Sloping and shoring requirements and the use of trench shields, determining the slope of the trench walls and excavation standards will also be covered. ***This course DOES NOT certify or imply competency. That designation can only be made by the employer.***

Maximum number of students: 10

Items students will be required to bring to class: None

CDL Courses

CDL Driving Test Prep - Level I

Course Length: 2 Weeks (80 Hours)

Pre-requisite:

- Proof of DMV issued IA permit
- **AND** DOT medical examiners card must be submitted to Training Center prior to registering for class

Basic course description:

Class is designed for individuals with little knowledge in driving a Class A commercial motor vehicle. Items covered in class will include airbrakes, vehicle inspections, load securement, brake adjustment, double clutching while shifting, and driving safely. In addition students will be given time to familiarize themselves with the truck and driving. Students will complete the DMV required driving test while at the Training Center. Candidates will be required to pass a vehicle inspection of the inside and outside of cab, in cab air brake test, required skills test and the on road driving test to obtain a class A commercial driver's license.

Maximum number of students: 4

Items students will be required to bring to class: Proof of DMV issued IA permit **and** DOT medical examiners card must be submitted to Training Center prior to registering for class. The permit and DOT medical examiners card must also be presented to the instructor on the first day of class.

CDL Driving Test (Appointment Only)

Course Length: 1 Day (8 Hours)

Pre-requisite:

- Proof of DMV issued IA permit
- **AND** DOT medical examiners card must be submitted to Training Center prior to registering for class
- **AND** Candidates must take and pass AOEETT's in-house written pre-test (with an 80% or higher score). After successful completion of the pre-test a Driven Test date will be scheduled

Basic course description:

This class is designed for students who have a vast knowledge of trucks and a vast amount of experience driving a Class A commercial motor vehicle. Student will be allotted time to familiarize themselves with the truck and a minimal amount of drive time prior to the scheduled test time. Candidates will be required to pass a vehicle inspection of the inside and outside of cab, in cab air brake test, required skills test and the on road driving test to obtain a Class A Commercial driver's license.

Maximum number of students: 1

Items students will be required to bring to class: Proof of DMV issued IA permit **and** DOT medical examiners card must be submitted to Training Center prior to registering for class. The permit and DOT medical examiners card must also be presented to the instructor at time of testing.

CDL Courses

CDL Load Securement

Note: This course does not add any endorsements to your CDL.

Course Length: 1 Week (40 Hours)

Pre-requisite:

- Must be a current CDL holder and provide proof of DMV issued Class A CDL License
- **AND** Current DOT Medical Card

Basic course description:

Course offers load securement, inspection requirements, and securement requirements on: dressed lumber and similar building materials, metal coils or spooled wire, paper rolls or short pieces of pipe, concrete pipe, steel pipe, automobiles, light trucks and vans, heavy vehicles, equipment and machinery, boulders or possible odd shaped items. Includes; directions on how to chain up and what to look out for in the cold climate. On the road driving and loading/off-loading vehicles will be practiced while in class.

Maximum number of students: 4

Items students will be required to bring to class: CDL License, DOT Medical Card. Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

CDL Courses

DOT Brake Inspection

Note: This course does not add any endorsements to your CDL.

Course Length: 1 Day (8 Hours)

Pre-requisite: None

Basic course description:

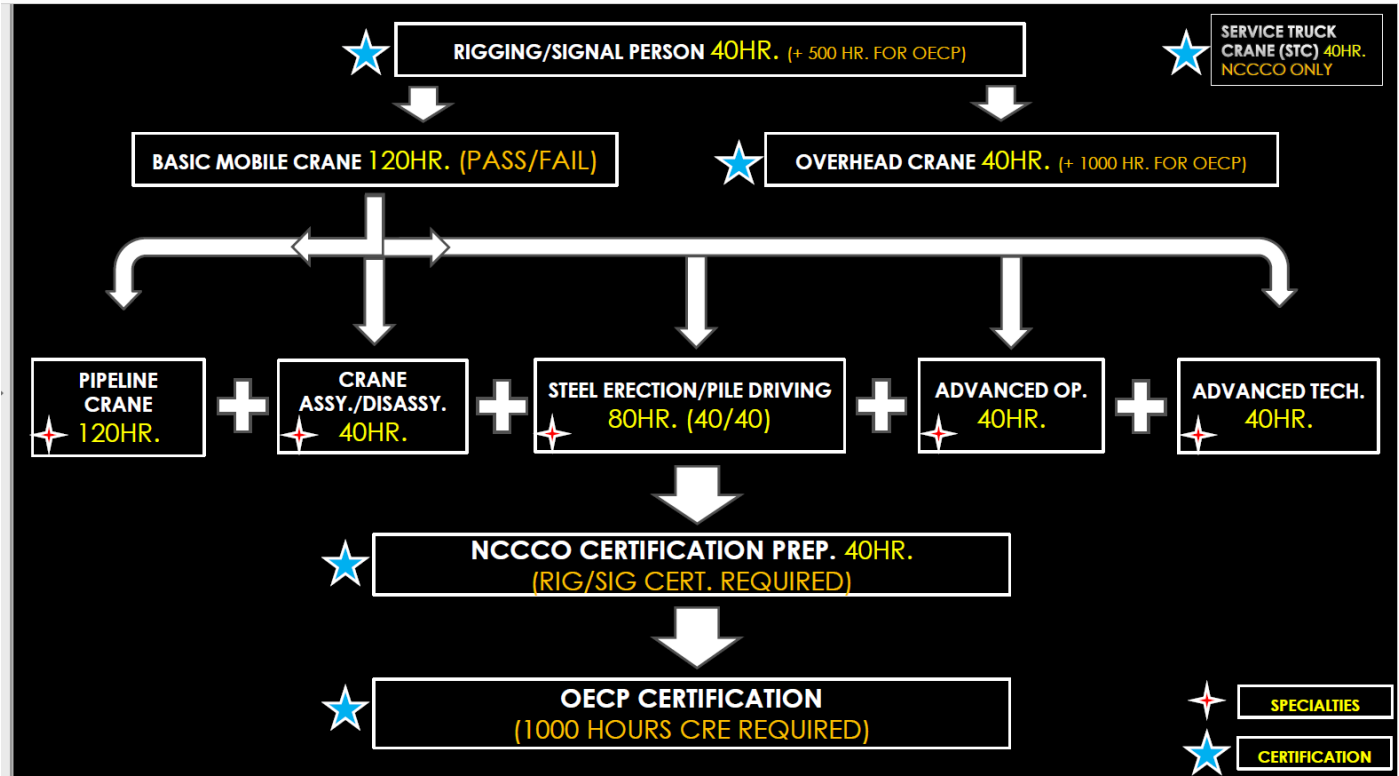
Course is designed to familiarize students with brakes, perform a thorough brake inspection and how to adjust brakes.

Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Crane Pathway



- ★ PATHWAY APPLIES TO MEMBERS UNDER 1000 HRS. OF C.R.E.
- ★ RIG/SIG + MOBILE 1 + 3 SPECIALTIES REQUIRED TO QUALIFY FOR NCCCO PREP.
- ★ TO QUALIFY FOR SPECIALTIES, PARTICIPANTS MUST HAVE PASSED MOBILE 1 WITHIN 2 YEARS.
- ★ PARTICIPANTS MUST HAVE PASSED MOBILE 1 TO QUALIFY FOR ANY ITC CRANE CLASSES.
- ★ VERIFICATION IS REQUIRED FOR PARTICIPANTS WITH 1000 HRS. OF C.R.E. :

1. LETTER FROM CONTRACTOR.
2. SPECIFIC TO MAKE AND MODEL.
3. DETAILED HRS OF C.R.E.
4. ON LETTERHEAD, SIGNED BY SUPERVISOR.

UPON VERIFICATION, PARTICIPANT QUALIFIES FOR NCCCO/OECP PREP. AND PRACTICALS.

- ★ PARTICIPANTS WITH CURRENT CERTIFICATION OR PROOF OF SUCCESSFUL WRITTEN EXAM, QUALIFY FOR NCCCO/OECP PREP AND PRACTICALS.
- ★ CRANE RELATED EXPERIENCE (C.R.E.): ANY RELATED EXPERIENCE ON OR AROUND ANY MAKE, MODEL OR TYPE OF MOBILE CRANES INCLUDING: OPERATION, OILING, SERVICE/MECHANIC, RIGGING/SIGNALING, ASSYMBLY/DIS-ASSYMBLY

Crane/Rigging/Signalperson Courses

Rigging/Signalperson Qualification/NCCCO Written & Practical Test Prep

Note: Upon completion of this course students will receive an in-house qualification card.

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

This course will focus on the everyday use of rigging in the construction industry. The students will learn the proper selection, use, care, and inspection of slings and rigging hardware. Students will learn to identify and use the different types of rigging equipment, natural fiber rope, synthetic fiber rope, wire rope, knots and various other items associated with rigging. In addition they will be instructed on how to distinguish between different types of fiber rope lay, different types of wire rope lay, and wire rope slings and chain slings.

Maximum number of students: 8

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Rigging/Signalperson - NCCCO Written & Practical Test

Note: **Must take Rigging/Signalperson Qualification in conjunction with these tests which are taken the last day of Rigging/Signalperson Qualification.

Course length: 1 Day (8 Hours)

Pre-requisite:

- Rigging/Signalperson Qualification

****Must complete the NCCCO Written & Practical Rigger & Signalperson Application 5 weeks prior to testing. In addition, members are responsible for applicable fees and documentation to include passport photo.**

Basic course description:

This course will focus on the everyday use of rigging in the construction industry. The students will learn the proper selection, use, care, and inspection of slings and rigging hardware. Students will learn to identify and use the different types of rigging equipment, natural fiber rope, synthetic fiber rope, wire rope, knots and various other items associated with rigging. In addition they will be instructed on how to distinguish between different types of fiber rope lay, different types of wire rope lay, and wire rope slings and chain slings.

Maximum number of students: 8

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Overhead Crane Operator - NCCCO Written & Practical Test Prep & Test

Course length: 1 Week (40 hours)

Pre-requisite:

- Rigging/Signalperson Certification

****Must complete the NCCCO Written & Practical Mobile, Tower & Overhead Crane Applications 5 weeks prior to testing.** In addition, members are responsible for applicable fees and documentation to include passport photo.

Basic course description:

This course reviews various types of overhead cranes. Items covered will include proper crane terminology, how to perform daily inspections. Students will also learn how to correctly use the control pendant, how to safely rig a load, how to use a sling, plate clamp and other lifting devices.

Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Basic Mobile Crane

Note: This course does not make attendees crane operators. Upon completion of class members will have a better familiarization of crane operations and safety.

