



# Manager of Manufacturing

Bio-economy Skills At-a-Glance



Building skills for Canada's bio-economy

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## About BioTalent Canada™

### Helping Canada's Bio-economy thrive globally

Canada is a world leader in biotechnology—the application of living organisms to industrial, agricultural, medical and other processes and products. To maintain and build on this leadership, the sector needs highly skilled, job-ready people.

By acting as a national hub and central resource for employers, job seekers, students, educators and government agencies, BioTalent Canada helps make this happen.

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[www.biotalent.ca](http://www.biotalent.ca) • Telephone: 613-235-1402

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## About the Bio-economy

The bio-economy involves the research, development, manufacturing and commercialization of technologies and products for such areas as:

- Agriculture
- Aquaculture
- Bioenergy
- Bioinformatics
- Bioproducts
- Biosciences
- Environment
- Food Processing
- Forestry
- Genomics
- Human and Animal Health
- Industrial
- Life Sciences
- Medical Devices
- Natural Resources
- Nanotechnology
- Nutraceuticals
- Pharmaceuticals

## Components of the Bio-economy Skills At-a-Glance

The *Bio-economy Skills At-a-Glance* are built around *Key Competencies*. They are *not* complete *Bio-economy Skills Profiles*. They capture the key hard and soft skills required to successfully function in this position. Those key competencies require specific tasks be accomplished in order to attain the desired outcome. More often than not, those key activities are functional in nature and require the application of specific knowledge acquired by education, training or practical experience. In bio-economy companies, those functional competencies may be very broad and diversified, encompassing both scientific and business expertise. Some may refer to functional competencies as hard skills of the position.

The *Bio-economy Skills At-a-Glance* have been developed through secondary research and have NOT been validated by industry. As a result, industry feedback will be greatly appreciated. Please send any feedback to [portfolios@biotalent.ca](mailto:portfolios@biotalent.ca).

The *Bio-economy Skills-At-a-Glance* are useful for such activities as recruiting, professional development, coaching, self-assessment, and many other purposes.

## Occupational Description

Managers of Manufacturing plan, direct, or coordinate the activities and resources necessary for the manufacture of products in accordance with cost, quality, and quantity specifications. They formulate policies, manage daily operations, and plan the use of materials and human resources. They oversee progress of manufacturing schedules to ensure safe and timely completion of releasable products.

## Potential Professional Background and Education/Bio-economy or Relevant Experience

### Education/Certification

- Some employers may require a university degree in electrical engineering
- University degree in engineering, business or related science. An advanced degree may be preferred.
- 2-year college program, industrial instrumentation technology

### Professional Experience

- 5 - 8 years experience. Some employers may require more.
- Supervisory experience
- Experience with manufacturing quality systems such as Lean Manufacturing, Six-Sigma and ISO
- Project management experience
- Experience working with GMP

## Competencies and Tasks

*A Manager of Manufacturing must be able to:*

### **A. Apply company objectives and strategies to production**

TASKS
1. Provide leadership
2. Provide strategic direction consistent with company goals and objectives

***B. Analyze and process information***

<b>TASKS</b>
1. Evaluate production capacity and capabilities
2. Forecast production capacity
3. Forecast staffing needs
4. Forecast equipment needs

***C. Monitor and control resources***

<b>TASKS</b>
1. Develop budgets
2. Implement financial efficiencies
3. Monitor budgets
4. Manage inventory
5. Monitor and manage timelines

***D. Monitor processes, materials, or surroundings***

<b>TASKS</b>
1. Monitor industry trends
2. Monitor project schedules
3. Monitor inspection schedules
4. Monitor production schedules

***E. Document and comply with policies and procedures***

<b>TASKS</b>
1. Maintain regulatory compliance
2. Enforce safety protocols
3. Ensure emergency response procedure compliance

<b>TASKS</b>
4. Develop policies and procedures as appropriate
5. Contribute to the development of safety and security procedures
6. Implement policies and procedures
7. Implement quality standard procedures
8. Maintain policies and procedures
9. Comply with current Good Manufacturing Practices (cGMP)

***F. Staff organizational units***

<b>TASKS</b>
1. Recruit employees
2. Hire employees
3. Develop and maintain organizational chart
4. Discipline employees
5. Terminate employees' employment

***G. Coach and develop others***

<b>TASKS</b>
1. Mentor staff
2. Motivate staff
3. Encourage continuous learning and development of staff
4. Train staff
5. Conduct performance management

***H. Use computers***

<b>TASKS</b>
1. Use email software as appropriate
2. Use Microsoft Office as appropriate
3. Use database software as appropriate

***I. Demonstrate Personal Competencies***

<b>TASKS</b>
1. Lead with confidence
2. Demonstrate teamwork
3. Exhibit sensitivity to cultural and social diversity
4. Be customer service focused
5. Work in a fast-paced environment
6. Follow company's policies and procedures
7. Demonstrate time management skills
8. Manage stress
9. Be a quick learner
10. Communicate effectively and clearly
11. Demonstrate professional attributes
12. Continuously update skills



## Strong Board of Directors

The Board of Directors is composed of experts in the field of HR, CEOs, CFOs and CSOs from across Canada with extensive financial and industry experience representing companies and organizations in Canada's bio-economy. BioTalent Canada is not a membership organization and therefore relies on the guidance provided by its dedicated volunteer Board of Directors.

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