



International Union of Operating Engineers

AFFILIATED WITH THE AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

Training Course Schedule

Courses from November 9, 2024 - January 8, 2025

Course - Session	Date(s)
Pipeline - ONLINE OILER TRAINING	Dec 1, 2024 - Dec 1, 2024
Mechanics Training - Hydraulic Fundamentals	Dec 2, 2024 - Dec 6, 2024
Pipeline - ONLINE OILER TRAINING	Jan 1, 2025 - Jan 1, 2025
Pipeline - Sideboom - Hydraulic Controls	Jan 6, 2025 - Jan 25, 2025
Pipeline - Sideboom - Intermediate with Winching- KENTUCKY	Jan 6, 2025 - Jan 25, 2025
Pipeline - Excavator - Intermediate	Jan 6, 2025 - Jan 25, 2025
Pipeline - Excavator - Rough Terrain/Hill Procedures - KENTUCKY	Jan 6, 2025 - Jan 25, 2025
Pipeline - Excavator - Mat Handling/Bridge Building Training	Jan 6, 2025 - Jan 11, 2025
Pipeline - Angle Dozer - Intermediate	Jan 6, 2025 - Jan 25, 2025
Pipeline - Angle Dozer - Rough Terrain/Hill Procedures/Winching - KENTUCKY	Jan 6, 2025 - Jan 25, 2025
Pipeline - Horizontal Directional Drilling with Mud Reclamation System	Jan 6, 2025 - Jan 25, 2025
Pipeline - Vacuworxs Pipelifter	Jan 6, 2025 - Jan 11, 2025
Pipeline - Hydro-Excavation	Jan 6, 2025 - Jan 11, 2025
Chief Engineer/Facility Management Seminar	Jan 6, 2025 - Jan 10, 2025
Electrical Systems 1	Jan 6, 2025 - Jan 10, 2025
Excavation Operations	Jan 6, 2025 - Jan 10, 2025
GPS Machine Control Training	Jan 6, 2025 - Jan 10, 2025

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Crane Operations - Practical Testing for NCCCO Certification	Jan 6, 2025 - Jan 10, 2025
Welding	Jan 6, 2025 - Jan 10, 2025
Asphalt Milling Machine Operations	Jan 7, 2025 - Jan 9, 2025
Asphalt Paving Operations	Jan 7, 2025 - Jan 9, 2025

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Training Course Descriptions

PIPELINE - ONLINE OILER TRAINING

This is an online class only. The class will take approx. 8 hours to complete, you will be able to complete the class at your own pace, meaning you can log in and out as needed to complete the course.

This class is intended for anyone who wants to work as an oiler in the pipeline industry. It is also intended for operators who have never worked in the pipeline industry.

Topics discussed and included in the course:

- Work Environment
- Duties of a Pipeline Oiler
- Nomenclature
- Work Ethic
- Vocabulary Games and review
- Final Exam
- Final Vocabulary Exam

The member will receive a certificate of completion at the end of the course.

MECHANICS TRAINING - HYDRAULIC FUNDAMENTALS

Mechanics Training - Hydraulic Fundamentals

This course will give the student a strong foundation in hydraulic systems used in mobile equipment. Upon completion, participants will be able to:

- Describe the principles of hydraulics.

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- Identify and describe the function of the components that make up a typical hydraulic system.
- Identify and read the schematic symbols in a typical hydraulic schematic.
- Understand the use and operation of load sensing variable displacement pumps.

The learning environment will be established in both the classroom and the service shop.

PIPELINE - SIDEBOOM - HYDRAULIC CONTROLS

SIDEBOOM – INTERMEDIATE TRAINING

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday - Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

Classes are intended for experienced operators, although apprentices with journeyman level skills are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. The following subjects will be covered:

- A pipeline spread – Explain in depth each individual crew
- Sideboom controls
- How to properly steer the sideboom around obstacles while carrying a section of pipe
- How to catch the load that is being carried
- How to carry a load using one sideboom or multiple machines
- How to correctly carry a joint of pipe with the aid of a swamper
- The multiple uses of a sideboom through various stages of pipeline construction
- Pipeline terminology and vocabulary

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Training Course Schedule

- Safety

PIPELINE - SIDEBOOM - INTERMEDIATE WITH WINCHING- KENTUCKY

Sideboom - Intermediate with Winching

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday-Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training. Sidebooms utilized in this course are Hydraulic and Live tractors.

