

# Level 5 Diploma in CHEMICAL ENGINEERING



## Programme Overview

Politeknik Brunei in collaboration with Hengyi Industries Sdn Bhd, has set up the Level 5 Diploma in Chemical Engineering programme to train students with essential knowledge and technical skills in the petrochemical field. The duration for the program is three (3) years.

The aim of the programme is to produce qualified Petrochemical Operators to meet the needs and demands of Hengyi Industries Sdn Bhd and other related industries.

## Career Progression

Career path of Level 5 Diploma in Chemical Engineering Graduates at Hengyi Industries Sdn Bhd



*\*Subject to changes from Hengyi Industries Sdn Bhd*

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Throughout 3 years programme

- EM1108 Enrichment

## List of Modules

### Semester 1

- Pengajian MIB
- Pendidikan Islam
- Mathematics for Engineering 1
- Communication Skills for Engineering
- General Chemistry
- Electrical & Electronic Principles

### Semester 2

- Health, Safety, Security and Environment
- Entrepreneurship Basics
- Fundamentals of Organic Chemistry
- Physical Chemistry
- Introduction to Oil and Product
- Mandarin (Beginner)

### Semester 3

- Mathematics for Engineering 2
- Information Technology
- Basic Knowledge of Hazardous Chemicals
- Analytical Chemistry
- Chemical Unit Process and Equipment 1
- Mandarin (Intermediate)

### Semester 4

- Chemical Unit Process and Equipment 2
- Petrochemical Production Technology
- Polymer Production Technology
- Industrial Instrumentation Automation
- Mandarin (Advanced)

### Semester 5

- Chemical Unit Operation Training
- Chemical Equipment Foundation
- Practical Training of Petroleum Hydrocarbon Pyrolysis Unit
- Practical Training of Pyrolysis Gas Compression Device
- Training of Pyrolysis Gas Separation Unit
- Crude Oil Distillation Unit Training
- Thermal Cracking of Petroleum Hydrocarbon Training
- Atmospheric and Vacuum Distillation Unit Simulation Training
- Propylene Unit Simulation Training

### Semester 6

- Professional Knowledge & Competency 1
- Professional Knowledge & Competency 2

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## Testimony

*"It's a very good opportunity for us to gain employment. This course is not easy for us. We have to learn new skills. In the fifth semester, we will be continuing our study at Lanzhou Petrochemical Polytechnic for a semester before being placed for an internship at Hengyi Industries Sdn. Bhd."*

Muhammad Safwan bin Azmi  
(20FTE1880)  
Intake 10 Student  
Diploma in Chemical Engineering

*"I am very grateful for the offer. We still need to study hard to get confirmation of employment. Working in Hengyi Industries Sdn. Bhd. will surely see me acquire more skills and experience"*

Ummi Nadzirah binti Abdullah Abdul Ghani  
(20FTE1953)  
Intake 10 Student  
Diploma in Chemical Engineering

