# Lather (Interior Systems Mechanic)

# Guide to Course Content

1-877-363-0536
apprenticeship@gov.sk.ca
saskapprenticeship.ca

Saskatchewan Apprenticeship and Trade Certification Commission

Online: www.saskapprenticeship.ca

*Recognition:*
*To promote transparency and consistency, this document has been adapted from the 2021 Lather (Interior Systems Mechanic) Red Seal Occupational Standard (Employment and Social Development Canada).*

*A complete version of the Occupational Standard can be found* at www.red-seal.ca

# STRUCTURE OF THE GUIDE TO COURSE CONTENT

To facilitate understanding of the occupation, this guide to course content contains the following sections:

**Task Matrix**: a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard detailing the essential skills and the level of training where the content is covered. The Task Matrix is broken down into the following:

**Major Work Activity (MWA):** the largest division within the standard that is comprised of a distinct set of trade activities.

**Task**: distinct actions that describe the activities within a major work activity.

**Sub-task**: distinct actions that describe the activities within a task.

**Training Profile Chart**: a chart which outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training.

**Technical Training Course Content for the Lather trade**: a chart which outlines the model for technical training sequencing. For the harmonized level of training, a cross reference to the Harmonized apprenticeship technical training sequencing, at the learning outcome level, is provided.

# TRAINING REQUIREMENTS FOR THE LATHER (INTERIOR SYSTEMS MECHANIC) TRADE

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 1500 hours each year. Total trade time required is 6000 hours and at least 4 years in the trade.

There are three levels of technical training delivered by NAIT in Edmonton, AB or SAIT in Calgary, AB:

Level One: 8 weeks
Level Two: 8 weeks
Level Three: 8 weeks

The information contained in this guide to course content details the technical training delivered for each level of apprenticeship. An apprentice spends approximately 15% of their 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.

**Entrance Requirements for Apprenticeship Training**

Your grade twelve transcripts (with no modified classes) or GED 12 is your guarantee that you meet the educational entrance requirements for apprenticeship in Saskatchewan. In fact, employers prefer and recommend apprentices who have completed high school. This ensures the individual has all of the necessary skills required to successfully complete the apprenticeship program and receive journeyperson certification.

Individuals with “modified” or “general” classes in math or science do not meet our entry requirements. These individuals are required to take an entrance assessment prescribed by the SATCC.

English is the language of instruction in all apprenticeship programs and is the common language for business in Saskatchewan. Before admission, all apprentices and/or “upgraders” must be able to understand and communicate in the English language.

| Designated Trade Name | Minimum Class Requirements | | Recommended /Assets |
|---|---|---|---|
| | Mathematics (one of the following) | Science | |
| Lather (Interior Systems Mechanic) | **WA** 10 or **F** 10 or **P** 10 or **Math** 10 | 10 | ❸,❺,❼ |
| WA - Workplace and Apprenticeship; F – Foundations; P – Pre-calculus; ❶ Biology 10; ❷ Chemistry 20; ❸ Physics 20; ❹ Biology 30; ❺ Chemistry 30; ❻ Physics 30; ❼ English and Math at Level 30 | | | |

# LATHER (INTERIOR SYSTEMS MECHANIC)
# TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2021 Lather (Interior Systems Mechanic) Red Seal Occupational Standard. Each sub-task details the corresponding essential skill.

## A - Performs common occupational skills — 21%

| | | | | | |
|---|---|---|---|---|---|
| **Task A-1** Performs safety-related functions | 1.01 Maintains safe work environment | 1.02 Uses personal protective equipment (PPE) and safety equipment | | | |
| **Task A-2** Uses tools and equipment | 2.01 Uses hand tools | 2.02 Uses power tools | 2.03 Uses powder-actuated tools | 2.04 Uses gas-actuated tools | 2.05 Uses pneumatic tools |
| | 2.06 Uses layout and measuring devices | A-2.07 Uses scaffolding and access equipment | | | |
| **Task A-3** Organizes work | 3.01 Uses documentation and reference materials | 3.02 Uses blueprints and drawings | 3.03 Plans project tasks | 3.04 Estimates materials and supplies | |
| **Task A-4** Performs routine trade activities | 4.01 Performs measurements | 4.02 Uses jigs and templates | 4.03 Handles materials, supplies, and products | 4.04 Lays out work | 4.05 Applies sealants and gaskets |

| | | |
|---|---|---|
| Task A-5 Uses communication and mentoring techniques | 5.01 Uses communication techniques | 5.02 Uses mentoring techniques |

## B – Performs framing activities 30%

| | | | | | |
|---|---|---|---|---|---|
| Task B-6<br>Erects non-loadbearing steel assemblies | 6.01 Frames non-loadbearing walls | 6.02 Frames spanned ceilings | 6.03 Frames suspended drywall ceilings | 6.04 Frames non-loadbearing bulkheads | 6.05 Installs metal door and window frames |
| | 6.06 Installs backing | | | | |
| Task B-7<br>Erects loadbearing steel assemblies | 7.01 Frames loadbearing walls | 7.02 Frames exterior ceilings and soffits | 7.03 Frames loadbearing bulkheads | 7.04 Frames loadbearing floors | 7.05 Frames loadbearing roofs |

