

# Taking the Pathway

Understanding  
career direction in  
industrial **baking**





## Food Processing Skills Canada

FPSC is your labour, skills and workforce development non-profit organization. Our job is to provide leadership in professionalizing the food and beverage manufacturing industry so that the most important resource - people - are the best in the world. We have developed a national skills strategy which is a proven long-term approach successfully utilized by other Canadian professional sectors. This strategy builds collaborations with industry, government, academia, unions, associations, community organizations and other stakeholders.

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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.

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The word "Canada" is written in a serif font, with a small red maple leaf above the letter 'a'. Below it, in a smaller font, is the text "This project is funded by the Government of Canada's Sector Initiative Program."

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## About Taking the Pathway

Canada's Agri-Food sector is a significant contributor to our nation's economy and was recently identified as one of Canada's top growth industries over the next 10 years. Despite this, the sector continues to face a critical labour shortage that, if left unresolved, will impede the industry's growth, employment opportunities, and overall sustainability.

To address this shortage, Food Processing Skills Canada (FPSC) has embarked upon a landmark Labour Market Information Study (LMI). In its finality, the LMI will provide government and decision-makers with

the research needed to make real regulatory change that will bring both prosperity and opportunity to the sector.

*Understanding Your Career Pathway in Industrial Baking* lays crucial groundwork for the LMI by defining occupations and career pathways in the industrial baking sector. Utilizing this data, the LMI will take in-depth reviews of each career pathway, and their specific challenges and opportunities.

## How to use the Career Pathway

This document provides practical information about the career pathways available for workers in the industrial baking industry. In a time when attraction and recruitment of workers is important to keep up with demand, the career pathway can be helpful to educate potential workers about the opportunities and career pathways within the sector. The career pathway is a helpful tool for employers to attract, recruit and retain productive and skilled workers.



## Understanding the Career Pathway

To learn more about the career pathways in industrial baking, we conducted extensive research to learn about the various job positions and skill levels within the industrial baking industry, including collecting and analyzing job descriptions, job advertisements, organizational charts and other occupational information from a variety of industrial baking facilities.

The career pathway for industrial baking illustrates the progression of occupational levels from foundational skills to executive management. The career pathway is comprised of six (6) levels. The typical entry-point into the industrial baking industry is at the Foundational Skill Level. With work experience and training (often offered on-the-job), workers often progress along on the career pathway within the processing/production department. This resource also illustrates the other potential career pathways (including certification as a Baker), which can lead to different positions within the industrial baking industry, including Research and Development.



# occupational levels

## Foundational Skill Level (FS)

Foundational Skill Level positions are often the entry-level positions or those jobs that required no prior experience or training to work in an industrial baking facility. A high school diploma or equivalent may be preferred but is not required by most businesses. Training for foundational skill level jobs most often occurs on the job; job shadowing is important for these entry-level positions.

### Applicable NOC Code(s)

**NOC 95106** - Labourers in food and beverage processing

Sample Titles for Foundational Skill Level Jobs within the Industrial Baking Sector include:

- ◆ Baker helper
- ◆ Bakery labourer
- ◆ Bakery products bander
- ◆ Bakery products divider
- ◆ Bakery products packager
- ◆ Bakery products wrapper
- ◆ Biscuit packer
- ◆ Bread pan greaser
- ◆ Cake wrapper
- ◆ Dough feeder
- ◆ Dough roller
- ◆ Dough weigher
- ◆ Industrial baking labourer
- ◆ Pastry cook helper
- ◆ Pastry wrapper

Labourers may also assist with packaging and support the work of machine operators (semi skill level workers) by feeding cartons and packaging materials into machinery, etc.

## Semi Skill Level (SS)

Semi Skill Level workers typically have 6 months – 1 year of experience working in industrial baking/food processing facilities. A high school diploma is often preferred but may not be a requirement. Workers in this job class typically receive training on the job and also receive WHMIS, food safety and food safety management system training, like HACCP. Workers who start in Foundational Skill Level Positions often progress into Semi Skill Level positions as they gain additional experience and training.

## Applicable NOC Code(s)

**NOC 94140** – Process control and machine operators, food and beverage processing

Sample Titles for Semi Skill Level Jobs within the Industrial Baking Sector include:

- ◆ Bakery machine operator
- ◆ Bake-off equipment tender
- ◆ Batter and dough mixer
- ◆ Bread slicer/slicing operator
- ◆ Cake mix equipment operator
- ◆ Conveyor oven operator
- ◆ Dough maker
- ◆ Frozen-dough-baking machine tender
- ◆ Fryer operator
- ◆ Pretzel baker
- ◆ Production line worker - baking

## High Skill Level (HS)

High Skill Level Workers typically have at least 1 year of experience (typically 1-3 years) in industrial baking and are able to perform the range of tasks that are completed on the production/processing line. A high school diploma is considered an asset. Additional training related to supervising workers may be provided in-house. Workers receive WHMIS, food safety and food safety management system training. Workers in Semi Skill Level positions often advance to High Skill Level positions as they gain additional experience and training.

