

SKILLED**TRADES**^{BC}

Personal Record Book

Machinist

This is your Record Book!

DO NOT SUBMIT TO SKILLED TRADES BC

This is not required to achieve certification

- It is a record of your progress towards achieving certification in the trade
- It provides a record of your experience
- It is your responsibility to keep it up-to-date
- Take it with you if you change employers

Note: Employers and supervisors are not responsible for keeping your Record Book up-to-date. They are responsible for sign-off of hours and sign-off of competencies once you have achieved the required level of skills and knowledge.

APPRENTICE IDENTIFICATION

Trade: MACHINIST

Legal First Name:		Legal Last Name:	
Suite Number:	Street Number and Name:		
City:		Province:	Postal Code:
Telephone Number: ()		Email Address:	

Work Safely!

A safe work attitude contributes to an accident free environment. Accident prevention and safe working conditions are the responsibility of both employers and employees.

Wear the required personal protective equipment, follow safe work practices and follow all safety regulations applicable to specific job activities.

Employer's responsibilities:

- Provide and maintain safety equipment and protective devices
- Ensure proper safe work clothing is worn
- Enforce safe work procedures
- Provide safeguards for machinery, equipment and tools
- Observe all accident prevention regulations
- Train employees in safe use and operation of equipment

Employee's responsibilities:

- Work in accordance with the safety regulations pertaining to job environment
- Work in such a way as not to endanger themselves or fellow workers.

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EMPLOYER INFORMATION

Originating Employer

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journey person 1:	*TWID #:
	Phone:
	Email:
Supervisor/Journey person 2:	TWID #:
	Phone:
	Email:

*TWID # - Trade Worker Identification Number

If you have more than one employer during your apprenticeship, record the information for subsequent employers on the following page(s).

If your job ends or you change employers...

Before leaving your place of employment:

- Have your sponsor update your Work Based Training hours on their [SkilledTradesBC Portal account](#).
- Update Record of Competencies with your supervisor.
- Confirm with your employer that your workplace hours have been reported to SkilledTradesBC, and if possible get a copy of all Work-Based Training Hours reports submitted.
- Notify SkilledTradesBC of the change in your employment by submitting an [Online Registration Request](#) with your new employer on the SkilledTradesBC Portal.

When re-employed...

You must be registered with your new employer before submitting any work-based training hours to SkilledTradesBC.

Subsequent Employers

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journeyperson 1:	TWID #:
	Phone:
	Email:
Supervisor/Journeyperson 2:	TWID #:
	Phone:
	Email:

Subsequent Employers

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journeyperson 1:	TWID #:
	Phone:
	Email:
Supervisor/Journeyperson 2:	TWID #:
	Phone:
	Email:

WORKPLACE HOURS

Instructions

Make an entry in this section each time your hours are reported to SkilledTradesBC.

1. Get a copy of the *Workplace Hours Report* from your employer.
2. Fill in the dates of the reporting period and the hours reported.
3. Enter your employer name, address and phone number.
4. Keep your Record Book in a safe place.

Workplace Hours

Workplace hours must be submitted to SkilledTradesBC by your employer on a regular basis. Your hours should be reported at least every six months; however, every three months is preferred.

At the beginning of your apprenticeship discuss the frequency of reporting with your employer.

Keeping Workplace hours up-to-date in your Record Book gives you the tools to better manage your apprenticeship. It provides you with the opportunity to:

- Follow up with your employer each reporting period to ensure your hours are reported on a regular basis.
- Discuss your progress with your direct supervisor/journeyperson on a regular basis.

DATE (TO-FROM)	EMPLOYER	HOURS
TOTAL HOURS		

RECORD OF COMPETENCIES

Instructions

The Record of Competencies is filled out and signed-off by the journeyperson supervising your work.

1. Know what skills are expected at each level of the program.
2. Ask the journeyperson to sign off on the competency when you have acquired the skills and are able to perform the task without supervision.
3. If the journeyperson agrees that you have the required skills, he/she will:
 - Record the date that the competency was achieved
 - Sign off on the competency
 - Enter his/her Trades Worker Identification Number (TWID #)

What is a Record of Competencies?

The Record of Competencies lists all competencies you should be knowledgeable in prior to receiving your certification. Keeping this section up to date will allow you to track your progress towards certification and demonstrate proficiency in the skills within the scope of your trade. Completion of the entire program should result in you becoming a skilled and knowledgeable journeyperson.

- Refer to this section periodically to ensure you are getting the work experience you need.
- Use the competencies as a guide to ensure work tasks are assigned so that you acquire the skills and knowledge required to be successful in the trade.

Review the Record of Competencies on a regular basis with your direct supervisor/journeyperson to ensure they have been completed.

Program Outline

The Program Outline provides detailed information on the scope of knowledge and skills expected at each level of the program, further defining the competencies listed in the Record Book. The Program Outline is a great resource for developing a training plan.

