

Build Montana Pre-Apprenticeship



Montana Contractors Association
THE PREMIER ASSOCIATION FOR COMMERCIAL CONSTRUCTION

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MONTANA CONTRACTORS ASSOC. THE CONSTRUCTION ASSOCIATION

The Montana Contractors Association is the premier association for general contractors, specialty contractors, and associate members across Montana. Their work varies across the industry from heavy civil work, bridge building, production and distribution of concrete and asphalt, commercial building, plumbing, heating, HVAC, equipment dealerships, and more.

MCA Values

The MCA recognizes the following values of the organization and our members:

- ✓ Professionalism: We convey excellence, where each endeavor is performed with safety, quality, and integrity.
- ✓ Generosity: We are generous with our time, talent, and resources. We focus on giving back to our community.
- ✓ Collaboration: We are committed to teamwork through open and transparent communication.
- ✓ Leadership: We engage and unite our membership toward common goals.



The program: What is Build Montana?

Build Montana is a course created by the Montana Contractors Association (MCA) to introduce high school students to the construction industry including civil construction, vertical construction, construction equipment operation, and construction trades through job site visits, MCA member facility tours, hands-on industry experiences and more.

Our goal for Build Montana is to educate students on the career opportunities within the commercial construction industry and show students the different pathways you can take to get into those careers.

Build Montana:

- **OSHA10**
- **85+ hours of industry approved online curriculum.**
- **Access to Montana Digital Academy Construction CORE (vertical construction)**
- **Access to John Deere University (diesel mechanics)**
- **On the Job Training**
- **Networking with Industry leaders**
- **Forklift Certification *must be 18+:** Practical training with industry professionals. Those pursuing certification must demonstrate safe and competent operational skills. There is no hour requirement for forklift certification.

Build Montana's industry experiences must be provided by MCA members in order to be funded by the MCA. If you do not have members in your area who are willing to provide those experiences, a Build Montana Popup may be a better fit for your school.

OSHA10

OSHA10 is a safety course required by all Build Montana graduates. This course will provide a general overview of job-related health and safety hazards. It is an entry-level course designed for employees such as carpenters, electricians, welders, laborers, masons, plumbers, sheet metal workers, etc. OSHA10 will train you to spot, avoid, and report the safety and health risks on a job, know your employer's responsibility for workplace safety, and learn the rights OSHA gives you and what to do if your workplace doesn't meet its safety obligations.

OSHA10 training can be administered by a local MCA member with the proper training, an individual provided by the MCA, a local organization, or online.



Build Montana Online Curriculum

Civil Construction:

Build Montana/ aQuiRe Construction Academy Online Curriculum

This curriculum is approximately 88 hours of online resources, videos, modules, quizzes, and training. Students will have access to these resources for one year from the time they begin the training. This means that they can go back and review the information after graduating from the program. The program is free of charge to Build Montana students.

Nano-credential [completed module]	Total Time	Micro-credential [for badge]	Total Time	Stackable Credential [for certificate]	Total Time	Section
WTH is WZTC	0:26:15					
Watch Out! Work Zones	0:15:15					
Traffic Control Devices	0:23:30					
Hold It Down	0:16:15					
Advance Warning Area	0:22:45					
Taper It: Highway	0:26:30					
Overnight Highway Traffic Control	0:21:30					
Flag It	0:16:00					
Portable Traffic Lights	0:28:45					
		Foundations of Traffic Control Badge	3:16:45			
Flagger Training Course I Module 1: Intro to Traffic Contr	0:28:15					
Flagger Training Course I Module 2: Taking Charge	0:26:45					
Flagger Training Course I Module 3: Get Ready	0:29:00					
Flagger Training Course I Module 4: Directing Traffic	0:28:45					
Flagger Training Course I Module 5: Scenarios	0:27:30					
		Flagger Training Badge	2:20:15			
Water Truck	0:20:15					
Lowboy: Chain It Down	0:22:15					
Lowboy: Inspect	0:16:45					
Lowboy: Disconnect	0:14:45					
Before You Tow: Pretrip Inspection & Hookup	0:21:30					
Tie It Down	0:23:15					
Haul It: Fuel Truck	0:24:00					
Haul Roads	0:15:00					
Pre-Cast	0:15:00					
Tri-Axle Dump Truck: Operation Overview	0:15:45					
Tri-Axle Dump Truck: Inspect	0:15:15					
Articulating Dump Truck	0:15:45					
		Haul It! Badge	3:39:30			
Excavator Dig Safely Course I Module 1	0:16:00					
Excavator Dig Safely Course I Module 2	0:15:30					
Excavator Dig Safely Course I Module 3	0:15:00					
Excavator Dig Safely Course I Module 4	0:17:00					
Excavator Dig Safely Course I Module 5	0:16:00					
		Excavator Dig Safely Badge	1:19:30			
Measure Like A Pro	0:21:30					
Hammer Like A Pro	0:18:45					
Saw Like A Pro (Part 1)	0:22:30					
Saw Like A Pro (Part 2)	0:23:45					
Saw Like A Pro (Part 3)	0:21:15					
Grind Like A Pro	0:25:15					
Chainsaw Module 1: Inspect	0:17:45					
Chainsaw Module 2: Tree Felling	0:24:45					
Chainsaw Module 3: Downed Wood Clearing	0:19:30					
		Like A Pro Tool Badge	3:15:00			
Construction Math Part 1: Overview	0:28:00					
Construction Math Part 2: Fractions & Decimals	0:25:45					
Construction Math Part 3: Calculating Length	0:23:00					
Construction Math Part 4: Calculating Area	0:25:15					
Construction Math Part 5: Calculating Volume	0:27:30					
Construction Math Part 6: Waste Factors, Ratios & Slope	0:20:30					
Construction Math Part 7: Calculating Weight Load	0:22:30					