## Applicable NOC Code(s)

**NOC 92012** – Supervisors, food and beverage processing

Sample Titles for High Skill Level Jobs within the Industrial Baking Sector include:

- ◆ Bakery foreperson
- ◆ Baking foreperson
- ◆ Head mixer – bakery



## Supervisory Skill Level (S)

Supervisory Skill Level workers typically have 2-3 years of experience on the line of an industrial baking facility. Additional training in production management, supervising and employee management may be required and provided by the company. A high school diploma or equivalent is often required; additional post-secondary education is an asset. It is typical for supervisors to begin at the Foundational Skill Level, and through experience and additional training, move up into supervisory roles. Supervisors must complete WHMIS, food safety and food safety management system training.

### Applicable NOC Code(s)

**NOC 92012** – Supervisors, food and beverage processing

Sample Titles for Supervisory Skill Level Jobs within the Industrial Baking Sector include:

- ◆ Bakery plant supervisor
- ◆ Production supervisor

## Management Skill Level (M)

Management Skill Level workers typically have a minimum of 5 years of supervisory experience within the industrial baking industry. Leadership experience is considered an asset. A post-secondary education may be required or considered a strong asset. Additional training in management is often required of job incumbents. Managers require WHMIS, food safety and food safety management system training.

### Applicable NOC Code(s)

**NOC 90010** – Manufacturing manager

Sample Titles for Management Skill Level Jobs within the Industrial Baking Sector include:

- ◆ Bakery plant manager
- ◆ Production manager





## Senior Executive Leadership Skill Level (SE)

Senior Executive Leadership Skill Level workers typically have extensive experience (e.g. 7-10+) years within the industrial baking/food processing industry, or within other food and beverage processing facilities. They are responsible for managing corporate affairs and lead the strategic direction and vision of the overall organization. Skills in organizational management and business administration are critical.

### Applicable NOC Code(s)

**NOC 90010** – Manufacturing manager

Sample Titles for Senior Executive Leadership Skill Level Jobs within the Industrial Baking sector include:

- ◆ Director of Operations/  
Production
- ◆ VP of Operations/  
Production



- SE SENIOR EXECUTIVE LEADERSHIP**
- M MANAGEMENT**
- S SUPERVISORY**
- HS HIGH SKILL**
- SS SEMI SKILL**
- F FOUNDATIONAL**