Download from: <https://skilledtradesbc.ca/machinist>

Apprenticeship Toolkit

For general information on apprenticeship and tips for navigating the apprenticeship system in BC visit SkilledTradeBC's website to learn about the [apprenticeship basics](#).

LEVEL 1

IMPORTANT!

Download the Program Outline!

<http://https://skilledtradesbc.ca/machinist>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE A: PERFORM SAFETY RELATED TASKS

- Describe the Federal-Provincial Occupational Health and Safety Regulations
- Describe the HAZMAT (Hazardous Materials Safety) and the WHMIS regulations
- Interpret material information sheets [SDS (Safety Data Sheets) and HAZMAT]

LINE B: PERFORM HAND PROCESSES

- Describe handheld power tool safety
- Identify and describe marking procedures

LINE C: USE APPLIED MATHEMATICS

- Identify types of angular geometric principles

LINE D: USE MEASURING TOOLS

- Describe optical measuring equipment

LINE E: INTERPRET DRAWINGS AND REFERENCE MATERIALS

- Identify information found on drawings
- Determine project requirements from a drawing or sample
- Identify and locate information in the machinery's handbook
- Describe fits and tolerances

LINE F: SELECT MATERIALS

- Describe the manufacture of iron and steel
- Describe the SAE and AISI classifications
- Identify steel characteristics by their designations
- Describe the operation and maintenance of fuel gas equipment

LINE G: REFURBISH COMPONENTS

- Identify fasteners for applications
- Describe lubricants and sealants and their applications

LINE H: USE DRILLING MACHINES

- Describe drilling machines and their applications

LINE I: USE POWER SAWS

- Describe power saws and their applications

LINE J: USE LATHES

- Describe lathes and their applications
- Identify parts of lathes and their functions
- Describe tool geometry
- Describe cutting tools and holders and their applications

LINE K: USE MILLING MACHINES

- Describe milling machines and their accessories
- Describe cutting tools and holders

LINE L: USE SUPPORT MACHINES

- Describe hones and lapping machines

PRACTICAL

LINE A: PERFORM SAFETY RELATED TASKS

- Apply knowledge of WHMIS and HAZMAT regulations to maintain a safe working environment
- Apply personal safety measures
- Identify and use shop emergency equipment
- Prevent, identify and extinguish various classes of fire
- Apply the Occupational Health and Safety Regulation to lifting and blocking applications
- Select, use and maintain lifting, securing and blocking equipment

LINE B: PERFORM HAND PROCESSES

- Select, use and maintain hand tools
- Select, use and maintain appropriate guarding and personal protective equipment
- Perform layout procedures
- Select, use and maintain handheld power tools and accessories
- Mark material and workpiece without causing functional damage

LINE C: USE APPLIED MATHEMATICS

- Perform calculations using formulas
- Solve problems using algebra
- Calculate ratios
- Perform metric/imperial conversions
- Perform geometric constructions
- Calculate mass, area and volume
- Apply trigonometry applications

LINE D: USE MEASURING TOOLS

- Use linear and vernier scales
- Use and maintain a micrometer
- Use calipers and gauges
- Use dial indicators

LINE E: INTERPRET DRAWINGS AND REFERENCE MATERIALS

- Sketch and dimension an orthographic drawing from an existing part
- Sketch and dimension an orthographic drawing from an isometric or oblique view
- Use other reference materials and resources to locate information

LINE H: USE DRILLING MACHINES

- Select and maintain cutting tools
- Perform clamping and fixturing
- Operate and maintain drilling machine

LINE I: USE POWER SAWS

- Select and maintain band saw blades
- Install and remove blades
- Operate and maintain band saws
- Operate and maintain cold saws, abrasive saws, and reciprocating saws

LINE J: USE LATHES

- Calculate RPM
- Operate and maintain lathes
- Cut and measure tapers

LINE L: USE SUPPORT MACHINES

- Operate and maintain pedestal grinders
- Operate and maintain arbor and hydraulic presses

Supervisor Signature

NOTES FROM LEVEL 1

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LEVEL 2

IMPORTANT!

Download the Program Outline!

<http://https://skilledtradesbc.ca/machinist>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE D: USE MEASURING TOOLS

- Describe gauge blocks and sine bars

LINE E: INTERPRET DRAWINGS AND REFERENCE MATERIALS

- Identify and locate information found in the machinery's handbook
- Describe geometric dimensions and tolerances

LINE F: SELECT MATERIALS

- Describe the characteristics of non-ferrous metals
- Describe the characteristics of non-metals
- Describe heat treating and surface treatment

LINE J: USE LATHES

- Describe the use of advanced cutting tools

LINE K: USE MILLING MACHINES

- Describe milling machine accessories
- Describe work holding devices
- Describe milling applications
- Describe cutting tools and holders and their applications

LINE L: USE SUPPORT MACHINES

- Describe lapping

LINE M: USE PRECISION GRINDERS

- Describe types of precision surface grinders and their applications
- Describe tool and cutter grinders
- Describe the standard marking system

