Carpenter Course Outline

2023



TRAINING PROFILE CHART

This Training Profile Chart represents Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training at the topic level.

Level One	Transcript Code	Hours
*Project Drawings		
*Specifications	BRPT 100	12
Documentation		
Site Layout	CNST 102	30
Wall systems (Engineered and Lumber Framing) Introduction	FNDT 100	60
Constructs Formwork	CONC 100	
Tools and Equipment	EQPT 100	36
*Materials/Fasteners, Adhesives and Connectors	MATE 100	12
Temporary Access Equipment and Structures Lifting, Rigging and Hoisting	SCAF 100	12
Safety	SFTY 101	12
Floor Systems (Engineered and Lumber Framing) Deck Systems	FRMG 100	36
	<u> </u>	210

Level Two	Transcript Code	Hours
* Project Drawings	BRPT 200	27
* Specifications	DRF1 200	21
* Materials/Fasteners, Adhesives and Connectors	EXFN 200	
Finish Components and Accessories		
Jambs/Frames, Doors, Windows and Hardware (Exterior)	EXFN 201	9
Wall Systems (Engineered and Lumber Framing)	FRMG 201	36
Ceiling Framing	FRMG 202	36
Roof Systems/Trusses	FRIVIG 202	30
Roof Covering and Components	ROOF 200	12
Site Layout	CNST 204	30
Stairs	STRS 201	36
		210

Level Three	Transcript Code	Hours
* Project Drawings	BPRT 300	30
* Specifications	DPK1 300	30
* Materials/Fasteners, Adhesives and Connectors	*	*
Jambs/Frames, Doors, Windows and Hardware (Interior)	DOOR 300	33
Wall Systems (Demountable) Wallboard and Finish		
inish Components and Accessories (Interior) INFN 300		42
Ceiling Systems		
Constructs Formwork	FNDT 300	42
Roof Systems/Trusses	FRMG 300	36
Stairs	STRS 301	27
		210

Level Four	Transcript Code	Hours
* Project Drawings	BPRT 401	15
* Specifications	DEKT 401	13
* Materials/Fasteners, Adhesives and Connectors	INSL 400	18
Roof Systems/Trusses	FRMG 400	30
Stairs	STRS 401	36
Flooring (Floor Covering)	- INFN 400 12	
Panels, Tiles and Solid Wood Finishes		
Project Planning	PROJ 402	18
Renovation	RENO 400	12
Cabinets (Exceed)	INFN 401	42
Carpenter Review (Exceed)	REVW 400	27
		210

^{*}Taught in context with applicable tasks.

TECHNICAL TRAINING COURSE OUTLINE

This chart outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training sequencing.

210 hours **Level One** 7 weeks **Safety Awareness** 12 hours Occupational Health & Safety (OH&S) legislation Personal protective clothing and equipment Fall protection equipment Unsafe working environments Fire safety procedures and control Types of industrial health hazards **Tools** 36 hours Hand tools Portable power tools Stationary power tools and equipment Powder actuated tools Scaffolds and Rigging 12 hours Safe use of ladders and ramps Erection, maintenance and dismantling of wood and metal access scaffolds Basic rigging operations 12 hours **Construction Documents** Basic residential construction drawings Building codes and permit Site Layout 30 hours Elevations with a builder's level Building layout with hand tools Elevations with a laser level

15 hours Concrete

- Concrete mixtures and admixtures
- Concrete testing
- Place, finish and cure concrete
- Concrete maintenance and repair



Floor Framing 36 hours

- Beams and supports
- Floor systems
- Floor sheathing and installation procedures
- Deck systems

Foundations 45 hours

- Formwork for footings
- Grade beam formwork and pilings
- Formwork for foundation walls
- Foundation drainage, damproofing, waterproofing, and backfilling
- Formwork for slabs-on-grade
- Concrete reinforcement
- Permanent wood foundations

