

## Engineering Managers



Engineering Managers use technical engineering knowledge to create solutions, improve operations, and lead the advancement of technologies of products and processes. They oversee engineering departments in industries such as aerospace and automotive manufacturing. Engineering Managers enjoy strong mobility between sectors due to their diverse skill sets, as well as the importance of their role in the transition to clean and green economies.

### Where do Engineering Managers work?



Aerospace Manufacturing Industry



Oil and Gas Industry



Vehicle Assembly and Body Parts Manufacturing



Architecture Industry



Utility and Infrastructure Industry

### What do Engineering Managers do?

Engineering Managers work in constantly evolving environments and settings. They can work on operations involving technologies such as big data and robotics at the same time to improve process efficiency and product efficacy, as well as increase business sustainability. Below are some tasks for Engineering Managers:

- Develop and implement programs to reduce environmental impacts and improve sustainability of engineering operations
- Recruit personnel and oversee the development and maintenance of core engineering competencies in staff
- Participate in design, development and inspection of technical projects and engineering work of the department

### Career pathways & potential earnings of Engineering Managers

Engineering Managers start their careers in engineering roles, and can progress into senior management and executive roles with adequate experience and knowledge:



Engineering Managers can also apply their skills and expertise in other occupations such as the following:

- Architecture and Science Managers
- Engineering occupations such as Mechanical Engineers, Civil Engineers, and Aerospace Engineers

## How do I become an Engineering Manager?

There are several educational, licensing and training requirements to become an engineering manager. Some requirements may vary by province or company. Below are the most commonly required qualifications to work as an Engineering Manager:

- **Minimum Education:** Bachelor's degree in any field of engineering.
- **Certification and Licensing:** Registration as a Professional Engineer (P.Eng.) is usually required by a provincial or territorial association of professional engineers. Certification requires three or four years of supervised work experience and passing an exam.
- **Training and other requirements:** Extensive experience in an engineering role, as well as supervisory experience are required.



## What are the most important skills to have as an Engineering Manager?

Engineering managers develop strong technical knowledge and soft skills, especially during their transition from engineering to management roles. Engineering managers must possess great leadership and communication skills, which are key in project management, hiring, and team development.

### Technical Knowledge and Skills

- Operations Management
- Allocating and Controlling Resources
- Recruiting, Hiring and Supervising
- Business Intelligence and Data Analysis
- Database Management
- Computer Aided Design (CAD) Software

### Soft Skills

- Leadership
- Communication
- Teamwork
- Critical Thinking
- Problem Solving and Recognition
- Mentorship and Training

## Future of Engineering Manager jobs in Canada

The job market for engineering managers in Canada is bright and promising. In 2021, more than 30,000 engineering managers were employed across Canada's sectors and industries. According to FOCAL's occupational forecasts, there will be more than 210 job openings for engineering managers in Canada's automotive manufacturing sector over the upcoming decade, and more than 50 managers will be needed to fill the recruitment gap in the sector.



Learn more about the job market for Engineering Managers, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website [futureautolabourforce.ca](http://futureautolabourforce.ca).

You can also check our social media by following these links:

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