Construction Math Badge		2:52:30			
Intro to Heavy Civil Construction	0:15:15				
Dependability	0:10:30				
Professionalism	0:10:15				
Positive Attitude	0:10:45				
Self-Motivation	0:10:00				
Adaptability	0:10:45				
Teachability	0:09:00				
Communication	0:10:15				
Interviewing	0:09:45				
Pre-Employment Checklist	0:11:15				
Financial Literacy Part 1: Reading Your Pay Stub	0:11:30				
Financial Literacy Part 2: Save and Spend Wisely	0:12:00				
Financial Literacy Part 3: Understanding Credit and Debt	0:10:15				
Financial Literacy Part 4: Investing In Your Future	0:08:30				
Career Empowerment Badge		2:30:00			
D6XE Dozer: Systems	0:52:30	Bulldozer Badge			
ARTICULATED TRUCK: Safety & Systems	0:16:15	Haul Truck Badge			
MEDIUM HEX: Systems Technology	0:25:00	Medium Excavator Badge			
Hammer Time: System Check	0:18:45	Iron Attachment Badge			
Wrist-O-Twist: System Check	0:14:30	Iron Attachment Badge			
972M XE: Systems	0:22:30	Large Wheel Loader Badge			
Motor Grader: System Check	0:14:45	Machine Components Badge			
MINI HEX: Systems	0:12:45	Mini Excavator Badge			
299D3J CTL/Skidsteer: Systems	0:10:30	Skidsteer/CTL Badge			
LANDFILL COMPACTOR: Systems and Service	0:19:45	Landfill Compactor Badge			
System Check		3:07:15			
Crane Hand Signals	0:16:00				
Rigging: Sling Safety Inspection	0:20:00				
Rigging: Hardware Inspection	0:19:30				
Pre-Rigging Badge		0:55:30			
D6XE Dozer: Operation Overview	0:18:45	Bulldozer Badge			
Scissor Lift: Operate	0:15:30	Aerial Lift Badge			
ARTICULATED TRUCK: Operations Overview	0:16:45	Haul Truck Badge			
906-908M Compact Wheel Loader: Operation Overview	0:16:45	Small Wheel Loader Badge			
SMALL WHEEL LOADER: Operation Overview	0:14:30	Small Wheel Loader Badge			
MEDIUM WHEEL LOADER: Operation Overview	0:26:45	Medium Wheel Loader Badge			
972M XE: Operation Overview	0:20:15	Large Wheel Loader Badge			
MEDIUM HEX: Operation Overview	0:14:00	Medium Excavator Badge			
LARGE HEX: Operation Overview	0:16:30	Large Excavator Badge			
Hydraulic Crane Overview	0:15:15	Machine Components Badge			
MINI HEX: Operations Overview	0:21:30	Mini Excavator Badge			
299D3J CTL/Skidsteer: Operation Overview	0:22:15	Skidsteer/CTL Badge			
Heavy Equipment Operation Overview		3:38:45			
D6XE Dozer: Inspect	0:23:15	Bulldozer Badge			
D6XE Dozer: Safety	0:12:45	Bulldozer Badge			
D6XE FEATURE FOCUS: Operators Monitor, Seat Control	0:28:15	Bulldozer Badge			
Bulldozer Badge		1:04:15			
Aerial Work Platform Training: Part 1 Inspect	0:22:45	Aerial Lift Badge			
Aerial Work Platform Training: Part 2 Operation	0:24:00	Aerial Lift Badge			
Aerial Work Platform Training: Part 3 Safety	0:26:00	Aerial Lift Badge			
Scissor Lift: Components	0:17:45	Aerial Lift Badge			
Aerial Lift Badge		1:30:30			
ARTICULATED TRUCK: Daily Inspection	0:19:00	Haul Truck Badge			
ARTICULATED TRUCK: Automated Hoist	0:12:15	Haul Truck Badge			
Off-Highway Truck: Fatal Safety Mistakes	0:15:00	Haul Truck Badge			
Off-Highway Truck: Daily Inspection	0:24:45	Haul Truck Badge			
Off-Highway Truck: Preventive Maintenance Walkaround	0:22:15	Haul Truck Badge			
Haul Truck Badge		1:33:15			
906-908M Compact Wheel Loader: Safety and Service	0:13:15	Small Wheel Loader Badge			
906-908M Compact Wheel Loader: Inspect	0:21:00	Small Wheel Loader Badge			
906-908M Feature Focus: Creep Control	0:07:30	Small Wheel Loader Badge			
SMALL WHEEL LOADER: Daily Inspection	0:14:45	Small Wheel Loader Badge			
SMALL WHEEL LOADER: Safety	0:10:00	Small Wheel Loader Badge			
SMALL WHEEL LOADER: Preventive Maintenance	0:29:30	Small Wheel Loader Badge			
SWL FEATURE FOCUS: Rim Pull	0:08:00	Small Wheel Loader Badge			
SWL FEATURE FOCUS: Kick-Outs, Snubbing, Wrap-Out	0:09:00	Small Wheel Loader Badge			
SWL FEATURE FOCUS: Customization	0:18:15	Small Wheel Loader Badge			
SWL FEATURE FOCUS: Hystat Powertrain Operation	0:18:45	Small Wheel Loader Badge			
SWL FEATURE FOCUS: Creep Control, Engine Idle Shut-Off	0:11:45	Small Wheel Loader Badge			