Classes are intended for experienced operators, although **apprentices with journeyman level skills** are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. The following subjects will be covered:

- A pipeline spread – Explain in depth each individual crew.
- Sideboom controls.
- How to be winched by a single tractor.
- The proper procedures to be winched over different terrains and conditions.
- The proper procedures of multiple tractors being winched at the same time.
- How to properly carry a section of pipe down a slope.
- How to “stove-pipe” and lower-in pipe on a slope.
- How to deal with endo/pipe movement.
- How to properly cross-clutch steer on a hillside.
- Pipeline terminology and vocabulary
- Safety

PIPELINE - EXCAVATOR - INTERMEDIATE

EXCAVATOR – INTERMEDIATE TRAINING

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday-Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

Classes are intended for experienced operators, although apprentices with journeyman level skills

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are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. The following subjects will be covered:

- A pipeline spread – Explain in depth each individual crew
- All the various applications of an excavator throughout the many different stages of construction
- How to dig a pipeline sloped ditch
- How to dig the point of intersections
- How to dig safe bell holes
- How to properly plug out
- How to dig road bore approaches and creek crossings
- How to dig for a box sag
- Understanding the pipeline terminology and vocabulary words
- Safety

PIPELINE - EXCAVATOR - ROUGH TERRAIN/HILL PROCEDURES - KENTUCKY

EXCAVATOR – INTERMEDIATE Winching

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday-Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

Classes are intended for experienced operators, although **apprentices with journeyman level skills** are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. The following subjects will be covered:

- A pipeline spread – Explain in depth each individual crew
- All the various applications of an excavator throughout the many different stages of construction

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- How to dig a pipeline sloped ditch on a slope.
- How to dig the point of intersections on a slope.
- How to dig safe bell holes on a slope.
- How to properly plug out on a slope.
- How to dig road bore approaches and creek crossings in the hills.
- The proper procedures to dig ditch in the hills.
- How to dig layered rock.
- How to be properly winched by a winch tractor.
- How to properly dig utilizing a winch line.
- How to properly walk with a winch tractor.
- How to properly build water – breakers.
- Understanding the pipeline terminology and vocabulary words.
- Safety

PIPELINE - EXCAVATOR - MAT HANDLING/BRIDGE BUILDING TRAINING

This is a one week course. The course will be 6 days in length, Monday - Saturday consisting of 10 hours a day of field training. Apprentices and Journeyman are encouraged to apply. A proficiency test will be given at the beginning of the class.

During the class, the operator will be challenged with different tasks utilizing mats.

- carrying single or multiple mats
- building bridges across wetlands or creek crossings
- rip-rapping mats
- lay mats down on the ROW
- Work with multiple excavators laying down large bridge mats

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PIPELINE - ANGLE DOZER - INTERMEDIATE

ANGLE DOZER - INTERMEDIATE

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday - Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

Classes are intended for experienced operators, although apprentices with journeyman level skills are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. The following subjects will be covered:

- A pipeline spread – Explain in depth each individual crew
- How to build different types of pipeline Right-of-way
- How to properly topsoil a pipeline Right-of-way
- How to make a two-tone pipeline Right-of-way
- How to make a side hill cut in a pipeline Right-of-way
- All the various applications of an angle dozer throughout the many different stages of the pipeline construction process
- The angle blade, understanding the concept of why the material on a pipeline right of way is moved at 90 degrees, using the long and short corners of the blade
- Understanding the pipeline terminology and vocabulary words
- Safety

PIPELINE - ANGLE DOZER - ROUGH TERRAIN/HILL

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Training Course Schedule

PROCEDURES/WINCHING - KENTUCKY

Angle Dozer - Intermediate with Winching

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday-Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

Classes are intended for experienced operators, although apprentices with journeyman level skills are encouraged to apply. A proficiency test will be given at the beginning of the course.