LINE N: USE CNC MACHINES

- Describe CNC turning centres

PRACTICAL

LINE C: USE APPLIED MATHEMATICS

- Perform calculations using formulas
- Solve geometric problems
- Apply trigonometry applications

LINE D: USE MEASURING TOOLS

- Use gauges
- Use dial indicators and digital readouts
- Use optical measuring equipment

LINE J: USE LATHES

- Calculate imperial threads
- Cut and measure imperial threads

LINE K: USE MILLING MACHINES

- Use dividing heads and rotary tables
- Operate and maintain milling machines

LINE L: USE SUPPORT MACHINES

- Operate and maintain hones

LINE M: USE PRECISION GRINDERS

- Select abrasives and applications
- Operate and maintain surface grinders

LINE N: USE CNC MACHINES

- Create a manual input program
- Program, operate and maintain CNC turning centre

Supervisor Signature

NOTES FROM LEVEL 2

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LEVEL 3

IMPORTANT!

Download the Program Outline!

<http://https://skilledtradesbc.ca/machinist>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE E: INTERPRET DRAWINGS AND REFERENCE MATERIALS

- Identify and locate information in the machinery's handbook

LINE F: SELECT MATERIALS

- Describe the physical properties and characteristics of steel

LINE G: REFURBISH COMPONENTS

- Describe bearings, seals and bearing materials

LINE J: USE LATHES

- Describe vertical lathes

LINE K: USE MILLING MACHINES

- Describe horizontal boring mills

LINE M: USE PRECISION GRINDERS

- Describe precision grinders and their applications

LINE N: USE CNC MACHINES

- Describe CNC machining centres
- Describe 2D and 3D models
- Describe CAM

PRACTICAL

LINE C: USE APPLIED MATHEMATICS

- Calculate ratios
- Apply trigonometry applications

LINE D: USE MEASURING TOOLS

- Use gauge blocks
- Use dial indicators and digital readouts

LINE F: SELECT MATERIALS

- Perform heat treating and oxy-acetylene processes
- Perform hardness testing

LINE J: USE LATHES

- Use gear ratio applications on lathes

LINE K: USE MILLING MACHINES

- Apply advanced applications using a dividing head
- Operate milling machines

LINE M: USE PRECISION GRINDERS

- Operate and maintain cylindrical grinders

LINE N: USE CNC MACHINES

- Create a manual input program
- Program, operate and maintain a CNC machining centre

Supervisor Signature

NOTES FROM LEVEL 3

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LEVEL 4

IMPORTANT!

Download the Program Outline!

<http://https://skilledtradesbc.ca/machinist>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE A: PERFORM SAFETY RELATED TASKS

- Describe mentoring techniques

LINE E: INTERPRET DRAWINGS AND REFERENCE MATERIALS

- Locate information in the machinery's handbook and other reference materials

PRACTICAL

LINE L: USE SUPPORT MACHINES

- Operate and maintain gear cutting machines
- Operate and maintain electric discharge machines

LINE N: USE CNC MACHINES

- Create 2D and 3D models
- Generate tool paths using CAM software

Supervisor Signature

NOTES FROM LEVEL 4

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MISSING COMPETENCIES?

To develop the best journeyperson possible employers should attempt to provide training in all competencies for the trade. This is not always possible.

If your employer is unable to provide training in any competency required for your trade, note that competency below. Competencies listed here will remain unsigned until your employer can provide training in that area or until you find an alternate way to gain the experience needed.

Competency:	Date:
Reason:	
Alternate plan:	

Competency:	Date:
Reason:	
Alternate plan:	

TECHNICAL TRAINING

Instructions

Keep a record of each level of technical training completed.

Level 1

Date Completed:	Training Provider:
Mark:	Instructor:

Level 2

Date Completed:	Training Provider:
Mark:	Instructor:

Level 3

Date Completed:	Training Provider:
Mark:	Instructor:

Level 4

Date Completed:	Training Provider:
Mark:	Instructor:

COMPLETION REQUIREMENTS

Instructions

Keep a record of each program completion requirement achieved.

MACHINIST

- Level 1 - Technical Training
- Level 2 - Technical Training
- Level 3 - Technical Training
- Level 4 - Technical Training

- 6,330 Work-Based Training Hours

- Interprovincial Red Seal examination
- Recommendation for Certification signed by sponsor

Note: After all other completions requirements have been met, SkilledTradesBC sends a Recommendation for Certification form to the sponsor requesting signoff.

CERTIFICATIONS

Instructions

Keep a record of the credentials and endorsements you have earned, including the certification number and date of issue.

CREDENTIAL EARNED	NUMBER	DATE OF ISSUE

*If you have any questions, please contact SkilledTradesBC
Customer Service at customerservice@skilledtradesbc.ca
778-328-8700 or toll free (within BC) at 1-800-660-6011*