Small Wheel Loader Badge			2:41:45	
Excavator: Components	0:16:30	Medium Excavator Badge		
Excavator: Daily Inspection	0:18:45	Medium Excavator Badge		
MEDIUM HEX: Inspect	0:11:15	Medium Excavator Badge		
MEDIUM HEX: Safety	0:14:15	Medium Excavator Badge		
MEDIUM HEX: Monitor Setup	0:16:00	Medium Excavator Badge		
MEDIUM HEX: Machine Display Settings	0:14:45	Medium Excavator Badge		
MHEX FEATURE FOCUS: Assist Tune Calibration	0:12:30	Medium Excavator Badge		
MHEX FEATURE FOCUS: Bucket Measure Up	0:14:45	Medium Excavator Badge		
MHEX FEATURE FOCUS: Payload Calibration	0:19:45	Medium Excavator Badge		
MHEX FEATURE FOCUS: Lift Assist	0:12:30	Medium Excavator Badge		
MHEX FEATURE FOCUS: Efficiency Features	0:14:30	Medium Excavator Badge		
MHEX FEATURE FOCUS: E-Fence	0:20:30	Medium Excavator Badge		
MHEX FEATURE FOCUS: Grade Assist	0:12:30	Medium Excavator Badge		
Medium Excavator Badge			3:18:30	
MEDIUM WHEEL LOADER: Daily Inspection	0:11:15	Medium Wheel Loader Badge		
MEDIUM WHEEL LOADER: Safety Features	0:14:45	Medium Wheel Loader Badge		
MEDIUM WHEEL LOADER: Preventive Maintenance	0:21:15	Medium Wheel Loader Badge		
MWL FEATURE FOCUS: Payload Scales, Ride Control, ar	0:12:45	Medium Wheel Loader Badge		
MWL Feature Focus: Joystick Steering Control	0:08:45	Medium Wheel Loader Badge		
MWL Feature Focus: Ride Control	0:07:30	Medium Wheel Loader Badge		
Medium Wheel Loader Badge			1:16:15	
Hammer Time: Attach	0:18:00	Iron Attachment Badge		
Wrist-O-Twist: Bucket Attach	0:18:00	Iron Attachment Badge		
Tamper: Attach	0:17:30	Iron Attachment Badge		
Tamp That: Plate Compactor	0:16:15	Iron Attachment Badge		
Mini Mill: Skid Steer Planer Maintenance	0:16:45	Iron Attachment Badge		
Mini Mill: Skid Steer Planer Attach	0:19:30	Iron Attachment Badge		
CAT Skid Steer: Attachments	0:09:00	[resources only]		
Sweep It: Attach	0:15:00	Iron Attachment Badge		
Snow Blower: Attach	0:17:15	Iron Attachment Badge		
Snow Blower: Disconnect	0:13:45	Iron Attachment Badge		
Iron Attachment Badge			2:41:00	
LARGE HEX: Daily Inspection	0:14:30	Large Excavator Badge		
LARGE HEX: Preventative Maintenance	0:16:00	Large Excavator Badge		
LARGE HEX: Safety	0:19:45	Large Excavator Badge		
LARGE HEX: Monitor Setup	0:16:00	Large Excavator Badge		
LARGE HEX: Machine Display Settings	0:14:45	Large Excavator Badge		
LARGE HEX: Assist Fine Tune Calibration	0:12:30	Large Excavator Badge		
LARGE HEX: Bucket Measure Up	0:14:45	Large Excavator Badge		