Building Materials 12 hours

- Wood and lumber used in the construction process
- Engineered panels used in the construction process
- Engineered wood products used in the construction process
- Storage for various building materials
- Fasteners and procedures for their use
- Metals used construction

evel Two 7 weeks	210 hours
Construction Documents	27 hours
Residential construction drawings	
Wall Systems	36 hours
Wall framing systems	
 Engineered wall systems 	
Structural timber materials	
Roof Framing	36 hours
 Conventional gable and shed roofs 	
Engineered roof trusses and sheathing	
 Gable roofs using metric measurements 	
Roof Coverings	12 hours
Roof coverings	
Exterior Windows and Doors	9 hours
Exterior windows	
Exterior doors	
Exterior Finishes and Accessories	24 hours
 Cornices 	
Exterior wall covering	
Transits	30 hours
Basic transit functions	7 - 1 - 2 - 1
Building layout with transits	
Wood stairs	36 hours

- Basic wood stairs
- Straight stairwell openings



Level Three 7 weeks **210** hours **Construction Documents** 30 hours Basic construction freehand sketches Commercial drawings and specifications 42 hours **Commercial Formwork** Formwork for columns and piers Slab and beam formwork Wall formwork for commercial construction **Concrete Stairs** 27 hours Formwork for concrete stairs **Roof Framing** 36 hours Conventional hip roofs Engineered roof trusses and install sheathing Hip roofs using metric measurements **Interior Finish** 42 hours Interior wall systems Finish components and accessories Ceiling finishes Various types of flooring

Doors and Hardware

33 hours

- Commercial door frames, doors and hardware
- Residential door frames, doors and hardware
- Specialty doors

Level F	our 7	weeks	210 hours
	uction Documents Commercial drawings and specifications		15 hours
•	cting Roof Construct an intersecting roof (imperial) Calculate an intersecting roof (metric)		30 hours
•	ets (Exceeds) Materials, terminology and design conside of cabinets Wall cabinets Base cabinets Plastic laminate counter tops	rations used in the construction	42 hours
•	Stairs Stairs and balustrades Stairwell openings Winders and geometrical stairs		36 hours
•	r Finish Components Flooring Panelling		12 hours
	ations Renovation-specific construction documen Renovation-specific construction activities	ts	12 hours
•	t Planning Quantity take-off Organizes work		12 hours
•	ng Envelope Insulate and seal the building envelope Fundamentals of building science		18 hours
•	nter Review (Exceed) Common occupational skills Planning and layout Concrete Framing Exterior finish Interior finish Renovations		27 hours



CARPENTER TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2013 Carpenter National Occupational Analysis (NOA). Each sub-task details the corresponding essential skill and level of training where the content is covered. *

* Sub Tasks with numbers in the boxes is where the content will be delivered in training.

A - Performs common occupational skills

Task A-1 Uses and maintains tools and equipment	1.01 Maintains hand, power and pneumatic tools	1.02 Maintains stationary tools	1.03 Uses powder actuated tools	1.04 Uses lifting, rigging and hoisting equipment
	1	1	1	1
	1.05 Uses layout Equipment			
	1, 2			
Task A-2 Performs safety related activities	2.01 Uses personal protective equipment (PPE) and safety Equipment	2.02 Maintains safe work environment		
	1	1		
Task A-3 Uses building materials	3.01 Installs fasteners, adhesives and connectors	3.02 Installs membranes and sealants	3.03 Installs foundation protection	3.04 Installs insulating materials
	1 (2,3,4 in context)	1 (2,3,4 in context)	1 (2,3,4 in context)	1 (2,3,4 in context)
Task A-4 Builds and uses temporary access structures	4.01 Uses stationary access equipment	4.02 Uses mobile access equipment	4.03 Erects/dismantles Scaffolding	4.04 Modifies specialized scaffolding
	1	1	1	1