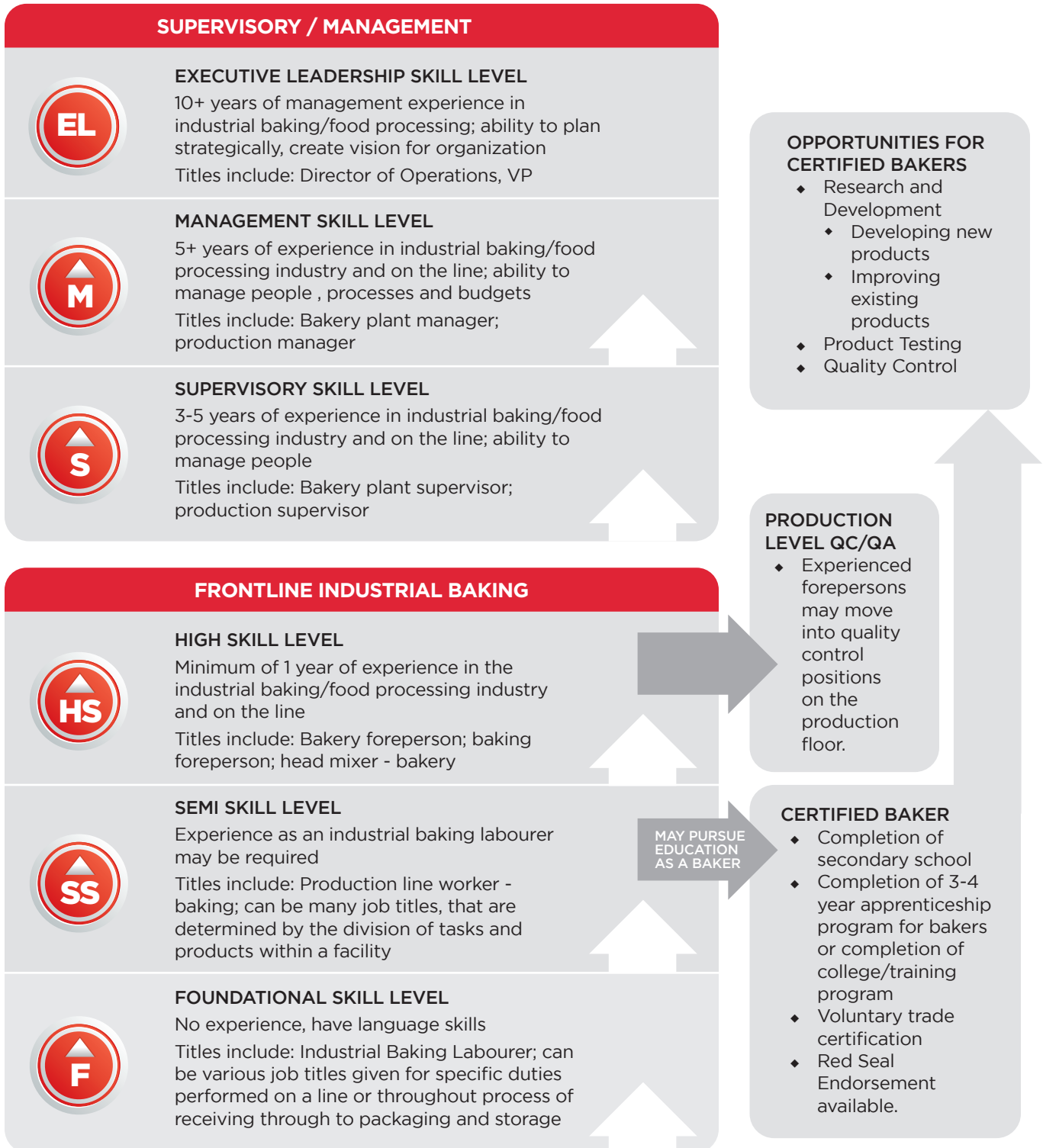
# industrial baking

## POSITIONS/CAREER LADDER

SAMPLE TITLES	EXPERIENCE / EDUCATION
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Director of operations/production</li> <li>◆ VP of operations/production</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ 7-10 years of experience in the industrial baking/food processing industry is the most significant requirement</li> </ul>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Bakery plant manager</li> <li>◆ Production manager</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ Minimum of 5 years of experience in industrial baking/food processing industry</li> <li>◆ Degree or diploma in food science may be considered an asset</li> <li>◆ Leadership experience</li> </ul>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Bakery plant supervisor</li> <li>◆ Production supervisor</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ 3-5 years of experience in industrial baking/food processing</li> <li>◆ High School Diploma</li> </ul>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Bakery foreperson</li> <li>◆ Baking foreperson</li> <li>◆ Head mixer - bakery</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ Minimum 1 year of experience as a Production line worker - baking</li> <li>◆ High School Diploma may be required</li> </ul>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Production line worker - baking</li> <li>◆ Various titles given for specific duties performed on the line or throughout the process of handling and packaging</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ Experience as a labourer may be required</li> <li>◆ Some High School education may be considered an asset</li> </ul>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">  </div> <ul style="list-style-type: none"> <li>◆ Industrial baking labourers</li> <li>◆ Various titles given for specific duties performed on the line or throughout the process of handling and packaging</li> </ul> </div>	<ul style="list-style-type: none"> <li>◆ No experience required</li> <li>◆ Some high school education may be considered an asset</li> </ul>

# industrial baking career pathway

The following graphic illustrates a typical career progression within the industrial baking sector.



# key findings

Our research helped to identify key issues and challenges that are unique to the industrial baking sector:

## **Automation**

The level of automation within industrial baking facilities has a direct impact on the skill-level and cross-training of industrial baking processing operators. Research indicates that machinery and equipment used for producing various bakery products often require the same skills for operation, including: programming and equipment interface; reading settings and output data; monitoring machine operation; and troubleshooting minor issues. In plants where automated equipment is used for most steps and processes, operators may be moved from station to station depending on need and production targets.

Operations that are more manual (less automated equipment) typically train employees to work at specific processing points or with specific products. Manual operations are also often smaller operations; therefore, it is not uncommon for workers in small plants to specialize in a certain area, product or process.