LARGE HEX: Payload Calibration	0:17:45	Large Excavator Badge		
LARGE HEX: Lift Assist	0:10:30	Large Excavator Badge		
LARGE HEX: Efficiency Features	0:14:30	Large Excavator Badge		
LARGE HEX: Grade Assist	0:12:30	Large Excavator Badge		
LHEX FEATURE FOCUS: E-fence Setup	0:20:30	Large Excavator Badge		
Large Excavator Badge			3:04:00	
K Series Large Wheel Loader: Operator Controls	0:17:15	Large Wheel Loader Badge		
K Series Large Wheel Loader: Basic Operator Tips	0:13:00	Large Wheel Loader Badge		
K Series Large Wheel Loader: Preventive Maintenance	0:20:00	Large Wheel Loader Badge		
972M XE: Inspect	0:18:15	Large Wheel Loader Badge		
Large Wheel Loader: Payload Scale, Ride Control, and E	0:12:45	Large Wheel Loader Badge		
LARGE WHEEL LOADER: Payload Scale (Long Demo)	0:35:00	Large Wheel Loader Badge		
Large Wheel Loader Badge			1:56:15	
Tri-Axle Dump Truck: Components	0:15:30	Machine Components Badge		
Motor Grader: Components	0:18:30	Machine Components Badge		
Motor Grader: Inspect	0:16:00	Machine Components Badge		
Paver: Components	0:19:30	Machine Components Badge		
Widener Components	0:10:00	Machine Components Badge		
Crane: Conventional	0:14:30	Machine Components Badge		
The Crane: Inspection	0:20:00	Machine Components Badge		
Vac Truck: Inspect	0:19:00	Machine Components Badge		
Vac Truck: Components	0:19:00	Machine Components Badge		
LeeBoy Tack Distributor Module 1	0:19:00	Machine Components Badge		
LeeBoy Tack Distributor Module 2	0:19:30	Machine Components Badge		
LeeBoy Tack Distributor Module 3	0:21:15	Machine Components Badge		
LeeBoy Tack Distributor Module 4	0:17:45	Machine Components Badge		
Machine Components Badge			3:49:30	
Forklift Training Course Module 1	0:25:15	Forklift Badge		
Forklift Training Course Module 2	0:25:00	Forklift Badge		
Forklift Training Course Module 3	0:28:00	Forklift Badge		
Forklift Training Course Module 4	0:27:45	Forklift Badge		
Forklift Badge			1:46:00	
DEF	0:16:30	Machine Systems Badge		
TIER 4 FINAL: DEF Testing & Quality Concerns	0:18:00	Machine Systems Badge		
TIER 4 FINAL: DEF Shutdown Process	0:23:30	Machine Systems Badge		
Hydraulics 101	0:16:00	Machine Systems Badge		
Grease Points	0:16:15	Machine Systems Badge		
Lock Out Tag Out (LOTO)	0:18:00	Machine Systems Badge		
Cool It Down	0:16:00	Machine Systems Badge		
Track Time: Basics	0:08:30	Machine Systems Badge		
Track Time: Maintenance	0:14:00	Machine Systems Badge		
Machine Systems Badge			2:26:45	