This course will prepare you for working in the pipeline industry. Safety will be a big topic of discussion in this class as the winch operation is very dangerous work if done the improper way. The following subjects will be covered:

- A pipeline spread - Explain in depth each individual crew
- All the various applications of the winch
- How to efficiently and safely trip the cable while winching
- How to winch with multiple machines involved
- Learn the safety hazards involved with the winch operations
- How to properly hook up to another machine
- How to properly winch a sideboom or hold an excavator on a hillside
- The angle blade, understanding the concept of why the material on a pipeline right of way is moved at 90 degrees, using the long and short corners of the blade
- Understanding the pipeline terminology and vocabulary words
- Understand the importance of communication on the jobsite
- Safety

PIPELINE - HORIZONTAL DIRECTIONAL DRILLING WITH

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Training Course Schedule

MUD RECLAMATION SYSTEM

HORIZONTAL DIRECTIONAL DRILLING WITH THE MUD RECLAMATION SYSTEM

This class is a three week course. The course schedule is 10 hours a day, 6 days a week, Monday-Saturday. A typical day will consist of 2 hours of classroom training followed by 8 hours of practical field training.

This class will start with the basic operation of the HDD machine first, as the class progresses, the operator will be challenged to operate the HDD in more complex scenarios all while incorporating the use of the Vermeer 250C mud reclamation system.

This course will prepare you for the HDD operations in the pipeline industry and the utility industry. The following subjects will be covered:

- How to drill various materials using different accessories
- Applications of the HDD machine in pipeline construction and in the utility industry.
- The different procedures of mixing chemicals for the mud tech position.
- How to use the F-5 Falcon locating instrument that tracks the drill stem.
- How to Log Bore while drilling.
- How to use the Kemtron 600X reclaimer system in conjunction with the drilling machine.
- How to use and understand different drilling profiles either by hand or the program itself.
- Explain how to understand clearance problems.
- How to use the Vermeer projects software system including all GPS components.
- How to send edit/send an LWD to a contractor successfully.
- Proper maintenance of an HDD machine.
- Terminology
- Safety

PIPELINE - VACUWORXS PIPELIFTER

VACUWORXS PIPELIFTER

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This class is one week in length; six days total, Monday-Saturday, the class runs 10 hours a day consisting of 2 hours classroom followed by 8 hours of practical field training. The class will have one instructor and 5 students per class.

Classes are intended for experienced excavator operators. A proficiency test will be given at the beginning of the course to verify abilities.

This class will prepare the operator for the pipe handling procedures used in the pipeline industry. The subjects covered will be:

- Loading and unloading a stringing truck
- Proper procedure for racking pipe in a pipe yard
- Proper procedure for stringing pipe down the right of way
- How to look for proper chocking of the pipe
- How to properly carry a joint of pipe up hills and down hills
- How to carry pipe underneath overhead power lines
- Overall safety
- Maintenance
- Pipeline terminology

PIPELINE - HYDRO-EXCAVATION

HYDRO-EXCAVATION CLASS

This class is one week in length; six days total, Monday – Saturday, the class runs 10 hours a day. The class will consist of one instructor and four students.

As the pipeline industry evolves, hydro-excavation is becoming one of the most popular way among gas companies to pothole/locate and excavate their existing hotlines. Hydro-excavation is considered one of the safest and most efficient ways to excavate and locate pipelines. As the

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demand for these machines rise in the industry, so will the demand for the skilled operators to operate them. This is a highly recommended course. This class is no longer utilizing a Morooka mounted unit, the class has been upgraded to an actual Hydrovac Truck.

