**Laborers Field Challenge:** Participants will be split up into three groups that will include several physically demanding activities for two full days. The activities are structured to give the applicant a true understanding of the type of work that Laborers are responsible for on construction job sites. Applicants must be in good physical condition to complete these timed, hands-on activities, which include carrying concrete blocks 100’ and properly stacking them, erecting and tearing down scaffolding, moving two cubic yards of material by wheelbarrow, and digging a trench with a pick and shovel.

*Carpentry 1:* This 40 hour introductory training covers the basics of carpentry and trades math. Accurate reading and use of tape measure, 3-4-5 layout method, and safe use of hand and power tools. Using skills learned in class, participants build the following projects: hammer, saw & nail, a foot stool, and a set of stairs to a platform. Construction site education, safety, and carpenter expectations also covered.

*Carpentry 2:* This 40 hour training with classroom instruction and hands-on covers the following: builders level, floor construction, exterior wall framing with windows and doors, and a gable roof. Students apply the skills they learn by building a miniature house.

**Blueprint Reading & Math:** This 32-hour introductory training covers basic residential print reading skills, abbreviations, plot plans, foundation plans, floor plans, exterior elevations, section views, details, framing plans, door & window schedules, finish schedules, and specifications. Trades math includes solving with ratio and proportion, fractions, decimals, and the 3-4-5 layout method.

**Trades Math:** This 16 hour introductory class covers: Construction related math practices including: solving with ratio and proportion, fractions, decimals, Pythagorean theorem, angles, & the 3-4-5 layout method.

**Power Tools:** This 40 hour introductory training covers: The ability to quickly and accurately use a tape measure, and the general safety, size, types, marking and cutting of lumber. Proper and safe use of a handsaw, hammer and various hand tools. Safety, operation and proper use of a variety of power tools used in the construction industry including; Orbital sander, finish sander, compound miter saw, router, jig saw, kreg jig, drill, impact driver, and belt sander. Students will construct several small projects and complete tasks using various power tools.

**Sheet Metal & HVAC:** This 40-hour introductory training covers the basics of Sheet Metal Work. Learn to build 3-D objects from flat sheets of metal. Learn about HVAC systems and how to fabricate and install ductwork. Use your brain to calculate cut sizes, your hands to fabricate intricate sheet metal pieces and your brawn to install the piece where it belongs.

**Flux Core Arc Welding:** This 24 hour introductory training covers: vertical and horizontal wire feed welding, oxygen and acetylene torch set-up and cutting, pipe threading, pro-press fittings and methods of joining. Introduction to SMAW welding-metallurgy. Introduction to waste, drainage, vent fittings, soil pipe methods of joining and cutting, plumbing fixtures and roof drains, plumbing and pipefitting tools, pipe beveling, Oakie Beveler and Tri-Tool. Introduction to hangers, supports, valves and use of ladders, and introduction to plumbing codes.

**General Construction:** (Chugiak, WIT only): This 40 hour introductory training covers lite version of general construction field assessment, trenching and back filling, sack and patch training and the hazards of silica in construction, hand signal/voice command training for cranes and forklifts and additional training as future construction craft laborers candidates.

**Construction Driver (WIT Only):** Training includes 4 days of CDL-A permit preparation and testing and 5 days of hands-on training using a tractor trailer.

**Commercial Driver CDL-Class A (H2H Only):** Participants must already have their CDL permit: This 2 week training will be the fundamentals of driving a tractor-trailer and get industry experience. CDL driving test given on last day for licensing.
**Ironwork & Welding:** This 40 hour training with classroom instruction and hands-on training includes; Vertical and horizontal stick welding, oxygen and acetylene cutting, hands-on tools and materials, hazard awareness, work site safety. Identify and use safe welding practices, identify joint design and fit-up, set up a welding machine, and identify electrode selection. Participants pack, place and tie Re-bar. Basic rigging training and hand signals also covered.

**Rigging & Piledriving:** This 40-hour introductory training covers the basics of the Piledriving trade including; safe hoisting & rigging techniques, universal hand signals, rigging mathematics, types of pile, welding & splicing, cast in place concrete, & the daily rigors of a Piledriver.

