

Process Development Technician

National Occupational Standard Summary



BIOTALENT CANADA

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Definition of occupation | **Process Development Technician**

The Process Development Technician defines, develops, and optimizes processes and equipment used in the laboratory, the pilot plant, and manufacturing. They validate/qualify these processes and equipment by engaging in and supporting a culture of innovation and sustainable development through ownership of improving work processes and equipment.

The Process Development Technician works in many different organizations and often needs a blend of technical and mechanical skills to do the job. With a primary focus on identifying areas of improvement, they monitor and test processes and equipment and either implement those improvements or provide recommendations to key decision-makers to make identified improvements.

Level of education, training or designations requirements

Typical Education Required	Secondary	College	Bachelor	Master	PhD
Typical Starting Experience	0-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20+ yrs.

- Technologist diploma plus technical experience is the minimum (some companies prefer a BSc and/or MSc or PhD in a related field, i.e., Sciences or Engineering)
- Trades training is an asset—type of trade varies by company and specific responsibilities
- Experience with and knowledge of current Good Manufacturing Practices (cGMP)
- Experience with computerized documentation
- Experience with micro measurement equipment
- Experience with industrial standards and regulations
- Experience with experimental design and statistics
- The role works in the following subsectors:
- They work in all sub-sectors, primarily in the development or manufacturing of products

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This role works in the following subsectors:

Applicable To	Bio-Health	Agri-Bio	Bio-Industrial	Bio-Energy
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The level of complexity of the role is:

Span of Complexity Levels	Foundational	Operational	Specialist/ Management	Expert/Executive
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PROCESS DEVELOPMENT TECHNICIAN COMPETENCY SUMMARY

Competencies	Complexity Level Required			
	1 Foundational	2 Operational	3 Specialist/ Manager	4 Expert/ Executive
Core				
Documentation of Processes and Procedures				
Reporting				
Process Administration				
Process Development/Optimization				
Technical				
Equipment Operation				
Equipment Maintenance				
Equipment Optimization				
Materials Handling				
Concept Development				
Industry Regulatory				
Safety Compliance				
Industrial Regulatory Compliance				
Personal and Professional				
Collaboration				
Communication				
Critical Thinking				

Core competencies

Documentation of Processes and Procedures

Documents all processes and procedures, both existing and new, and store them in the appropriate systems. This ensures that personnel are able to access the documents and follow the processes and procedures in order to maximize safety and efficiency in their work areas.

Reporting

Takes information and presents it in an objective and succinct manner in order to inform colleagues, supervisors, and other stakeholders about daily production, deviation from set standards, accidents/incidents, quality inspections, maintenance (PM/CM), safety, etc.

Process Administration

Ensures that established, modified, and new processes are being correctly followed to allow for a safe and productive workplace and to minimize waste, loss, and misuse of materials and equipment.

Process Development/Optimization

Develops new, and optimizes existing, processes to build on a culture of continuous improvement that will allow the organization to improve safety and quality in the workplace and to be more efficient and competitive in the market.

Technical competencies

Equipment Operation

Operates various equipment and ensures that operating processes, materials, environmental conditions, etc. meet required standards for safety and production.

Equipment Maintenance

Ensures that equipment is cleaned properly, in serviceable condition, ready for use, and calibrated to deliver accurate and reliable products in a consistent manner.

Equipment Optimization

Conducts analyses of equipment and data (internal and external) to determine if and where improvements can be made to the equipment in order to increase quality, efficiency, and productivity, helping to reach organizational goals.

Materials Handling

Moves, stores, controls, and protects materials to maintain/improve equipment quality and working condition; reduce damage; promote safety, productivity, and use of facilities; and control inventory.

Concept Development

Assists in generating the need/concept of a new piece of equipment or system from process design to prototype development to final product in order to answer technical challenges and meet new standards.

Industry regulatory competencies

Safety Compliance

Ensures own and others safety by following safety policies and procedures to eliminate or reduce workplace hazards and maintain a safe work environment.

Industrial Regulatory Compliance

Draws on an understanding of regulatory requirements to verify that processes are compliant.

Personal and professional competencies

Collaboration

Works across boundaries, within defined roles and responsibilities, to accomplish shared outcomes and stronger business results.

Communication

Positively directs outcomes by delivering communications that result in a better understanding of goals and objectives, capture interest, direct action, and gain support.

Critical Thinking

Analyzes data to reach objective conclusions, defend positions on complex issues, clarify issues, and transfer ideas to new contexts.

USE NATIONAL OCCUPATIONAL STANDARDS TO:

- ✓ Build a job description
- ✓ Plan professional development
- ✓ Map career progression and succession planning
- ✓ Benchmark compensation

View the full National Occupational Standards at biotalent.ca/NOS

Funded by the Government of Canada's Sectoral Initiatives Program. 

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