Course length: 3 Weeks (120 Hours)

Pre-requisite:

- Must have sufficient strength, endurance, agility, coordination, and speed of reaction to meet physical demands, able to read, write, comprehend, and use arithmetic - (Per ASME B 30.5)
- Rigging/Signalperson Certification

Basic course description:

Course is designed for individuals with little or no crane experience. It covers basic rigging and responsibility for rigging a load. It includes: safety requirements for safe rigging practices, recognizing site conditions that could have an adverse effect on crane operations, familiarization and understanding of crane manuals and load charts, manufacture's safe operating procedures, familiarization and understanding of cranes functions and its limitations, performance of daily inspections, how to report deficiency and repairs, calculating the load and rigging weight provided by the lift director in regards to crane capacity to make the lift, operator responsibility when entering a prohibited zone of an energized power line, site inspection before entering the site with a crane and determination of energized power lines. OSHA 1926-550 and ANSI B30.5 regulations.

Maximum number of students: 10

Minimum number of students: 3

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Mobile Crane Assembly/Disassembly

Course length: 1 Week (40 Hours)

Pre-requisite:

- Rigging/Signalperson Certification
- PASSED Basic Mobile Crane
- OR Current Crane Certification

Basic course description:

In this class students will learn the proper techniques in assembling and disassembling mobile cranes in a safe manner.

Maximum number of students: 6

Minimum number of students: 2

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Pile Driving and Steel Erection (Combo Class)

Course length: 2 Weeks (80 Hours)

Pre-requisite:

- Rigging/Signalperson Certification
- PASSED Basic Mobile Crane

Basic course description:

In this class students will drive and extract H beam piling, round pipe piling, and Z sheet piling. Students will learn how to place the vibro hammer onto a pile, the method to drive a piling straight, and how to safely extract a piling. For Steel Erection: students will be erecting a building and working with Ironworkers. Training consists of blind picks, assembled roof picks, vertical beam picks and multi beam picks.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Crane/Rigging/Signalperson Courses

Mobile Crane Operator - NCCCO Written Test Prep

Course length: 1 Week (40 Hours)

Pre-requisite:

- Previous NCCCO Certification
- **OR** 1,000 hours Crane Related Experience (must be verified*)
- **OR** completion of Rig/Sig + Basic Mobile Crane + ANY 3 Specialties (Pipeline Crane, Crane Assembly/Disassembly, Pile Driving and Steel Erection, Advanced Operation of Crane or Advanced Techniques of Cranes)

Basic course description:

This one week course is designed for members that are currently NCCCO Certified or have provided verification of the pre-requisite amount of crane experience. Course will cover general items that may be covered on the NCCCO written exam. Recommended for anyone re-certifying for the NCCCO Certification as well as anyone with verified experience (per pre-requisite) to take the NCCCO Written Exam.

Maximum number of students: 30

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Crane/Rigging/Signalperson Courses

Mobile Crane Operator - NCCCO Written Test

Course length: 1 Day (8 Hours)

Pre-requisite:

- Previous NCCCO Certification
- **OR** 1,000 hours Crane Related Experience (must be verified*)
- **OR** completion of Rig/Sig + Basic Mobile Crane + ANY 3 Specialties (Pipeline Crane, Crane Assembly/Disassembly, Pile Driving and Steel Erection, Advanced Operation of Crane or Advanced Techniques of Cranes)

****Must complete the NCCCO Written Mobile, Tower & Overhead Crane Application 5 weeks prior to testing. In addition, members are responsible for applicable fees and documentation to include passport photo.**

Basic course description:

Administration of the NCCCO Written Examination by third party - The Training Trust does not have access to the actual test and/or answers nor are they responsible for the grading of the tests. Upon completion of examination the results will be sent to you by the International Assessment Institute within 6 to 8 weeks.

***NOTE:** Arrangements for individuals with disabilities will be provided by the NCCCO upon request in conformance with the ADA. Professional documentation for accommodation must be submitted to the NCCCO no later than four (4) weeks prior to your scheduled test date. While the NCCCO will make every accommodation to provide access to any candidate to take the test, certification can only be available to those candidates who comply with the provisions of ANSI/ASME B30.5. Candidates who do not meet the requirements for certification can still take the test, however, and receive their scores but no certification will be issued.*

Maximum number of students: N/A

Items students will be required to bring to class: Acceptance letter from NCCCO (Members can expect to receive this after application has been finalized by NCCCO).

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Crane/Rigging/Signalperson Courses

Mobile Crane Operator - NCCCO Practical Test (Appointment Only)

Course length: Varies

Pre-requisite:

- Previous NCCCO Certification
- **OR** 1,000 hours Crane Related Experience (must be verified*)
- **OR** completion of Rig/Sig + Basic Mobile Crane + ANY 3 Specialties (Pipeline Crane, Crane Assembly/Disassembly, Pile Driving and Steel Erection, Advanced Operation of Crane or Advanced Techniques of Cranes)

****Must complete the NCCCO Practical Mobile, Tower & Overhead Crane Application prior to testing. In addition, members are responsible for applicable fees and documentation to include passport photo.**

Basic course description:

Administration of the NCCCO Practical Examination - The Practical Examiners on staff administer the NCCCO Practical Examinations; however they are not responsible for the scoring of the tests. Upon completion of examination the score sheets are forwarded to the International Assessment Institute and your results will be sent to you by the International Assessment Institute within 6 – 8 weeks.

Maximum number of students: N/A

Items students will be required to bring to class: Passport Photo, Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Crane/Rigging/Signalperson Courses

Service Truck Crane (STC) - NCCCO Written & Practical Test

Course length: 1 Week (40 Hours)

Pre-requisite: None

****Must complete the NCCCO Written & Practical Mobile, Tower & Overhead Crane Application 5 weeks prior to testing. In addition, members are responsible for applicable fees and documentation to include passport photo.**

Basic course description:

This course is a restricted subcategory of the CCO Telescopic Boom-Fixed Cab certification (TSS) and was developed specifically for the industries that use smaller machines. STC certification is intended only for operators of Service Truck Cranes and not for those who operate larger Telescopic Boom-Fixed Cab cranes.