MINI HEX: Safety	0:14:30	Mini Excavator Badge		
MINI HEX: Daily Inspection	0:18:00	Mini Excavator Badge		
MINI HEX: Assist Calibration	0:12:30	Mini Excavator Badge		
MINI HEX FEATURE FOCUS: Monitor	0:13:30	Mini Excavator Badge		
MINI HEX FEATURE FOCUS: Stick Steer	0:10:00	Mini Excavator Badge		
		Mini Excavator Badge	1:08:30	
299D3 CTL/Skidsteer: Safety	0:14:30	Skidsteer/CTL Badge		
299D3 CTL/Skidsteer: Inspect	0:17:00	Skidsteer/CTL Badge		
299D3 FEATURE FOCUS: Creep Control, Return to Dig, e	0:14:00	Skidsteer/CTL Badge		
		Skidsteer/CTL Badge	0:45:30	
LANDFILL COMPACTOR: Equipment Safety	0:13:00	Landfill Compactor Badge		
LANDFILL COMPACTOR: Daily Inspection	0:24:00	Landfill Compactor Badge		
LANDFILL COMPACTOR: Startup & Shutdown	0:09:30	Landfill Compactor Badge		
		Landfill Compactor Badge	0:46:30	
Get Your Footing: Pile Drive It	0:18:15	The Bridge Badge		
The Abutment: Form It	0:19:30			
The Abutment: Pour It	0:19:15			
Swinging Steel	0:18:15			
True or False: Falsework	0:17:00			
Rebar	0:15:15			
SIP Deck Pans Module 1	0:15:45			
SIP Deck Pans Module 2	0:15:00			
SIP Deck Pans Module 3	0:14:45			
The Deck: Dry Run & Layout	0:14:00			
It's Pouring: Putting it In Place	0:16:00			
It's Pouring: Finishing It Out	0:14:30			
Little Pour	0:16:45			
		The Bridge Badge	3:34:15	
Asphalt Crushing	0:18:30			
Concrete Flatwork	0:22:00			
Water is Solid: Hydro-demolition	0:16:00			
Vac Truck: High Pressure Wash	0:14:30			
Vac Truck: Operate	0:19:00			
Snow Blower: Operate	0:16:15			
Scaffold: Installation and Safety	0:23:15			
Total Station Part 1: Instrument Setup	0:23:00			
Total Station Part 2: Data Collector	0:19:30			
GPS Rover Setup Module 1	0:14:15			
GPS Rover Setup Module 2	0:14:00			
Solar Construction Part 1: Intro to Solar	0:14:00	Specialized Processes Badge		
Solar Construction Part 2: PV Racking Basics	0:16:30			
Solar Construction Part 3: Safety	0:17:30			
Introduction to Networked Geothermal	0:22:15			
		Specialized Processes Badge	4:30:30	
Excavator: Can You Dig It?	0:15:45			
Trench It	0:14:30			
Bulldozer: Rough Time	0:18:15			
Silt Fence	0:16:45			
Get Over It: Stream Crossing	0:18:00			
Dredge It: Bank Grading	0:17:15			
Dredge It: Stream & Lake	0:21:00			
The Slope: Squeeze It	0:19:15			
The Slope: Aerate It	0:16:15			
The Slope: Grade It	0:22:30			
Sweep It: Operate	0:14:15			
Land Clearing & Grubbing	0:21:45			
		Earthworks Badge	3:35:30	
Culvert Part 1: Excavate	0:20:30			
Culvert Part 2: Place and Cover	0:10:30			
Water Detention Systems	0:18:00			
Lay It Under	0:16:15			
Water Pumps	0:20:45			
		Drain It! Badge	1:26:00	
Pitch Perfect: Setting the Grade	0:13:45			
Principles of Paving Part 1	0:23:30	The Road Badge		
Principles of Paving Part 2	0:23:00			
Principles of Paving Part 3: Demonstration	0:17:00			
The Widener: Operate	0:15:15			
Principles of Road Compaction Part 1	0:23:45			
Principles of Road Compaction Part 2	0:19:15			
Principles of Road Compaction Part 3	0:22:30			
Spray It: Tack Distributor Demonstration	0:09:45			
Crafco Trailer: Joint and Crack Sealing	0:20:15			
Curb It	0:17:00			
		The Road Badge	3:25:00	
Site Manager Responsibility	0:17:45			
How to Give A Toolbox Talk	0:10:00			
Working 'Round the Railroad	0:27:45			
Stop Work Authority	0:09:00			
Working With Inspectors	0:09:45	Think Like A Boss Badge		
		Think Like A Boss Badge	1:14:15	

