

Carpenter

Course Outline

2022



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	BRPT 100	12
*Specifications		
Documentation		
Site Layout	CNST 102	30
Wall systems (Engineered and Lumber Framing) Introduction	FNFT 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	SCAF 100	12
Lifting, Rigging and Hoisting		
Safety	SFTY 101	12
Floor Systems (Engineered and Lumber Framing)	FRMG 100	36
Deck Systems		
		210

Level Two	Transcript Code	Hours
* Project Drawings	BRPT 200	27
* Specifications		
* Materials/Fasteners, Adhesives and Connectors	EXFN 200	24
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		
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		
* Materials/Fasteners, Adhesives and Connectors	*	*
Jambs/Frames, Doors, Windows and Hardware (Interior)	DOOR 300	33
Wall Systems (Demountable) Wallboard and Finish	INFN 300	42
Finish Components and Accessories (Interior)		
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		
* 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)	RE VW 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.

Level One	7 weeks	210 hours
Safety Awareness		12 hours
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• Hand tools• Portable power tools• Stationary power tools and equipment• Powder actuated tools		
Scaffolds and Rigging		12 hours
<ul style="list-style-type: none">• Safe use of ladders and ramps• Erection, maintenance and dismantling of wood and metal access scaffolds• Basic rigging operations		
Construction Documents		12 hours
<ul style="list-style-type: none">• Basic residential construction drawings• Building codes and permit		
Site Layout		30 hours
<ul style="list-style-type: none">• Elevations with a builder's level• Building layout with hand tools• Elevations with a laser level		
Concrete		15 hours
<ul style="list-style-type: none">• 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

Level Two	7 weeks	210 hours
Construction Documents <ul style="list-style-type: none"> Residential construction drawings 		27 hours
Wall Systems <ul style="list-style-type: none"> Wall framing systems Engineered wall systems Structural timber materials 		36 hours
Roof Framing <ul style="list-style-type: none"> Conventional gable and shed roofs Engineered roof trusses and sheathing Gable roofs using metric measurements 		36 hours
Roof Coverings <ul style="list-style-type: none"> Roof coverings 		12 hours
Exterior Windows and Doors <ul style="list-style-type: none"> Exterior windows Exterior doors 		9 hours
Exterior Finishes and Accessories <ul style="list-style-type: none"> Cornices Exterior wall covering 		24 hours
Transits <ul style="list-style-type: none"> Basic transit functions Building layout with transits 		30 hours
Wood stairs <ul style="list-style-type: none"> Basic wood stairs Straight stairwell openings 		36 hours

Level Three	7 weeks	210 hours
Construction Documents <ul style="list-style-type: none"> • Basic construction freehand sketches • Commercial drawings and specifications 		30 hours
Commercial Formwork <ul style="list-style-type: none"> • Formwork for columns and piers • Slab and beam formwork • Wall formwork for commercial construction 		42 hours
Concrete Stairs <ul style="list-style-type: none"> • Formwork for concrete stairs 		27 hours
Roof Framing <ul style="list-style-type: none"> • Conventional hip roofs • Engineered roof trusses and install sheathing • Hip roofs using metric measurements 		36 hours
Interior Finish <ul style="list-style-type: none"> • Interior wall systems • Finish components and accessories • Ceiling finishes • Various types of flooring 		42 hours
Doors and Hardware <ul style="list-style-type: none"> • Commercial door frames, doors and hardware • Residential door frames, doors and hardware • Specialty doors 		33 hours

Level Four	7 weeks	210 hours
Construction Documents <ul style="list-style-type: none"> • Commercial drawings and specifications 		15 hours
Intersecting Roof <ul style="list-style-type: none"> • Construct an intersecting roof (imperial) • Calculate an intersecting roof (metric) 		30 hours
Cabinets (Exceeds) <ul style="list-style-type: none"> • Materials, terminology and design considerations used in the construction of cabinets • Wall cabinets • Base cabinets • Plastic laminate counter tops 		42 hours
Wood Stairs <ul style="list-style-type: none"> • Stairs and balustrades • Stairwell openings • Winders and geometrical stairs 		36 hours
Interior Finish Components <ul style="list-style-type: none"> • Flooring • Panelling 		12 hours
Renovations <ul style="list-style-type: none"> • Renovation-specific construction documents • Renovation-specific construction activities 		12 hours
Project Planning <ul style="list-style-type: none"> • Quantity take-off • Organizes work 		12 hours
Building Envelope <ul style="list-style-type: none"> • Insulate and seal the building envelope • Fundamentals of building science 		18 hours
Carpenter Review (Exceed) <ul style="list-style-type: none"> • 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	1.02 Maintains stationary tools 1	1.03 Uses powder actuated tools 1	1.04 Uses lifting, rigging and hoisting equipment 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 1	2.02 Maintains safe work environment 1			
	Task A-3 Uses building materials	3.01 Installs fasteners, adhesives and connectors 1 (2,3,4 in context)	3.02 Installs membranes and sealants 1 (2,3,4 in context)	3.03 Installs foundation protection 1 (2,3,4 in context)	3.04 Installs insulating materials 1 (2,3,4 in context)
Task A-4 Builds and uses temporary access structures		4.01 Uses stationary access equipment 1	4.02 Uses mobile access equipment 1	4.03 Erects/ dismantles Scaffolding 1	4.04 Modifies specialized scaffolding 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 concrete, cement-based and epoxy products	9.01 Places Concrete	9.02 Facilitates curing of concrete	9.03 Performs basic concrete finishing	9.04 Installs pre-case components
	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 2	14.02 Installs exterior doors 2	14.03 Installs specialty exterior doors 2	14.04 Installs exterior windows 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 3	19.02 Installs interior doors 3	19.03 Installs interior windows 3	19.04 Installs interior door and window hardware 3
Task F-20 Constructs and installs finish components and stairs	20.01 Fabricates finish components 3	20.02 Installs finish components and accessories 3	20.03 Constructs Stairs 2,3,4	

G- Renovations

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

Training Requirements: To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1800 hours each year. Total trade time required is 7200 hours and at least 4 years in the trade.

There are four levels of technical training delivered by Saskatchewan Polytechnic in Saskatoon.

Level One:	7 weeks
Level Two:	7 weeks
Level Three:	7 weeks
Level Four:	7 weeks

The information contained in this document serves as a guide for employers and apprentices. The document briefly summarizes the training delivered at each level of apprenticeship training. An apprentice spends approximately 15% of the apprenticeship term in a technical training institute learning the technical and theoretical aspects of the trade. The hours and percentages of technical and practical training may vary according to class needs and progress. The content of the technical training components is subject to change without notice.

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

The **Carpenter Red Seal Occupational Standard (RSOS), describing the “full scope” of the trade, can be found at www.red-seal.ca.*