



# **TIMBER FRAMING INTENSIVE: BUILDING A TIMBER FRAME CABIN**

## **COURSE DESCRIPTION**

The best way to learn how to timber frame, it to timber frame. This is what we do in our timber frame tutorial. Focusing on joinery design/layout is the starting point, attention is then turned to execution.

Students will lay out and cut every joint, gaining firsthand experience in joinery design and execution. The experience of cutting timber frame joints by hand is a tactile exercise as the hands receive direct feedback from the timber as it is being worked. The frame being cut is intended to provide students exposure to a wide range of components including posts, beams, rafters, and braces. The class will learn strategies and skills to ensure repeatability and precision in their work.

The project starts by reviewing the planned frame and all its components so that students can establish a shared vision of what lies ahead. The timbers will be inspected for defects and potential uses; they will then be labeled with their position within the frame.

We can expect that layout and cutting of joinery will begin on day two of the course. The first few joints will seem slow as all of our work will be reviewed by our classmates to ensure we all learn the fundamentals as quickly as possible. As the first few joints are cut and start to come together confidence and proficiency will grow and by the second week a flow and natural rhythm will have developed. This momentum will culminate on the last day of the course when we raise our timber frame.

Having met each other only a short three weeks ago our team has come together to build something remarkable. Unified by our desires to learn, develop our skills, and create something that is both useful and beautiful, we are part of the Craftsman's Army. With our newly erected frame in front of us; it is time to celebrate!



## COURSE LOGISTICS

### Dates

October 13 to October 31, 2025

9:00 A.M. to 5:00 P.M., Monday thru Friday with a break for lunch at mid-day.

- Timber Framing often requires working together, as such each participant's presence or absence affects everyone involved.
- Please make every effort to arrive on time for class, return on time from lunch, be in attendance every day, and inform the instructor if you will be unable to make it to class at any point.

### Course Location

The Timber Framing Course will be hosted at the Regenera Ranch; which is located about 30 minutes north of Calgary and 3 minutes east of Carstairs in the Rosebud River coulee. It is a working ranch with sheep and horses, native plant greenhouses, and beehives. We will be working right in the middle of it all in a sheltered paddock amongst the ranch buildings, overlooking the whole coulee.



### Where to Stay

The closest town to The Regenera Ranch is Carstairs; which is located less than a 10 minute drive away. Carstairs is home to about a dozen restaurants (including a Tim's), the Golden West Motor Inn, and a couple grocery stores.

Alternatively, the ranch is located only 20 minutes north of the city of Airdrie which has plenty of amenities available.



# TOOLS

## Student

Each student is expected to bring with them:

- Pen, Pencil, and Ruler
- Notebook
- Good, comfortable eye protection
- Hearing Protection
- Work Boots / Sturdy Shoes
- Carpenter's Belt or Apron (if You Enjoy Wearing One)

## Vintage Woodshop

Vintage Woodshop will provide all the tools needed for the course. Students are welcome to bring their own tools if they prefer, the tools must be in good/safe working condition.

For reference, here is a list of tools you can expect to use during the course:

## Hand Tools

- Tape Measure (1" x 25')
- Metal Ruler (12")
- Rafter Square
- Combination Square
- T Bevel
- Level (2' / 4')
- Carpenter Pencils
- Chalk Line (plus extra chalk)
- Ink Line
- Utility Knife
- Handsaw (24") cross cut
- Timber Framing Chisels ( 1.5", 2" )
- Timber Framing Slick
- Sharpening Stones / Guide
- Wood Mallet
- Hammer
- Bar Clamps
- Jointer Plane
- Rabbit Plane
- Heavy Beetle / Persuader

## Power Tools

- 3/8" and 1/2" Electric Drills
- 7 1/4" Circular Saw, 10 1/4" Circular Saw, and 16 1/4" Circular Saw
- Beam Saw
- 1/2" Router
- 6" Power Planer
- Curved Base Power Planer
- Mortising Machine
- Jigsaw
- Angle Grinder



## COURSE OUTLINE

### Building Design

- Building Methodology - history, design and vocabulary of timber framing.
- Lofting Design – application of center-line layout
- Lofting of timber frame bents.
- Working Drawings – develop the individual timber bent component drawings.
- Joinery Design – the ability to design appropriate joinery for specific requirements.
- Calculating volume, weight and center of gravity for raising bents.
- Calculating loads in lifting tackle for raising bents.