Sexual Harassment: Part 1	0:29:15				
Sexual Harassment: Part 2	0:32:15				
Workplace Violence Prevention: Part 1	0:22:45				
Workplace Violence Prevention: Part 2	0:21:30				
Workplace Violence Prevention: Part 3	0:21:00				
Keeping Your CDL	0:15:15				
The Crane: Getting Your License	0:15:00				
Compliance Badge		2:37:00			
What is a Hazard?	0:21:30	Construction Hazards Badge			
Slips, Trips, & Falls	0:14:45				
Caught Between	0:14:30				
Struck By	0:13:45				
Confined Spaces	0:20:00				
Fire Protection & Extinguisher Use	0:32:00				
Chemical Hazards	0:28:30				
Lead Safety	0:18:30				
Non-ionizing Radiation	0:16:15				
Asbestos Awareness	0:26:45				
Silica Awareness	0:20:45				
Housekeeping: In the Field	0:22:00				
Housekeeping: Indoor	0:18:00				
Risk Tolerance	0:19:30				
Control Measures	0:18:00				
Safety Data Sheets	0:13:00				
Construction Hazards Badge		5:17:45			
Managing Stress & Fatigue	0:11:45				
iBeam 1. We All Have Mental Health	0:06:00				
iBeam 2. Taking Care: A Look At Mental Health	0:08:30				
iBeam 3. Construction: An Industry In Crisis	0:09:30				
iBeam 4. Responding To A Mental Health Crisis	0:10:15				
iBeam 5. Preventing Suicide	0:08:30				
Mental Wellness Badge		0:54:30			
PPE Overview	0:16:15	Personal Safety Badge			
Hearing Conservation	0:32:30	Personal Safety Badge			
Don't Zone Out	0:14:45				
Safe Cell Phone Use	0:09:15				
Ergonomics and Back Injury Prevention	0:25:15				
Heat Stress	0:21:30				
Cold Stress	0:22:15				
Respiratory Protection	0:23:45				
Pathogen Prevention: In the Field	0:20:00				
Pathogen Prevention: Indoor	0:24:30				
Bloodborne Pathogens	0:20:15				
Portable Ladder Safety	0:24:30				
Lone Worker	0:09:30				
Personal Safety Badge		4:24:15			