Service Truck Cranes are identified by their telescopic boom, where the base and mast structure is not integral to the stabilizer/outrigger system. Lifting is typically accomplished via a winch (electric or hydraulic) and its functions (rotation, elevation, telescoping) are either powered or manual. These machines tend to have relatively shorter boom lengths (10-35 ft.) and lower capacities (1-7 tons) as compared to other Telescopic Boom-Fixed Cab machines.

This course is designed to prepare you for taking NCCCO Core, STC Written and STC Practical exams. You must take NCCCO Core and add STC as a specialty.

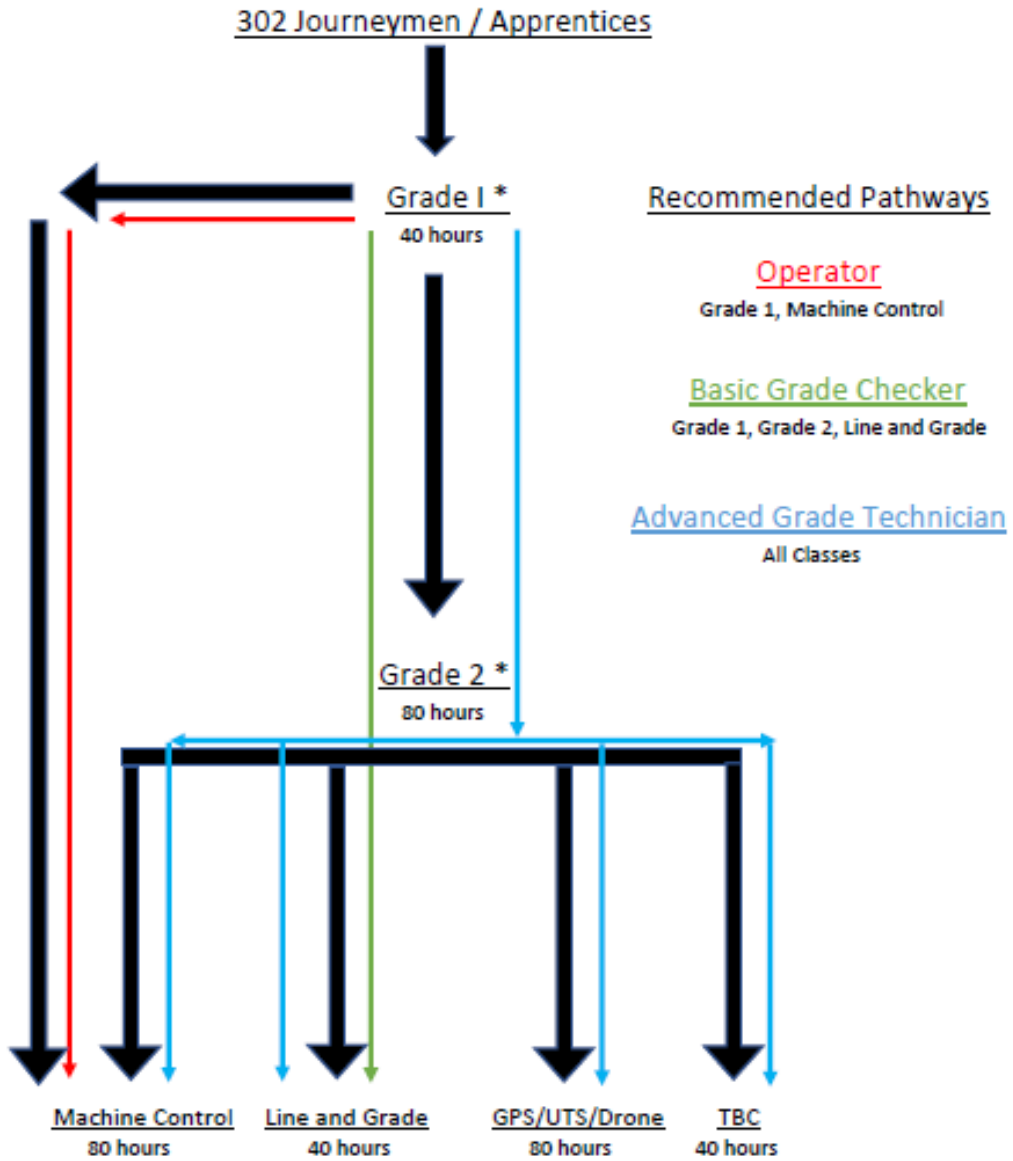
Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Grade Checking Courses

Grade Checking Flow Chart

Operator / Grade Checker Flow Chart



Grade Checking Courses

Grade Checking - Level I

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

This introduction to grade checking will cover responsibilities, tools, job safety and will provide a general understanding of grade checking. This course will include class lecture, field exercises and will provide demonstrations, videos, quizzes and photos. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course covers:

- Basic math skills
- Basic plan reading
- Slope stakes
- Hand signals
- Introduction to lasers
- Terminology
- Different material types
- Simple volumes
- Stationing
- Jump stakes
- Survey staking notes
- Job position safety
- Hand Levels

Maximum number of students: 8

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sine, cosine, square root and tangent functions.