**Metal Studs Framing / Sheetrock & Taping:** This 80 hour training covers the basics of carpentry and trades math. Accurate reading and use of a tape measure, 3-4-5 layout method and safe use of power tools. Hands-on covers layout and framing of walls which will be attached at partitions and squared. Material handling, storage, layout, cutting, application and installation of sheetrock, proper application of joint compound, tape and corner bead, and patch/repair of sheetrock. Participants also learn the difference between using metal and wood studs.

**Electrical Wiring:** This 40 hour introductory training covers: Basic electrical theory, electrical code, blueprints, and tool safety. Hands-on training includes; wiring of switches, GFCI receptacles, duplex receptacles, panels, 3-way and 4-way switches, bending EMT and rigid conduit. Students apply the skills they learn by assembling and wiring a lamp with a light switch, outlets, and USB receptacles.

**Weatherization w/ OSHA 10, First Aid, CPR, AED:** This 40 hour training covers; building science, health and safety, theory of blower door use, including general air sealing, and attic weatherization. Training will also cover theory of identifying specific home weatherization problems, and doing weatherization work safely. OSHA 10 & Frist Aid/CPR AED certificates included.

**Telecommunications:** This 40-hour introductory training covers exposure to basic principles in the telecommunications industry including: central office operations, outside plant line and splicing work, installation and repair, data and key/pbx, simple termination and testing of category 5E cabling, network Interface device installation techniques, block terminations, basic AC/DC theory as it relates to telecommunications, and principles of light and fiber optics.

**Scaffold User:** This training covers correct procedures for erecting, disassembling, moving, operating, maintaining and inspecting scaffold, proper use and handling of material on the scaffold, fall protection, falling object protection, and the associated safety wear.

**Heavy Duty Mechanics (Mat-Su):** This 40-hour introductory training covers instruction into Heavy Duty Diesel Mechanics. Modules include: hydraulics, drivetrains, fuel systems, exhaust systems, electrical functions, and troubleshooting techniques. The proper use of tools and jobsite safety will be included in the instruction.

**Heavy Equipment Operators (Mat-Su):** Training covers classroom instruction in the Alaska Safety handbook, Camps & Safety Orientation, Environmental Excellence, Hazard Communication, Hazwopper Awareness, Personal Protective Equipment, Hydrogen Sulfide, and includes Hands-on practice on heavy equipment including; Hydraulic Excavator, Dozer & Front-end Loader. Equipment training covers how to conduct pre-operational 360° walk-arounds, control familiarization, basic equipment functions, basic operating techniques and safety rules and practices.

**Welding Fabrication (Mat-Su):** This 40-hour introductory training covers the techniques used in the maintenance and repair of heavy equipment. Participants will learn and practice the safe process of oxy-acetylene cutting and arc welding as well as the proper use of tools and jobsite safety.

**OSHA 10 (Former Students only):** Provides entry level construction workers information about their rights and employer responsibilities and how to file a complaint. Emphasizes how to identify, abate, control, avoid and prevent job related hazards on a construction site. Covers a variety of construction safety and health hazards which a worker may come across on a construction site as well as personal protective equipment (PPE).

**First Aid/CPR/AED (Former Students only):** Combines adult CPR, AED, and first aid training in a program designed for the occupational first aid provider. This comprehensive program meets OSHA and other federal and state regulatory requirements for training people how to respond and care for medical emergencies at work.

H2H: Helmets to Hardhats. WIT: Women in the Trades

*Trades basic skills training. **Trade Ready Training. Trainings that are part of a Quality Pre–Apprenticeship (QPA) Program.

See the QPA Framework on our website for more information under the Apprenticeship tab.

Alaska Works Partnership is an equal opportunity program. Funding is provided by the Alaska Department of Labor & Workforce Development.

Alaska Works Partnership’s programs are funded by grants awarded by the U.S. Department of Labor’s Employment and Training Administration, and the Alaska Department of Labor and Workforce Development. The following Alaska Works programs are 100% federally funded: TET DWG, WIOA Youth, and WIA SWP Adult. They are currently: 38%, 9%, and 6% of the awarded amounts to AWP. The following Alaska Works Programs are 100% State funded: Construction Academies, STEP H2H, and STEP Women in the Trades. They are currently: 26%, 6%, and 14% of awarded amounts to AWP. Equal Opportunity Employer/Program Auxiliary aids and services are available upon request to individuals with disabilities.