# CHEMICAL ENGINEERING

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#### WHO IS A CHEMICAL ENGINEER?

Transforming raw material or chemical into useful forms, that's the life of a chemical engineer. Chemical engineering is a discipline influencing numerous areas of technology, beginning with experimentation in the laboratory followed by the implementation of the technology in full scale production. A chemical engineer design, create and optimize the systems and equipment used in the chemical, industrial, biological and environmental process. They produce a range of materials from fuels and fertilizers to processed foods, beers and wine, polymers ad pharmaceuticals. Chemical engineers are in great demand because of the large number of industries that depend on the synthesis and processing of chemicals and materials. Chemical Engineers are usually employed by large scale manufacturing plants to maximize productivity and product quality while minimizing cost.



### WHAT THE WORK INVOLVES?

A typical day for a Chemical Engineer might include:

- Create chemicals which help preserve the shelf life of food and drink
- Work with communities to make unclean water safe for human consumption
- Work with pharmaceutical companies to develop new drugs
- Develop new products for use in pest control and to prevent the spread of diseases.
- Find new ways to transform waste and landfill issues
- Ensuring compliance with health, safety and environmental regulations
- Help vehicle manufactures to produce more fuel efficient and less polluting vehicles
- Help electrical engineers to seek new ways of generating energy

Most Chemical Engineers work full time and occasionally have to work additional hours to meet production targets.

Some Engineers travel extensively to plants or work sites, both domestically and abroad and often visit research and production facilities.

#### WHO IS THIS CAREER FOR?

There are a few important qualities that a chemical engineer needs to possess to be great at his/her job. Great analytical, logical and interpersonal skills, they should also be a team player with good organizational skills and being able to continuously create new ways to constantly improve their field.

#### WHAT CAN I EARN?

As a Chemical Engineer you can earn a median level salary, salary may also differ if you have a supervisory or management position.

#### **HOW DO I QUALIFY?**

From a secondary school level your subjects of focus should be mainly in mathematics, physics, biology and chemistry. Further studies should include you attaining a bachelor's degree in chemical engineering or a related field, these programs usually takes about three years to complete and while doing so try to gain some form of work experience.

## WHO OFFERS TRAINING IN JAMAICA?

The University of the West Indies

The University of Technology

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