Grade Checking Courses

Grade Checking - Level II

Course length: 2 Weeks (80 Hours)

Pre-requisite:

- Successful completion of Grade Checking Level I within the last 2 years
- **OR** 80% passing grade on AOETT's in-house entrance exam

Basic course description:

The Grade Checking Level II course will include a quick review of Level I with many advanced lessons and skills taught. This course will include class lecture, field exercises and will provide demonstrations, videos, quizzes and photos. Students will be expected to build simulated construction projects using heavy equipment and grade checking instruments. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course covers the following:

- Super elevations
- Slope intercepts
- Volumes & formulas
- Total station introduction
- Dual plane laser system
- Advanced staking notes
- Introduction to AZ Bearings Coordinate System
- Advanced plan reading
- Slope staking
- Advanced math skills
- GPS introduction
- Job position safety
- Material yielding

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sine, cosine, square root and tangent functions.

Grade Checking Courses

Grade Checking - Line & Grade

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Grade Checking Level II within last 2 years
- **OR** 80% passing grade on AOEETT's in-house entrance exam

Basic course description:

The line and grade course will cover underground utility construction, as well as instruction for the setup and use of the line and grade instruments. The course will include class lecture, field exercises and will provide demonstrations, videos, quizzes and photos. Excavator operations (utility) is included. Students will be expected to install simulated underground utilities using heavy equipment and grade checking instruments. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course content:

- Total station set up
- Transit/theodolites set up
- Underground plan reading
- Ditch volumes
- Safety and equipment care
- Measurement of pipe & fittings
- Proper line & grade book layout
- Structure installation
- Pipe laser set up
- Differential level set up
- Specs understanding
- Level loops
- Proper hand signals
- Utility locations
- Safe ditch layout
- Red lines

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sine, cosine, square root and tangent functions.

Grade Checking Courses

GPS/UTS/Drone Grade Checking

Course length: 2 Weeks (80 Hours)

Pre-requisite:

- Successful completion of Grade Checking Level II within last 2 years
- **OR** 80% passing grade on AOETT's in-house entrance exam

Basic course description:

GPS grade checking will cover operations and responsibilities with GPS using Trimble SCS 900 software. The course will include class lecture, field exercises and will provide demonstrations, videos, quizzes and photos. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course content:

- Parts & pieces of equipment
- Base station set up
- Calibration/Project control
- Different TOPO shot types
- Safety & equipment care
- Exporting GPS data
- Universal Total Station (UTS)
- Rover setup
- Plans reading for GPS
- Import GPS models
- Data organization
- Job position safety
- Trimble Connected Community (TCC)
- Drone overview

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sine, cosine, square root and tangent functions.

Grade Checking Courses

GCS Machine Control

Course length: 2 Weeks (80 Hours)

Pre-requisite:

- Successful completion of Grade Checking 1 within last 2 years
- **OR** 80% passing grade on AOEETT's in-house entrance exam

Basic course description:

The GCS Machine Control course provides instruction on how to use GPS using the Trimble GCS on heavy equipment for grading purposes. The course teaches the basics of the operating software and will cover operations and responsibilities with heavy equipment GPS. The course will include class lecture, field exercises and will provide demonstrations, videos, quizzes and photos. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course content:

- Parts & pieces of equipment
- Equipment trouble shooting
- Calibration/Project control
- Import GPS models
- Cut/fill situations
- Equipment platforms
- Equipment setup
- In cab designs
- Trimble Connected Community (TCC)
- Laser system
- Sonic system
- Blade sloping system
- UTS system
- GPS system
- Plan reading for GPS
- Safety & equipment care
- Job position safety

Equipment Used: Dozer D6K2, GraderG14, Excavator Cat 315

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sign, cosine, square root and tangent functions.

Grade Checking Courses

Trimble Business Center Project Modeling

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion Grade Checking 2 within last 2 years
- **OR** 80% passing grade on AOEETT's entrance exam

Basic course description:

Trimble Business Center Project Modeling course educates students on how to convert paper plans to a 3D digital form using TBC. This class will cover the basic use of TBC and will include class lecture, demonstrations, videos, quizzes and photos. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Course Content:

- Digital data management
- Construct lines & points
- Importing/exporting files
- Backing up files
- Road models
- Site models
- TBC based volumes
- Equipment care
- Distances
- Digital plan reading
- Alignments and vertical control
- Trimble Connected Community (TCC)

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Calculator with sine, cosine, square root and tangent functions. Laptop recommended.

Equipment Skills Courses

Earth Moving Equipment Skills Upgrade

** Please specify type of equipment requested for training

- Articulating Truck
- Compactor
- Dozer
- Excavator / TLB
- Loader
- Motor Grader
- Scraper
- Skid Steer

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Grade Checking Level I
- **OR** 80% or higher passing grade on AOETT's Grade Checking entrance exam

Basic course description:

This class covers: Pre-start checks of a machine's hardware (frame, body panels, tires, tracks and safety equipment), driveline components, hydraulic system components, electrical components, and controls. Explains how to safely start, move, steer, stop, and shut down procedures on different types of machines. This class will also include a broad introduction to the process of planning and executing Earth Moving activities on various types of construction projects.

Maximum number of students: 6 per equipment

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing along with a good attitude.