## **From Helper to Operator**

New employees, with limited or no experience in food processing or industrial baking, are typically assigned to helper or labourer positions, providing support and assistance to production line workers or working on the packaging line. New employees are often assigned to product packaging and/or mastering positions, and then are introduced to various aspects of processing under the guidance of experienced operators and production line workers. Helpers/labourers can expect to move into machine operator/production line positions once they have received on-the-job training and are most-often partnered with an experienced operator before performing the job independently.

## **Migration from Processing to Quality Control**

Movement along the Industrial Baking Career Pathway is common – starting from entry-level labourer positions to lead hands and supervisors. Lateral movement, from the warehouse and logistics department (entry-level positions) into Labourer, and in some cases Production Line Worker positions, is also common.

Skilled Leadhands/Forepersons may qualify for production quality control positions. The QC positions, while still considered



processing/production positions, involve completing quality control processes – such as testing and inspection – on the production floor. These individuals often still report to the production supervisor, but also communicate and collaborate with the Quality Assurance/Quality Control department.

### **Migration from Processing to Certified Baker**

Semi Skill level production line workers, and Skilled Leadhands may find that they have an interest in the science and art of baking and decide to upgrade their skills to become certified bakers. The requirements to become a certified Baker include:

- Completion of secondary school is usually required.
- Completion of a three- or four-year apprenticeship program for bakers or Completion of a college or other program for bakers is usually required.
- On-the-job training may be provided.

- Trade certification is available, but voluntary, in Newfoundland and Labrador, Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Alberta, British Columbia, the Yukon, the Northwest Territories and Nunavut.
- Red Seal endorsement is also available to qualified bakers upon successful completion of the interprovincial Red Seal examination.

Certified Bakers are often employed by industrial baking facilities in the research and development department. They have the skills required to develop new recipes, test batches, scale up recipes and troubleshoot production problems. They are also often involved in product development, thinking of new and innovative products to meet consumer demands and respond to food trends. Certified Bakers may also work with the Quality Assurance/Control Department to assist in developing the quality control standards and guidelines for products developed in their facilities.



# appendix a

## INDUSTRIAL BAKING

LEVEL/NOC	TITLES	DESCRIPTION/DUTIES	EXPERIENCE/ EDUCATION
<p><b>Executive Leadership Skill Level</b></p> <p>NOC 90010</p> <p>Manufacturing Manager</p>	<ul style="list-style-type: none"> <li>◆ Director of operations/production</li> <li>◆ VP of operations/production</li> </ul>	<ul style="list-style-type: none"> <li>◆ Strategic planning/contributing to strategic planning for the organization</li> <li>◆ Identify opportunities to eliminate waste, add value, maximize yield and develop solutions by initiating team-based studies and trials related to process improvement</li> <li>◆ Develop and implement continuous improvement strategies in the organization</li> <li>◆ Set and monitor budgets</li> <li>◆ Oversee quality control, inventory management, and finished product warehousing and transfers</li> <li>◆ Lead, motivate and coach all employees to drive performance</li> <li>◆ Identify and implement capital projects/physical facility improvements such as technology upgrades</li> <li>◆ Track and ensure that regulation changes are implemented throughout the organization</li> </ul>	<ul style="list-style-type: none"> <li>◆ 7-10+ years of experience in the industrial baking/food processing industry</li> <li>◆ Leadership experience</li> </ul>

### Management Skill Level

NOC 90010  
Manufacturing  
Manager

- |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>◆ Bakery plant manager</li> <li>◆ Production manager</li> </ul> | <ul style="list-style-type: none"> <li>◆ Provide leadership and direction to the plant</li> <li>◆ Plan, organize, direct, control and evaluate the operations of the industrial baking facility</li> <li>◆ Direct quality control inspection system and develop production reporting procedures</li> <li>◆ Plan and manage production budget</li> <li>◆ Collect and report plant data related to production and performance</li> <li>◆ Ensure customer satisfaction by verifying production targets and shipping schedules are met</li> <li>◆ Develop production schedules and maintain inventory of raw materials and finished products</li> <li>◆ Ensure all SOPs are developed, used and maintained</li> <li>◆ Develop and implement plans to efficiently use materials, labour and equipment to meet production targets</li> <li>◆ Ensure compliance with all regulatory requirements and guidelines</li> <li>◆ Assist in addressing and resolving customer complaints related to product quality</li> <li>◆ Lead and manage employees</li> <li>◆ Collaborate with other organization department to meet corporate goals</li> </ul> | <ul style="list-style-type: none"> <li>◆ 5+ years of experience in industrial baking/ food processing industry</li> <li>◆ Leadership experience</li> <li>◆ Post-secondary degree/diploma is asset</li> </ul> |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# appendix a

