



# **Automotive Refinishing Technician Course Outline**

**2024**

# TRAINING PROFILE CHART SASKATCHEWAN

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

**Note:** Level One Auto Body and Collision Technician and Automotive Refinishing Technician attend common Level One technical training. Either apprentice may switch to the other trade upon completion of level one technical training and work experience. Graduates of Saskatchewan Polytechnic's applied certificate ABCT program with sufficient work experience hours may enter Automotive Refinishing Technician apprenticeship at level two.

At this time, all Saskatchewan's Automotive Refinishing Technician apprentices attend technical training in Alberta at NAIT or SAIT for Level 2.

Level two Automotive Refinishing Technician apprenticeship technical training has yet to be developed. Once industry indentures sufficient, sustainable numbers of Automotive Refinishing Technician apprentices, level two will begin development.

Sask. Polytechnic Level One (Harmonized)	Transcript Code	Hours
Trade Mathematics	MATH 131 – Theory	12
Metal Repair	METL 122 – Theory	20
	METL 123 – Shop	36
Refinishing	PNTG 122 – Theory	24
	PNTG 123 – Shop	32
Vehicle Body Trim Repair	VEHC 122 – Theory	24
	VEHC 123 – Shop	32
		180

# TRAINING PROFILE CHART ALBERTA

This Training Profile Chart represents Alberta Apprenticeship and Industry Training (AIT) technical training at the topic Level 2.

Northern and Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level Two (Harmonized)	Hours
Shop Practices and Procedures	24
Product Preparation	49
Topcoat Application	107
	180

# TECHNICAL TRAINING COURSE OUTLINE

This chart outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training sequencing. For the harmonized level of training, a cross reference to the Red Seal Occupational Standard (RSOS) apprenticeship technical training sequencing, at the learning outcome level, is provided.

<b>Level One</b>	<b>6 weeks</b>	<b>180 hours</b>
<b>Trade Mathematics</b> <ul style="list-style-type: none"> <li>• use basic mathematics</li> <li>• use basic algebra</li> <li>• use metric system and formulas</li> </ul>		<b>12 hours</b>
<b>Metal Repair – Theory</b> <ul style="list-style-type: none"> <li>• discuss auto body hand and power tools</li> <li>• identify metal shaping procedures</li> <li>• discuss metal preparation procedures</li> <li>• describe minor dent repair procedures</li> <li>• describe application and finishing procedures of fillers</li> <li>• describe oxy-acetylene cutting and heating procedures</li> <li>• describe plasma cutting procedures</li> <li>• describe trade-related documents</li> </ul>		<b>20 hours</b>
<b>Metal Repair – Shop</b> <ul style="list-style-type: none"> <li>• demonstrate knowledge of trade terminology</li> <li>• use auto body hand tools</li> <li>• use auto body power tools</li> <li>• demonstrate metal working procedures</li> <li>• perform the application and finish filler process</li> <li>• use oxy-acetylene equipment</li> <li>• use plasma arc</li> </ul>		<b>36 hours</b>
<b>Refinishing – Theory</b> <ul style="list-style-type: none"> <li>• describe preparation of panel to be painted</li> <li>• identify methods of stripping paint</li> <li>• describe undercoat application procedures</li> <li>• identify primer sealers</li> <li>• describe spray equipment</li> <li>• describe paint mixing procedures</li> <li>• explain paint application procedures</li> <li>• describe procedures for paint defect correction</li> <li>• describe air supply systems</li> <li>• describe vehicle detailing procedures</li> </ul>		<b>24 hours</b>
<b>Refinishing – Shop</b> <ul style="list-style-type: none"> <li>• prepare panel to be painted</li> <li>• strip painted panel</li> <li>• apply undercoats</li> <li>• apply primer sealers</li> <li>• clean and maintain spray equipment</li> </ul>		<b>32 hours</b>

- mix paint
- apply paint to a panel
- correct paint defects
- service air supply systems
- perform an interior and exterior vehicle clean up

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### **Vehicle Body Trim Repair – Theory**

**24 hours**

- discuss personal and shop safety
- discuss electrical systems
- identify fastening devices
- describe body trim and mouldings
- identify passenger restraint systems
- describe plastic repair
- describe body panel replacement and alignment

### **Vehicle Body Trim Repair – Shop**

**32 hours**

- repair electrical systems
- replace vehicle trim components
- repair plastic components
- replace body panels and associated trim

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## **Level Two**

**6 weeks**

**180 hours**

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### **Section One – Shop Practices and Procedures**

**24 hours total**

#### **Shop Maintenance**

**18 hours**

- describe spray environment set-up
- describe air supply systems
- describe record keeping procedures
- describe the management of materials inventory
- describe the management of waste materials
- identify mixing room requirements
- maintain mixing room
- maintain spray environment
- maintain refinishing equipment