B - Planning and layout

Task B-5 Interprets documentation	5.01 Interprets project drawings	5.02 Interprets Specifications	5.03 Interprets safety documentation	5.04 Interprets workplace documentation
	1 (2,3,4 in context)	1 (2,3,4, in context)	1	1
Task B-6 Organizes work	6.01 Schedules work Sequence	6.02 Performs site Preparation	6.03 Performs quantity take off	6.04 Organizes Materials
	1	1	1	1
Task B-7 Performs layout	7.01 Performs site Layout	7.02 Lays out concrete formwork	7.03 Lays out floor Systems	7.04 Lays out deck Systems
	1	1,3	1	1
	7.05 Lays out wall Systems	7.06 Lays out ceiling Systems	7.07 Lays out roof Systems	7.08 Lays out Stairs
	2	2,3	2,3,4	2,3,4

C – Concrete

Task C-8 Constructs formwork	8.01 Erects excavation shoring and underpinning	8.02 Erects concrete falsework	8.03 Constructs footing forms	8.04 Constructs wall and grade beam formwork
	3	3	1	1
	8.05 Constructs slab on-grade formwork	8.06 Constructs column formwork	8.07 Constructs stair formwork	8.08 Installs embedded steel
	1	3	3	3

8.09 Dismantles Formwork 1 Task C-9 Installs 9.01 Places 9.02 Facilitates 9.03 Performs 9.04 Installs pre-case concrete, cement-Concrete curing of concrete basic concrete components based and epoxy finishing products 1 1 1 3 9.05 Installs grout 3

D - Framing

Task D-10 Constructs floor systems 1	10.01 Installs engineered floor systems	10.02 Constructs dimensional lumber floor framing
	1	1
Task D-11 Constructs deck systems	11.01 Constructs Decks	11.02 Installs deck Components
	1	1
Task D-12 Constructs wall systems	12.01 Installs engineered wall systems	12.02 Constructs dimensional lumber wall framing
	2	2
Task D-13 Constructs roof and ceiling systems	13.01 Installs engineered trusses	13.02 Constructs roof and ceiling framing
	2,3,4	2,3,4

E - Exterior finish

Task E-14 Installs exterior doors and windows

14.01 Installs exterior jambs/frames

14.02 Installs exterior doors

14.03 Installs specialty exterior doors

14.04 Installs exterior windows

2

2

2

2

14.05 Installs exterior door and window hardware

2

Task E-15 Installs roofing

15.01 Installs roofing components

2

15.02 Installs roof Coverings

2

Task E-16 Installs exterior finishes

16.01 Installs exterior wall components

2

16.02 Installs exterior wall coverings

2

F - Interior finish

Task F-17 Applies wall and ceiling finishes 17.01 Installs Wallboard

3

17.02 Applies wall Compound

3

17.03 Installs panels, tiles and solid wood finishes

3,4

17.04 Installs suspended ceiling

3

17.05 Installs demountable wall systems

3

Task F-18 Installs flooring

18.01 Installs Underlayment

4

18.02 Installs floor Coverings

4

18.03 Installs access flooring

4

Task F-19 Installs interior doors and windows	19.01 Installs interior jambs/frames	19.02 Installs interior doors	19.03 Installs interior windows	19.04 Installs interior door and window hardware
	3	3	3	3
Task F-20 Constructs and installs finish components and stairs	20.01 Fabricates finish components	20.02 Installs finish components and accessories	20.03 Constructs Stairs	
	3	3	2,3,4	

G- Renovations

Task G-21 Performs renovation specific support activities	21.01 Removes existing material	21.02 Protects structure during renovations
	4	4
Task G-22 Performs renovation specific construction activities	22.01 Joins new to existing construction	22.02 Changes existing structure during renovations
	4	4

*The Carpenter National Occupational Standard (NOA), describing the "full scope" of the trade, can be found at www.red-seal.ca.

For more detailed information on course content, please refer to the Carpenter Guide to Course Content at www.saskapprenticeship.ca