Other online training available for Build Montana Students:

Vertical Construction: Pre-Apprentice CORE

This curriculum is available for free through Montana Digital Academy



Course Description: This self-paced introductory course is designed for high school students interested in the field of construction and provides them with an overview of the industry, basic safety training, and basic introductions to the tools, communication, skills, and materials it takes to prepare to be an apprentice in the construction field. This course is the first in a series of registered courses in a tiered system with Dick Anderson Construction that is rigorous, relevant, and highly accessible education that provides a plan and pathway to explore opportunities in the construction industry. When completed, DA Construction will work with the student to find an Apprenticeship opportunity in their area. **80 hours** (DAC requires 6 months of positive work history to be a candidate for Apprenticeship).

Diesel Mechanics: John Deere University



This curriculum is available for free through RDO Equipment

John Deere University is the web-based instruction tool we will use to gain training for equipment operation, diesel mechanics, and technology. All courses will be available to students who are interested in jump-starting their education towards a technician certification. **15 hours (minimum).**



On the Job Training

Build Montana students are considered student-learners under the provisions of 41-2-110 and therefore can participate in any work function as required by the occupation under supervision of the trainers.

Supervisors, please initial the line after you have completed the training category.

Civil Construction

Safety

- **Safety orientation: 1hr** Supervisor: _____
- **Trenching & Excavation Comp Person Training: 2hrs** Supervisor: _____

Laborer Basics

- **Industry basics- roles and responsibilities: 2hrs** Supervisor: _____
 - Roles and responsibilities
 - Better every day- preparing for work hours
- **Proper inspection and safe use of tools: 1hr** Supervisor: _____
 - Shovel, broom, impact wrench, chop saw, handheld grinder, skill saw.
- **Field Communications: 1hr** Supervisor: _____
 - radios, hand signals & verbal
- **Pipe Laying: 2hrs** Supervisor: _____
 - Waterline, sewer line, storm drain
 - What's the difference?
 - How to string pipe out
 - How to bring pipe into the trench
 - How to install pipe, gaskets, flanges



Planning the Job

- **Intro to Project Management: 1hr**
 - **Understanding the job cost**
 - **Scheduling**
 - **Procurement**

Supervisor: _____

Heavy Equipment Machine Operation

- **4 WD Loaders: 2hrs**
 - **Machine Onboarding/Safety**
 - **Start/Stop Procedures**
 - **Basic Operation**

Supervisor: _____

- **Backhoes: 2hrs**
 - **Machine Onboarding/Safety**
 - **Start/Stop Procedures**
 - **Basic Operation**

Supervisor: _____

- **Excavators: 2hrs**
 - **Machine Onboarding/Safety**
 - **Start/Stop Procedures**
 - **Basic Operation**

Supervisor: _____

- **Motor Graders: 2hrs**
 - **Machine Onboarding/Safety**
 - **Start/Stop Procedures**
 - **Basic Operation**

Supervisor: _____

- **Skid Steers: 2hrs**
 - **Machine Onboarding/Safety**
 - **Start/Stop Procedures**
 - **Basic Operation**

Supervisor: _____

Surveying and Engineering

- **Transit and Laser Levels: 30mn**
- **Basic Layout for excavation: 30mn**

Supervisor: _____

Supervisor: _____



Technology in Construction

- **Machine/Grade Control: 1hr**
- **Drone Demonstration: 30mn**
- **Modeling/Mapping: 30mn**

Supervisor: _____

Supervisor: _____

Supervisor: _____

Record Other Civil Construction Career Experiences (tours, operations, facility tours, etc.) here:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Vertical Construction

Site Safety

- **Safety Orientation: 1hr**
 - PPE

Supervisor: _____

Construction Math: 1hr

- **Reading a Tape Measure**
- **Jobsite math applications**

Supervisor: _____

Supervisor: _____



Hand Tools: 1hr

- Hammer, speed square, level, hand saw

Supervisor: _____

Power Tools: 1hr

- Circular saw, drill, miter saw, jigsaw

Supervisor: _____

Carpentry

- Framing: 1hr
- Finish carpentry vs. rough carpentry: 1hr
- Concrete: 1hr
 - Footings
 - Foundations
 - Slab on grade

Supervisor: _____

Supervisor: _____

Supervisor: _____

Interpreting Construction Drawings

- Technology: 30mn
 - Procore
 - Digital prints

Supervisor: _____

Basic Rigging: 45mn

- What is a rigger?
- Safety
 - Overhead hoisting
 - Attaching and detaching from a hook

Supervisor: _____

Supervisor: _____

Material Handling: 1hr

- Stacking
- Sorting
- Loading/Unloading
- Ergonomics

Supervisor: _____

Supervisor: _____

Supervisor: _____

Supervisor: _____

Record Other Vertical Construction Career Experiences here:

- _____
- _____
- _____



- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Heavy Equipment Mechanics

Safety: 1hr

- Safety orientation

Supervisor: _____

Machine Components and Function: 7hrs

- Backhoe/Loader Component ID
- 4WD Loader Component ID
- Excavator Component ID
- Motor Grader Component ID
- Crawler/Dozer Component ID
- Skid Steer Component ID
- Electrical Systems
 - Basic DVOM Usage
 - Battery Testing
 - Battery Series/Parallel Setup
 - Battery Jumper Setup 12V/24V

Supervisor: _____

Supervisor: _____

Supervisor: _____

Supervisor: _____

Supervisor: _____

Supervisor: _____

Supervisor: _____

Machine Maintenance: 2hrs

- Pre-start checks and inspections
- Daily maintenance/fuel/grease machine

Supervisor: _____

Supervisor: _____



Record Other Heavy Equipment/Mechanic Career Experiences here:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Other Construction Trades

Electrical

- _____
- _____
- _____
- _____

HVAC

- _____
- _____
- _____
- _____

Plumbing

- _____
- _____
- _____
- _____



Welding

- _____
- _____
- _____
- _____

Other

- _____
- _____
- _____
- _____

Total Build Montana OTJT hours: _____