Equipment Skills Courses

Articulating Truck - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

This course covers the duties and responsibilities of the operator, prestart inspections, loading and dumping procedures, driving and backing techniques, preventative maintenance and safety.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Compactor - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

Course reviews the different models and styles of compactors, as well as soil dynamics, compaction techniques and applications. Also, covers safety practices, inspection, start up, shutdown and operation.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Crusher

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

This is an awareness, maintenance, and operation class. It contains information on types of crushers and how each crushes differently. This course will instruct how to work safely, inspections of picking devices and electrical dangers. Maintenance aspects will include application and repair of conveyor belts and screen decks. Operation training includes start up and what to watch for when the plant is running. Will also include MSHA standards and how they apply to crushers.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Dozer - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

This class will cover: Pre-operational checks, inspections, and maintenance. Will help develop familiarity with control functions, basic dozer techniques, slot dozing, v-ditches, push-cat applications, safety, proper traveling, and efficient work patterns.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Dozer - Level II

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Dozer Level I **AND** 1000 Hours Dozer experience (must be verified*)
- **OR** 2000 Hours Dozer Experience (must be verified*)

Basic course description:

This class will cover: Backfilling techniques around pipe, walls, and foundations. It will also cover compaction requirements, efficient pushing/loading of scrapers, ripping operations, and introduction to GPS.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Equipment Skills Courses

Drone Regulation and Basic Operation

Course length: 1 Week (40 Hours)

Pre-requisite:

- None

Basic course description:

To develop the skills needed to obtain an FAA Unmanned aerial System remote pilot certificate and develop UAV training for their local. Each student will demonstrate an understanding of FAA Part 107 Regulations and testing procedures. Materials covered include: Regulations, specific testing techniques and basic flight procedure.

Maximum number of students: 4

Items students will be required to bring to class: Laptop is suggested.

Equipment Skills Courses

Excavator/TLB - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

This class will cover: Pre-operational checks, inspections, and maintenance. It will develop familiarity with control functions, ditching, benching, loading techniques, and machine safety will also be covered.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Excavator/TLB - Level II

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Excavator/TLB Level I **AND** 1,000 Hours Excavator/TLB experience (must be verified*)
- **OR** 2,000 Hours Excavator/TLB Experience (must be verified*)

Basic course description:

This class will cover: Introduction to laser, advanced ditching, utilities, trench box techniques, loading techniques, machine placement, safety and maintenance.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Equipment Skills Courses

Loader - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

This class will cover: Pre-operational checks, inspections, and maintenance. Will teach nomenclature, familiarity with control functions, basic techniques, feeding a plant, stockpiling, pit operations and loader and truck safety.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Loader - Level II

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Loader Level I **AND** 1,000 hours Loader experience (must be verified*)
- **OR** 2,000 hours Loader Experience (must be verified*)

Basic course description:

This class will cover: Pre-operational checks, inspections, and maintenance. It will also cover machine placement, truck loading, crusher/hot plant applications, multi-tasking, stockpiling, safety, and floor maintenance.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Equipment Skills Courses

Loader – Support loading Trucks

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

Basic operation loading rock trucks and side dumps. Learning how to work with other trades: Teamsters. Bucking up piles and keeping a clean floor in the gravel pit. Practicing basic safety, maintaining fuel level in equipment and assisting mechanic with any maintenance of equipment.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Motor Grader - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

This class will cover: Basic motor grader applications and skills. It will also include an emphasis on soils, compaction, earthmoving operations, road maintenance, ditching, ripping, scarifying, mixing, and fill operating.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Motor Grader - Level II

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of Motor Grader Level I **AND** 1,000 hours Motor Grader experience (must be verified*)
- **OR** 2,000 hours Motor Grader Experience (must be verified*)
(Snow removal may only account for 50% of experience)

Basic course description:

This class will cover: Motor grader efficiency, cutting edge/tire, and circle inspection. Identifying cuts & fills, proper compaction, proper lift depths, project sectioning, and blue topping.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

***Verified:** Written documentation (i.e. – hours book, work log, etc.) OR letter from Contractor, on company letterhead, verifying hours.

Equipment Skills Courses

Paving

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

This class will cover: Basic asphalt paving techniques, mat troubleshooting procedures, pre-work planning, paver & screed operation, raking, compaction, finishing, and how to prevent/correct mat defects will be reviewed.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Scraper - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

Course reviews the types of scrapers used in site preparation, as well as the safe practices associated with the operation of scrapers. Also, covers safety practices, inspection and maintenance requirements, start-up, shutdown and operation.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Skid Steer - Level I

Course length: 1 Week (40 Hours)

Pre-requisite:

- The ability to safely operate equipment and comprehend basic instruction

Basic course description:

Course reviews the many uses of skid steer and attachments available for operation. Also, covers safety practices, inspection and maintenance requirements, start-up, shutdown and operation.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Equipment Skills Courses

Construction Foreman

Course length: 32 Hours

Pre-requisite:

- 5 years of field experience in the craft, or Contractor request.

Basic course description:

The Construction Foreman class will introduce basic supervisory concepts, practices, and skills needed on the job. Topics will include: lecture and hands on activities, leadership, communication, problem solving, decision making, planning and scheduling, costs, risk management, and hazard recognition.

Maximum number of students: 8

Minimum number of students: 4

Items students will be required to bring to class: None

Equipment Skills Courses

Skill Testing On Equipment (Appointment Only)

Course Length: 1 Day (8 Hours)

Pre-requisite:

- Candidates must take and pass AOEETT's in-house written pre-test for each equipment with an 80% or higher score. After successful completion of the pre-test a practical Skill Testing date may be scheduled

Basic course description:

The IUOE Local 302 Skill Testing is intended to describe the tasks that an experienced operator should be capable of performing with a specific type of equipment.

These tests also measure operator behavior necessary to accomplish each task safely, efficiently and effectively.