In this class the operator shall learn:

- The basic controls of a Vermeer VTX300 Hydro-vac Truck.
- The fundamentals for locating pipelines.
- How to locate a pipeline without damaging the protective coating.
- How to excavate a pipeline without damaging the protective coating
- Learn different trenching techniques.
- Learn the different nozzle selection
- Environmental concerns
- Maintenance
- Safety
- Terminology

CHIEF ENGINEER/FACILITY MANAGEMENT SEMINAR

This Seminar is designed for chief engineers or engineers training to make the transition to chief or lead engineer. This seminar will provide the student the necessary administrative and personnel skills to handle the day-to-day leadership challenges associated with this position.

The ten sections are:

- Recommended Skills levels
- Planning and Time Management
- Budget Preparation
- Computer Applications
- Record Keeping

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- Benefits of an Internal Work Force
- Reports and Presentations
- Health and Safety
- Human Relations
- Energy Conservation.

The Chief Engineers class has been updated as a Blended Learning Environment, in which traditional face-to-face instruction is also supplemented with specific computer assisted Learning. The purpose is to take advantage of the best features of both face-to-face and computer assisted learning in the same classroom setting. During class you will be given a set of credentials and guided how to log onto the platform. Once logged in, you will be instructed on how to use and navigate the system. Additionally, while performing some of the class exercises, you will be using various types of software for letter writing, email, budgets, presentations etc. With all that said, it would be advantageous if each member would bring their own laptop computer to class, being that some of these exercises will remain on the computer for the student's future reference. If you cannot bring your own laptop computer or you do not own a laptop computer, we can provide a computer for you to use during the class.

ELECTRICAL SYSTEMS 1

Electricity is a fundamental part of most tasks that the stationary engineer performs. Whether one works with motors, chillers, boilers, air handlers, lighting, or controls, electricity plays a part of each. This course equips the stationary engineer with knowledge of electrical principals, electrical safety, how to perform electrical calculations, and gives an understanding of both AC and DC electrical components. Students have the opportunity to also perform hands on activities to reinforce the coursework.

This course is a suggested pre-requisite for Electrical Systems 2 course.

EXCAVATION OPERATIONS

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Excavation Operations – The IUOE Training and Education Center will be offering the Excavation Operations course for Operators with skill levels of beginner through advanced. This 40-hour course will include classroom instruction and hands-on training. Classroom instruction topics will include machine safety, working around utilities and OSHA regulations that apply to trenching/excavation activities. Hands-on will consist of machine control familiarization, benching and sloping techniques, slot dozing and backfill operations. Upon completion of this course, the member will understand trench safety techniques and how to move dirt efficiently.

GPS MACHINE CONTROL TRAINING

GPS Machine Control - This course will cover the three Major GPS machine control systems; Topcon , Trimble , and Leica. The majority of class time will be spent in the field, where members will be given the option to use the GPS brand of their choice. Indoor class time including any rainy days will be spent going over every aspect of the different software systems via PC Simulators. Members wishing to focus on one GPS system are free to do so (pending availability). Members wanting an overview of all three systems will have that option as well.

CRANE OPERATIONS - PRACTICAL TESTING FOR NCCCO CERTIFICATION

Practical Testing for NCCCO Certification - Please remember when registering for this course that you should have prior experience in crane operations. The training portion of this course is only an equipment familiarization period on the crane or cranes you would like to be tested on. Members will complete a NCCCO application when the course begins and all candidate testing fees are the responsibility of the candidate.

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Practical Testing available on the following cranes

- Lattice Boom Cranes
- Telescopic Boom Cranes—Swing Cab (TLL)
- Telescopic Boom Cranes—Fixed Cab (TSS)
- Tower Crane
- Overhead Crane

WELDING

Courses will teach the student how to weld in all positions using different welding processes.

ASPHALT MILLING MACHINE OPERATIONS

In this course students will learn the operations of a Wirtgen Asphalt Milling machine from Factory trainers. This is a 3 day course that will include classroom and hands-on operations.

ASPHALT PAVING OPERATIONS

An Introduction into the Asphalt Paving Process. This course will cover the safety aspects as well as the responsibilities of the Operating Engineer during the paving process.