### Wood ID

- Properties, Grades and Seasoning
- Timber Selection, identify timber defects and appearance and locate appropriately in the bent.
- Hand Power Planing and Edging
- Finishing, End Sealing and Repair

### Tool ID

- Identification – demonstrates appropriate tool for the job and proper handling.
- Power/Hand Tool Operation and Safety – demonstrates consistent safe manner.
- Sharpening and Maintenance – demonstrates ability to sharpen and maintain tools.
- Jig and Template Fabrication – fabrication of devices to enable repeated cuts or procedures
- Mechanical Advantage – an understanding of various types and methods.
- Personal Tools- maintains an orderly tool box
- Work Journal- demonstrates an understanding of the course teachings.

### Timber Layout

- Timber Identification – ability to choose and orient timber crown and face surfaces in preparation for layout.
- Corrected Timber Layout – ability to correctly level and place grid lines and test with zero line.
- Square Rule Layout – ability to locate and layout timber joints using a square rule.
- Template Layout – ability to employ templates in joinery layout and Cutting.
- Inventory and Production Control- demonstrates an ability to maintain production inventory spreadsheets for timber components.



### Timber Joinery

- 90-degree Tenon and Mortise - (blind and through wedged) demonstrates the ability to locate, layout, cut and assemble.
- 45-degree Tenon and Mortise – (Rafter to Post) the ability to locate, layout, cut and assemble.
- Sloped Shouldered Tenon and Mortise – demonstrates the ability to locate, layout, cut and assemble.
- Housing – the ability to locate, layout, cut and assemble.
- Knee Brace Centered/Offset Housed Tenon and Mortise – ability to locate, layout, cut and assemble.
- Lapped Dovetail- ability to locate, layout, cut and assemble.
- Spline Connections – ability to locate, layout, cut and assemble.
- Assembly and Labelling – ability to correctly label Timber Bent components and ‘tune’ frame during pre-assembly process.
- Drawboring and Pegging – ability to offset tenon peg hole for ‘draw’ effect. Peg size and spacing.
- Frame Raising – demonstrates ability to plan and assist in Raising the frame.

### Foundation Systems

- Building Layout- demonstrates the ability to Layout the dimensions of a project building.
- Grade levels and Excavation- demonstrates the ability to set grade levels and excavate for project pier foundation.
- Foundation Forms/Types – demonstrates the ability to set temporary foundation piers.

### Wall Systems

- Types - understands the various types of wall systems.
- Bracing Types - understands the effects of diagonal; diaphragm; and tensioning forms of wall bracing.
- Modular Infill - demonstrates the ability to fabricate and place infill walls using expanded polystyrene (EPS) Infill with acrylic stucco Finish.

### Roof Systems

- Types - understands the various types of roof systems
- Structural Beam Sizing- able to determine roof ridge and purlin beams from structural tables
- Ridge beam and Purlins - able to calculate, layout, cut and place a purlin rafter.



# TUITION SCHEDULE AND REFUND POLICY

## Tuition Schedule

Timber Framing Intensive Course:	\$2100.00
<ul style="list-style-type: none"><li>• Total Course Fee</li><li>• \$2000 + GST = \$2100.00</li><li>• 3 weeks, ~120 hours</li></ul>	
Registration Fee:	\$500.00
<ul style="list-style-type: none"><li>• Non refundable</li><li>• Taken off price of tuition</li><li>• Due upon registration</li></ul>	
50% Stage Payment:	\$550.00
<ul style="list-style-type: none"><li>• Due 4 weeks prior to start of course</li></ul>	
Balance of Payment:	\$1050.00
<ul style="list-style-type: none"><li>• Due before class starts on the first day</li></ul>	

## Refunds

### Voluntary Withdrawal Policy:

- Written notice must be provided by the student to Vintage Woodshop.
- If a replacement student is found to take the place of the student who is withdrawing a full refund will be provided (less the registration fee).
- Students who withdraw after 4 weeks from the start of the course will be entitled to receive a refund of any tuition paid greater than 50% of the course fee.
- Withdrawals which occur after the start of the course will not be entitled to receive any refunds.

### Dismissal Policy:

- Written notice must be provided by Vintage Woodshop to the student.
- If the course needs to be cancelled due to insufficient enrollment (or similar constraint), the student will receive a full refund of tuition paid up to that point (including registration fee).
- If a student needs to be dismissed due to abusive or aggressive behavior towards other people involved (students, instructors, partners, etc.) in the course or due to repeated safety infractions the student is not entitled to any refund.