Each operator will be graded on a number of specific out-puts (objectives) for each of the following equipment groups:

- Inspection (prior to operation)
- Services Equipment (if required)
- Start-up
- Operation (basic, intermediate, difficult)
- Grade Checking
- Shut-down
- Safety

Upon completion, the candidate's score will be compiled and they will be notified immediately. Notification will also be sent to Dispatch Hall.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Mechanic Courses

ASE (Automotive Service Excellence) Test Prep

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Courses consist of instructor led preparation, designed to help Apprentice and Journeyman level mechanics successfully test for the following **ASE Certification Test:**

Automobile & Light Truck Certification Tests (A1 - A8)

- A1-Engine Repair
- A2-Automatic Transmission/Transaxle
- A3-Manual Drive Train & Axels
- A4-Suspension & Steering
- A5-Brakes
- A6-Electrical/Electronic Systems
- A7-Heating & Air Conditioning
- A8-Engine Performance

Medium & Heavy Truck Certification Tests (T1-T8)

- T1-Gasoline Engines
- T2-Diesel Engines
- T3-Drive Train
- T4-Brakes
- T5-Suspension & Steering
- T6-Electrical/Electronic Systems
- T7-Heating, Ventilation & Air Conditioning (HVAC)
- T8-Preventive Maintenance Inspection

Maximum number of students: 6

Items students will be required to bring to class: None

Mechanic Courses

Crusher

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

This course is geared towards maintenance of a crusher to include, application and repair of conveyor belts, screen decks and crushers. This course will instruct how to work safely, perform inspections of picking devices, welding steel fabrication, electrical dangers, start-up, shut-down and what to watch for while the plant is running. Will also include MSHA standards and how they apply to crushers.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Diesel Engines

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Course consists of theory and evolution of the modern diesel engine. Topics include: Fuel Systems, Exhaust Systems, Electrical functions, troubleshooting techniques, complete hands-on tear down, inspection, reassembly/rebuild of engine and testing.

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Drivetrain

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Course consists of studying all Systems; Power Shift Transmission, Torque Converter and Final Drive Assemblies. Review trouble-shooting techniques. Complete hands-on removal, tear-down, inspection and re-assembly of systems.

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Hydraulics - Introduction

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

Course covers hydraulic safety, basic hydraulic theory, hydraulic hoses and connectors, routing and securement, symbols and schematics, fluids and filtration, identification of motors, pumps, valves, accumulators, heat exchangers, reservoirs, and identification of and rebuilding cylinders.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Hydraulics - Level I

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Course covers hydraulic safety, system design, hydraulic law and principles, symbols and schematic reading, basic trouble shooting skills, proactive maintenance, and principles of filtration, pumps, motors, valves, cylinders, heat exchangers, reservoirs, accumulators, lines and conductors.

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Portable Line Boring

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Course consists of: Competency in the use of micrometers and other measuring devices, applications and varied needs of Portable Line Boring, related hands-on practice, including set-up and maintenance.

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Mechanic Courses

Power Shift Transmission

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Course covers theory and principles of operation, torque converters, hydraulic controls, and power shift transmissions.

Maximum number of students: 4

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing. Small box of hand tools.

Electrical Courses

AC Electrical - Level I

Course length: 3 Weeks (120 Hours)

Pre-requisite: None

Basic course description:

Includes instruction on motor controls, Ohm's Law, basic line and ladder logic, logic function, induction, Atomic Theory, and also several hours of hands on laboratory work. Students should expect 2 – 3 hours of homework per night and will be held accountable for completion of homework as well as class participation review of homework. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Maximum number of students: 10

Items students will be required to bring to class: Wire strippers, standard and Phillips screwdrivers, colored pencils, calculator and safety glasses (side shields).

Electrical Courses

AC Electrical - Level II

Course length: 3 Weeks (120 Hours)

Pre-requisite:

- Successfully complete AC Electrical Level I within last 2 years

Basic course description:

Instruction of this class to include solid state devices, timers and counters, proximity switches, and automobile sensing devices. Acceleration and deceleration of AC/DC motors, troubleshooting techniques. Lab work includes control wiring circuit for an actual 400 HP impactor and also an actual burner control circuit simulation of an asphalt plant operation. Students should expect 2 – 3 hours of homework per night and will be held accountable for completion of homework as well as class participation review of homework. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Maximum number of students: 10

Items students will be required to bring to class: Wire strippers, standard and Phillips screwdrivers, colored pencils, calculator and safety glasses (side shields).

Electrical Courses

DC Electrical - Level I

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

You will develop an understanding of fundamental electrical principles in relation to series parallel and combination resistive circuits. This course will cover starters, charging, batteries, schematics, and wire methods. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Maximum number of students: 10

Items students will be required to bring to class: Small box of basic hand tools and multi meter if available. Wire strippers, standard and Phillips screwdrivers, colored pencils, calculator and safety glasses (side shields).

DC Electrical Mobile Computers - Level II

Course length: 1 Week (40 Hours)

Pre-requisite:

- Successful completion of DC Electrical Level I within last 2 years

Basic course description:

Applied DC Electrical troubleshooting and repairing, DC circuits, and on board mobile computers. Successful completion of course will be based on score of 80% or more on **Final Exam**.

Maximum number of students: 10

Items students will be required to bring to class: Small box of basic hand tools and multi meter if available. Wire strippers, standard and Phillips screwdrivers, colored pencils, calculator and safety glasses (side shields).

Electrical Courses

Power Generation

Course length: 1 Week (40 hours)

Pre-requisite: Passing grade in AC Electrical 1

Basic course description:

This course is a continuation of AC Electrical Program supporting onsite electrical power production.

Maximum number of students: 10

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Welding Courses

Welding

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

This class covers the techniques used in the maintenance and repair of heavy equipment. The first week will be an introduction to the safe process of oxy-acetylene cutting and arc welding. The second week introduces advanced techniques in welding applications, fabricating, hard surfacing, and line boring.

