

Spotlight on Cost Engineers



Whether investing in new projects or improving business operations, petroleum companies keep a close eye on the bottom line.

Cost Engineers directly impact an organization's profitability. They use sophisticated control systems to manage project scope, costs, schedules, and risks. They apply cost engineering and cost management principles, project management methodology and specialized technology to their projects.

Imagine developing project plans and staying on top of the implementation schedule, ready to jump in and propose solutions if the project veers off course. You could help to improve production processes, maintain processing units, or expand facilities by using sophisticated software. The opportunities are varied and endless.

If you have a talent for managing projects and a desire to impact a company's operational and financial performance, a career as a Cost Engineer could be your calling!



A Cost Engineer.



What does a Cost Engineer do?

Cost Engineers provide in-depth expertise about project planning and scheduling, cost management and control systems. Typical specialties include:

- **Planners/Schedulers:** Develop project plans, schedules and forecasts. They analyse schedule deviations and recommend corrective actions.
- **Cost Estimators:** Prepare capital and operating cost estimates. They monitor project costs, complete risk analyses and identify improvements. They also maintain an estimating/experience database, guidelines, procedures and best practices.
- **Cost Analysts/Controllers:** Establish project control systems. They oversee project performance in terms of scope, time and cost. They also identify and monitor project risks, and recommend improvement measures.



How do I become a Cost Engineer?

Cost Engineers need an engineering degree from an accredited college or university. Programs in process engineering, chemical engineering, and computer process control may better prepare you for this work.

You will also need a license to practice as an engineer. Provincial engineering associations are responsible for administering and issuing licenses. For more specific information about engineering qualifications and professional certifications, check out the following website: www.engineerscanada.ca.

Certifications and designations that can be attained for this work include:

- Planning and Scheduling Professional (PSP), Certified Estimating Professional (CEP), Certified Cost Engineer (CCE), and Certified Cost Consultant (CCC). For further information see the Association for the Advancement of Cost Engineering (AACE) International website at www.aacei.org.
- Project Management Professional (PMP) - Project Management Institute (PMI), information at www.pmi.org.
- Professional Quantity Surveyor (PQS) - Canadian Institute of Quantity Surveyors (CIQS), information at www.ciqs.org.

Information for foreign-trained engineers is provided on the Canadian Information Centre for International Credentials website at www.cicic.ca.





What are the working conditions like?

Most Cost Engineers perform their work indoors, in office settings. Cost Engineers work with multi-disciplinary, fast-paced, dynamic environments. Some business travel is required.



Do I fit the bill?

Do you think you have what it takes to become a Cost Engineer?

- I have a natural curiosity about the world and have a knack for figuring out how things work.
- I like to build new things and enjoy making improvements.
- I have skills in project planning, estimating time and costs, and seeing things through from start to finish.
- I can apply critical thinking and enjoy problem solving.
- I can balance details with the 'big picture'.
- I have an aptitude for using specialized computer software.
- I am a multi-tasker and can handle changing priorities when under pressure.
- I can manage high volumes of work and meet tight deadlines.
- I consider myself a great team-player – I can build personal and professional relationships easily.
- I am interested in pursuing a university education that may require at least four or more years of study.
- I think a career as a Cost Engineer is exciting and I'm up for the challenge and adventure!



One tool of the profession.



Quick tips and next steps!

- Choose a university that offers co-op engineering programs. These programs combine academic classes with practical work experience.
- Browse the information for students on the Association of Professional Engineers and Geoscientists of B.C. website at www.apeg.bc.ca.
- Review 'Engineering Your Future – a Career Planning Guide in Engineering' at www.apegga.ca.
- Check out the P-Eng website for helpful information, including a section of Frequently Asked Questions at www.peng.ca.
- Review the recommended practices from the Association for the Advancement of Cost Engineering International about required skills and knowledge of cost management professionals at www.aacei.org.
- Learn more about project management, and become a member of the Project Management Institute.
- Participate in *National Engineering Month* (www.new-sng.com) and *National Science and Technology Week* (www.cctt.ca).
- Get a summer job that will expose you to industry projects and operational processes.

Want more info?

For information on other industry occupations check out www.careersinoilandgas.com.