# C – Installs interior systems

**36%**

| | | | | | |
|---|---|---|---|---|---|
| **Task C-8**<br>**Installs wall systems and components** | **8.01 Installs demountable walls** | **8.02 Installs drywall** | **8.03 Finishes drywall** | **8.04 Installs drywall trims and mouldings** | **8.05 Installs security mesh** |
| | **8.06 Installs access panels** | | | | |
| **Task C-9**<br>**Installs ceiling systems** | **9.01 Installs suspended ceiling** | **9.02 Installs non-suspended ceilings** | | | |
| **Task C-10 Install access flooring systems** | **10.01 Installs pedestals and supporting hardware** | **10.02 Installs flooring panels** | | | |
| **Task C-11 Installs sound barriers and lead radiation shielding** | **11.01 Installs sound barriers** | **11.02 Installs lead radiation shielding** | | | |
| **Task C-12 Installs smoke and fire barriers** | **12.01 Installs shaft wall systems** | **12.02 Seals penetrations** | **12.03 Encloses beams, columns and staircases to achieve desired fire rating** | | |

## D – Installs exterior systems

**13%**

| | | | |
|---|---|---|---|
| **Task D-13 Installs insulation and membranes** | **13.01 Installs thermal insulation** | **13.02 Installs interior/exterior membranes** | |
| **Task D-14 Prepares surface for exterior finishes** | **14.01 Installs exterior sheathing** | **14.02 Installs lath** | **14.03 Installs exterior insulation finish system (EIFS)** |
| **Task D-15 Installs exterior finishes** | **15.01 Fabricates panels** | **15.02 Installs pre-manufactured panels** | |

# TRAINING PROFILE CHART

This Training Profile Chart represents NAIT and SAIT training at the topic level.

| Level One |
|---|
| Codes, Regulations and General Safety |
| Tools, Equipment and Materials |
| Walls |
| Exterior Stucco Preparation |
| Drywall Applications |
| Component Ceiling Systems |
| Air and Moisture Barriers |
| Blueprint Reading |
| Trade Mathematics |

| Level Two |
|---|
| Fire Resistive and Acoustical Ratings |
| Wind/Load Bearing Wall and Floor Systems |
| Metal Lath Partitions, Walls and Ceilings |
| Shaft Wall Systems |
| Component and Specialty Ceiling Systems |
| Demountable Partition Systems |
| Specialized Systems |
| Exterior Insulation Finish Systems (EIFS) |
| Blueprint Reading |
| Trade Mathematics |

| Level Three |
|---|
| Advanced Ceiling Systems |
| Renovations, Walls and Fireproofing |
| Specialized Environments |
| Blueprint Reading |
| Business Fundamentals |
| Final Period Practical Project |

# TECHNICAL TRAINING COURSE CONTENT

This chart outlines the model for Alberta's NAIT and SAIT technical training.

## Level One 8 weeks

**Codes, Regulations and Safety**

- construction safety
- project organization
- study of regulations
- fire prevention and controls
- introduction to WHMIS

**Tools, Equipment and Materials**

- hand and power tools
- scaffolding
- materials
- explosive actuated tools

**Walls**

- various types and specifications
- materials and erection
- metal framing
- furring systems on existing walls
- preparations for other trades
- application of insulation in walls and ceilings

**Exterior Stucco Preparation**

- sheathing and building paper
- stucco wire and coatings

**Drywall Applications**

- application, layout and installation
- taping
- drywall ceiling systems

**Component Ceiling Systems**

- component ceilings
- component baffles

**Air and Moisture Barriers**

- application of air and moisture barriers
- barrier failures
- exterior insulation finish systems (EIFS)

**Blueprint Reading**

- drawing instruments and techniques
- freehand sketching
- drawing to specifications
- blueprint interpretation

**Trade Mathematics**

- basic applied mathematics
- trade problems from basic plans and specifications
- metric systems

## Level Two 8 weeks

**Fire Resistive and Acoustical Ratings**

- fire and sound ratings
- wall and ceiling designs

**Wind/Load Bearing Wall and Floor Systems**

- wind bearing framing systems
- composite metal floor systems and load bearing walls
- access floor systems

**Metal Lath Partitions, Walls and Ceilings**

- fabrication of metal lath partitions, walls and ceilings

**Shaft Wall Systems**

- shaft wall fabrications
- plenum barriers

**Component and Specialty Ceiling Systems**

- concealed suspension ceiling system
- reveal grid and ceiling tile system
- metal linear ceiling systems
- specialty ceilings

**Demountable Partition Systems**

- components and installation

**Specialized Systems**

- pre-cast plaster, glass fibre and reinforced gypsum
- component wall treatment and baffles
- jigs and templates

**Blueprint Reading**

- blueprints for commercial building
- isolating the lather – drywall and acoustical mechanic work
- amplifying drawings with notes
- freehand pictorial drawings
- specified shop projects

**Exterior Insulation Finish Systems (EIFS)**

- panelization
- on-site application
- air and moisture barriers

**Trade Mathematics**

- trade calculations

## Level Three 8 weeks

**Advanced Ceiling Systems**

- adjustments and adaptations from regular layouts
- component ceilings
- groined drywall and domed metal lath ceiling
- specialty ceilings
- development and use of jigs and templates
- trim and finish components

**Renovations, Walls and Fireproofing**

- demountable partition systems
- fireproofing
- renovations and additions

**Specialized Environments**

- introduction to specialized environments
- radiation protective systems

**Blueprint Reading**

- specifications
- blueprints with emphasis on drywall and acoustical mechanic
- working drawings
- job organization

**Business Fundamentals**

- documents and forms
- trade math
- workplace coaching skills
- interprovincial standards

**Final Period Practical Project**

- Final period practical examination