Maximum number of students: 6

Items students will be required to bring to class: Welding gloves/leather gloves, Welding helmet, long sleeve shirt or light jacket, no flared clothing. Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Welding Courses

MIG Welding

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

Course is designed to teach welders about arc welding safety and the gas metal arc welding process (GMAW-MIG). Includes classroom lectures and hands on instruction.

Maximum number of students: 4

Items students will be required to bring to class: Welding gloves/leather gloves, Welding helmet, long sleeve shirt or light jacket, no flared clothing. Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

TIG Welding

Course length: 1 Week

Pre-requisite: None

Basic course description:

Course is designed to teach welders about arc welding safety and the gas tungsten arc welding process (GTAW-TIG). Students will learn fundamentals of GTAW (TIG) welding and upon completion of the course each student should have an understanding of how the GTAW process works.

Maximum number of students: 4

Items students will be required to bring to class: Welding gloves/leather gloves, Welding helmet, long sleeve shirt or light jacket, no flared clothing. Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

CNC Machine Class

Course length: 1 Week (40 Hours)

Pre-requisite: None

Basic course description:

This class covers the techniques used in designing custom parts using a CNC Machine. Computer numerical control (CNC) is a method for automating control of machine tools through the use of software embedded in a microcomputer attached to the tool. Classroom time learning the computer program as well as hands on time cutting out designs.

Maximum number of students: 5

Items students will be required to bring to class: Long sleeve shirt or light jacket, no flared clothing. Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Drill Helper

Course length: 2 or 3 Weeks (80 or 120 Hours)

Pre-requisite: None

Basic course description:

This class will give you the very basic knowledge of what to expect when working with and around a drill. (This is a beginner's class and does not qualify you to be Drill Hand.) Class will cover the various parts and pieces of a drill and the set up. In addition safety, technique, maintenance, and record keeping will be reviewed.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Pipeline Crane

Course length: 3 Weeks (120 Hours)

Pre-requisite:

- Previous NCCCO Certification
- **OR** completion of Rig/Sig Certification + Basic Mobile Crane (passing grade)

Basic course description:

Course is designed for individuals with little or no crane experience. It covers basic rigging and responsibility for rigging a load. It includes: safety requirements for safe rigging practices, recognizing site conditions that could have an adverse effect on crane operations, familiarization and understanding of crane manuals and load charts, manufacture's safe operating procedures, familiarization and understanding of cranes functions and its limitations, performance of daily inspections, how to report deficiency and repairs, calculating the load and rigging weight provided by the lift director in regards to crane capacity to make the lift, operator responsibility when entering a prohibited zone of an energized power line, site inspection before entering the site with a crane and determination of energized power lines. OSHA 1926-550 and ANSI B30.5 regulations.

Note: Will be working with other trades in simulating a pipeline project.

Maximum number of students: 6

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Pipeline Mechanic

Course length: 1 – 3 Weeks (40 – 120 Hours)

Pre-requisite: None

Basic course description:

Mechanics will be working with a journeymen mechanic to keep all equipment up and running during all pipeline training classes. This can involve anything from changing fuel filters and broken hoses, removing booms and counter weights, replacing turbos and water pumps, hard surfacing and welding projects to operating. Equipment utilized in this training will include: Side-booms, VSM Drill, Dozers, Loaders, Backhoes, Excavators, Heaters, Light Plants, Motor Graders and Cranes.

Note: Will be working with other trades in simulating a pipeline project.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Pipeline Sideboom

Course length: 3 Weeks (120 Hours)

Pre-requisite:

- Must have 2 years equipment operating experience

Basic course description:

Side-boom class starts 1 week prior to pipeline training to allow the operator's time to get formerly introduced with the operation and mechanics of side-booms before working around equipment and people.

Classroom time will cover safety and operation of side-boom, learning component names, terminology, and hand signals used with side-boom and pipeline work.

Hands on training will include learning the controls and names of components. Operating side-booms with weight individually, controlling the load, working as a team with 2 or more side-booms lowering, raising, setting and traveling with pipe. Setting pipe for pipe gang. Loading and unloading pipe on trailers, setting pipe on VSM's. How to perform daily walk around inspections and the assembly and disassembly of boom and counter weights.

Note: Will be working with other trades in simulating a pipeline project.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Sideboom - Apprentice

Course length: 2 Weeks (80 Hours)

Pre-requisite: None

Basic course description:

Classroom time will cover safety and operation of side-boom, learning component names, terminology, and hand signals used with side-boom and pipeline work. How to perform daily walk around inspections and the assembly and disassembly of boom and counter weights. Hands on training will include learning the controls and names of components. Operating side-booms with weight individually, controlling the load, working as a team with 2 or more side-booms lowering, raising, setting and traveling with pipe. Loading and unloading pipe on trailers, setting pipe on VSM's.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.

Pipeline Courses

Sideboom - Refresher

Course length: 1 or 2 Weeks (40 or 80 Hours)

Pre-requisite: 500 Hours Side-boom Related Experience (must be verified) or completion of Side-boom Level I

Basic course description:

Geared for Operators that have taken the Side-boom class or have operated side-booms previously and are in need of review on the controls and operations of side-booms.

Classroom training will include review of safety and operation of side-boom. Review components, terminology and hand signals used with side-boom and pipeline work.

Hands on training will include operating side-booms with suspended weight on an individual basis. Controlling the load. Working as a team with 2 or more side-booms lowering, raising, setting and traveling with pipe. Perform daily walk around inspections and the assembly/disassembly of boom and counter weights.

Maximum number of students: Varies

Items students will be required to bring to class: Safety glasses (side shields), hard hat, safety vest, safety toed footwear or boots and weather appropriate clothing.