



4-Year Highway & Bridge Apprenticeship Outline

Level One

- Core Basic Safety
- Core Basic Math
- Core Intro to Hand Tools
- Core Intro to Power Tools
- Core Intro to Blueprints
- Core Basic Rigging
- Orientation to the Trade
- Wood Building Materials, Fasteners and Adhesives
- Hand and Power Tools
- Intro to Light Equipment
- Floor Systems
- Wall and Ceiling Framing
- Roof Framing
- Windows and Exterior Doors
- Introduction to Concrete Properties
- Tools and Equipment
- Prepare Placement
- Placing Concrete
- Finishing
- Curing and Protecting
- Troubleshooting

Level Two

- Reading Plans and Elevations
- Site Layout
- Foundations and Flatwork
- Concrete Forms
- Reinforcing Concrete
- Tilt-Up Walls
- Properties of Concrete
- Estimating Concrete
- Thermal and Moisture Control
- Framing with Metal Studs
- General Rigging
- Roofing Applications
- Exterior Finishing
- Drywall One – Installation
- Drywall Two – Finishing
- Interior Finishing Doors

- Interior Finish Window, Door, Floor and Ceiling Trim

Level Three

- Rigging Equipment and Hardware
- Rigging Practices
- Handling and Placing Concrete
- Trenching and Excavating
- Vertical Form Work
- Horizontal Form Work
- Intro to Highway Trucks
- Heavy Equipment
- Cranes
- Below Grade Construction
- Welding

Level Four

- Super Flat Floors
- Surface Treatments
- Quality Control
- Making Repairs
- Site Layout
- Earthmoving
- Plant Operations
- Paving
- Structures
- Welding
- Intro to Project Management and Supervision