## INDUSTRIAL BAKING

<p><b>Supervisory Skill Level</b></p> <p>NOC 92012 – Supervisors, food and beverage processing</p>	<ul style="list-style-type: none"> <li>◆ Bakery plant supervisor</li> <li>◆ Production supervisor</li> </ul>	<ul style="list-style-type: none"> <li>◆ Supervise, co-ordinate and schedule the activities of workers who produce, package, test and grade baked and par-baked products</li> <li>◆ Establish methods to meet work schedules and co-ordinate work activities with other departments</li> <li>◆ Resolve work problems and recommend measures to improve productivity and product quality</li> <li>◆ Requisition materials and supplies</li> <li>◆ Train staff in job duties, safety procedures and company policy</li> <li>◆ Recommend personnel actions such as hirings and promotions</li> <li>◆ Prepare production and other reports</li> </ul>	<ul style="list-style-type: none"> <li>◆ 3-5 years of experience in the industrial baking/food processing industry</li> <li>◆ High School Diploma is an asset</li> </ul>
<p><b>High Skill Level</b></p> <p>NOC 92012 – Supervisors, food and beverage processing</p>	<ul style="list-style-type: none"> <li>◆ Bakery foreperson</li> <li>◆ Baking foreperson</li> <li>◆ Head mixer-bakery</li> </ul>	<ul style="list-style-type: none"> <li>◆ Provide direct supervision on the line to industrial baking production line workers/machine operators and labourers</li> <li>◆ Provide guidance and direction to industrial baking production line workers/machine operators and labourers</li> <li>◆ Ensure safety and efficiency of industrial baking production line workers/machine operators and labourers</li> </ul>	<ul style="list-style-type: none"> <li>◆ Minimum of 1 year of experience in industrial baking/food processing</li> <li>◆ High School Diploma is an asset</li> </ul>



<p><b>Semi Skill Level</b></p> <p>NOC 94140 – Process control and machine operators, food and beverage processing</p>	<p><b>Production Line Workers - Baking</b></p> <p><i>Sample Titles:</i></p> <ul style="list-style-type: none"> <li>◆ Bakery machine operator</li> <li>◆ Bake-off equipment tender</li> <li>◆ Batter and dough mixer</li> <li>◆ Bread slicer/slicing operator</li> <li>◆ Cake mix equipment operator</li> <li>◆ Conveyor oven operator</li> <li>◆ Dough maker</li> <li>◆ Frozen-dough-baking machine tender</li> <li>◆ Fryer operator</li> <li>◆ Pretzel baker</li> </ul>	<ul style="list-style-type: none"> <li>◆ Operate multi-function process control machinery through control panels, computer terminals or other control systems</li> <li>◆ Observe gauges, computer printouts and video monitors to verify specified processing conditions and make adjustments to process variables such as cooking times, ingredient inputs, flow rates and temperature settings</li> <li>◆ Maintain shift log of production and other data</li> </ul>	<ul style="list-style-type: none"> <li>◆ Experience as an <i>Industrial Baking Labourer</i> may be required</li> <li>◆ Some High School may be required</li> </ul>
<p><b>Foundational Skill Level</b></p> <p>NOC 95106 – Labourers in food, and beverage processing</p>	<p><b>Industrial Baking Labourer</b></p> <p><i>Sample Titles:</i></p> <ul style="list-style-type: none"> <li>◆ Baker helper</li> <li>◆ Bakery labourer</li> <li>◆ Bakery products bander</li> <li>◆ Bakery products divider</li> <li>◆ Bakery products packager</li> <li>◆ Bakery products wrapper</li> <li>◆ Biscuit packer</li> <li>◆ Bread pan greaser</li> <li>◆ Cake wrapper</li> <li>◆ Dough feeder</li> <li>◆ Dough roller</li> <li>◆ Dough weigher</li> <li>◆ Pastry cook helper</li> <li>◆ Pastry wrapper</li> </ul>	<ul style="list-style-type: none"> <li>◆ Transport raw materials, finished products and packaging materials throughout facility and warehouse manually, or with powered equipment</li> <li>◆ Measure and dump ingredients into hoppers of mixing machines</li> <li>◆ Feed and unload food, beverage and associated products processing machines</li> <li>◆ Feed flattened boxes into forming machines to construct containers</li> <li>◆ Remove filled containers from conveyors and manually pack goods into bags, boxes or other containers</li> <li>◆ Clean work areas and equipment</li> <li>◆ Check products and packaging for basic quality defects</li> <li>◆ Assist production line workers - baking in performing their duties</li> </ul>	<ul style="list-style-type: none"> <li>◆ No experience required</li> <li>◆ Some High School may be considered an asset</li> </ul>

# notes



# notes





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