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#### **Shop Procedures**

**6 hours**

- explain a refinish supplement
- explain a refinish estimate
- identify refinish work required
- develop refinish schedule

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<b>Section Two – Product Preparation</b>	<b>49 hours total</b>
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<b>Topcoat Identification</b>	<b>18 hours</b>
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- identify existing substrates
- describe topcoat considerations for complete panel refinish
- describe topcoat considerations for spot repair
- select a formula that corresponds to a paint code. Maintain spray environment

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<b>Mixing Identification</b>	<b>4 hours</b>
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- describe additive considerations
- mix paint according to specifications
- correct an over-pour situation when mixing paint

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<b>Colour Matching</b>	<b>27 hours</b>
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- explain colour theory
- identify a colour mismatch
- adjust colour using gun technique
- adjust colour by tinting

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<b>Section Three – Topcoat Application</b>	<b>107 hours total</b>
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<b>Apply Topcoat</b>	<b>95 hours</b>
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- describe topcoat application
- describe blending techniques and applications
- prepare the refinisher for topcoat application
- prepare the work piece for topcoat application
- prepare spray equipment for topcoat application
- perform topcoat application
- perform multi-stage blend repair

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<b>Paint Faults</b>	<b>12 hours</b>
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- identify paint faults
- repair paint faults

# AUTOMOTIVE REFINISHING TECHNICIAN TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2019 Automotive Refinishing Technician Red Seal Occupational Standard. Each sub-task details the corresponding essential skill and level of training where the content is covered. \*

\* Sub-tasks with numbers in the boxes indicate where the content will be delivered in training.

### **A – Performs common occupational skills**

**16%**

<b>Task A-1 Performs safety-related functions</b>	<b>1.01 Maintains safe workplace</b>  <p style="text-align: center;">1</p>	<b>1.02 Uses personal protective equipment (PPE) and safety equipment</b>  <p style="text-align: center;">1</p>			
<b>Task A-2 Maintains tools and equipment</b>	<b>2.01 Maintains hand and power tools</b>  <p style="text-align: center;">1</p>	<b>2.02 Maintains spray booth</b>  <p style="text-align: center;">1</p>	<b>2.03 Maintains spray equipment</b>  <p style="text-align: center;">1, 2</p>	<b>2.04 Maintains mixing equipment</b>  <p style="text-align: center;">1, 2</p>	<b>2.05 Maintains shop equipment</b>  <p style="text-align: center;">1</p>
<b>Task A-3 Organizes work</b>	<b>3.01 Uses documentation</b>  <p style="text-align: center;">1, 2</p>	<b>3.02 Performs inspections</b>  <p style="text-align: center;">1, 2</p>	<b>3.03 Contributes to development of a repair plan</b>  <p style="text-align: center;">1, 2</p>	<b>3.04 Organizes refinish production schedule</b>  <p style="text-align: center;">1, 2</p>	
<b>Task A-4 Uses communication and mentoring techniques</b>	<b>4.01 Uses communication techniques</b>  <p style="text-align: center;">1, 2</p>	<b>4.02 Uses mentoring techniques</b>  <p style="text-align: center;">1, 2</p>			

## B – Performs Preparation

42%

Task B-5 Prepares surface	5.01 Performs initial preparation	5.02 Masks surface	5.03 Strips surface	5.04 Sands surface
	1	1, 2	1	1
Task B-6 Uses repair materials	6.01 Mixes repair materials	6.02 Applies repair materials	6.03 Applies protective coating	
	1	1	1	

## C– Performs refinishing procedures

42%

Task C-7 Prepares refinishing equipment	7.01 Prepares spray booth	7.02 Performs spray gun setup		
	1, 2	1, 2		
Task C-8 Prepares refinishing materials	8.01 Mixes refinishing materials	8.02 Performs colour adjustments		
	1, 2	2		
Task C-9 Applies refinishing materials	9.01 Applies sealers	9.02 Applies base coat	9.03 Applies single-stage paint	9.04 Applies clear coat
	2	1, 2	1, 2	2
Task C-10 Performs post-refinishing functions	10.01 Removes masking materials	10.02 Corrects surface imperfections	10.03 Performs final check	
	1, 2	1, 2	1, 2	

***\*The Automotive Refinishing Technician Red Seal Occupational Standard (RSOS), describing the “full scope” of the trade, can be found at [www.red-seal.ca](http://www.red-seal.ca).***

***For more detailed information on course content, please refer to the Automotive Refinishing Technician Guide to Course Content at [www.saskapprenticeship.ca](http://www.saskapprenticeship.ca).***