

Level 5 Diploma in LABORATORY TECHNOLOGY



Testimony

"The Diploma in Laboratory Technology is a course developed in collaboration with Hengyi Industries Sdn. Bhd. which is a plus for me. Throughout my studies so far, I have gained extensive knowledge in scientific research as well as in sample analyses. It is a great way to get hands-on experience in preparation for future employment. It has also equipped me with communication skills in Mandarin and a mindset to face real-life situations."

Siti Nursyahirah Binti Shahminan
Intake 10 Student
Diploma in Laboratory Technology

Programme Overview

The Diploma in Lab Technology is a three-year Level 5 Diploma programme, comprising of six semesters. It is a collaboration between Politeknik Brunei and Hengyi Industries Sdn. Bhd.

Graduates will have essential skills and knowledge and ability to carry out various laboratory analysis and practical work independently. Our graduates should be able to:

- Conduct and support scientific investigations and experiments.
- Plan, set up and undertake controlled experiments and trials.
- Record and analyse data.
- Demonstrate procedures.
- Collect, prepare and test samples.
- Maintain, calibrate, clean and test sterility of the equipment.
- Provide technical support.
- Present results, write reports, review and summarise.
- Keep up to date with relevant scientific and technical developments.
- Carry out risk assessments.

This programme is designed with the intention to allow students to perform a variety of chemical laboratory testing and analysis, to inculcate students with a good laboratory practice mindset and to expose students to a real industry working environment.

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List of Modules

The total credit values of this programme is 92 CV.

Semester 1

- CL1201 General Chemistry
- GS1101 Pengajian Melayu Islam Beraja
- GS1102 Pendidikan Islam
- GS1117 Communication Skills for Engineering
- GS1127 Mathematics for Science
- HS1101 Health Safety Security & Environment

Semester 2

- CL2202 Basic Laboratory Skills & Techniques
- GS2203 Analytical Chemistry
- GS2204 Inorganic Chemistry
- GS2208 General Biology
- GS2117 Communication Skill for Engineering II
- LA2501 Mandarin (Beginner)

Throughout 3 years programme

- EM1108 Enrichment

Semester 3

- BE1102 Entrepreneurship Basics
- CL2207 Biochemistry
- CL3202 Chemistry Laboratory Techniques
- CL3203 Analytical Instrumentation
- CL3205 Fundamental of Organic Chemistry
- CL3206 Physical Chemistry
- LA2501 Mandarin (Intermediate)

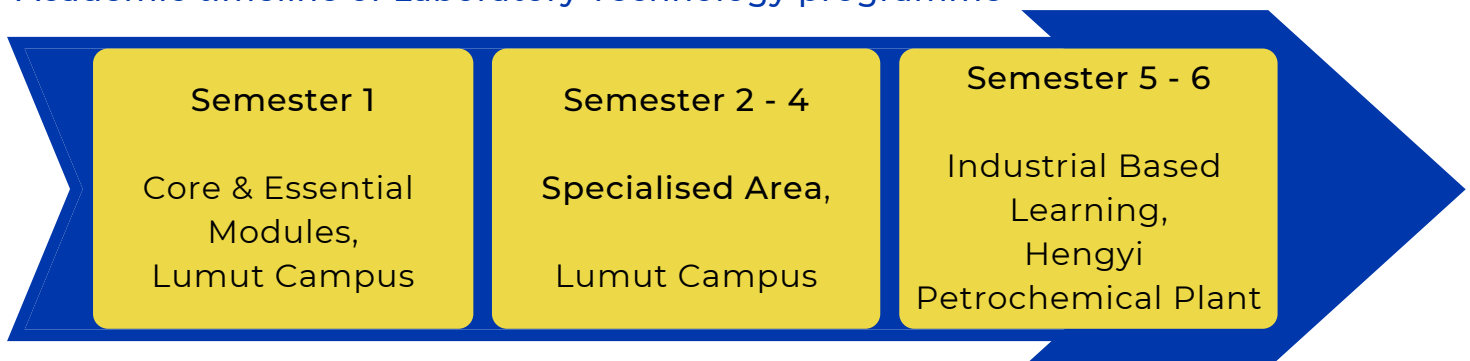
Semester 4

- CL2201 Basic Knowledge of Hazardous Chemicals
- CL3209 Microbiology
- CL5303 Technology in Petrochemical
- CL5305 Oil Analysis
- IT1202 Information Technology
- LA2501 Mandarin (Advance)

Semester 5 & 6

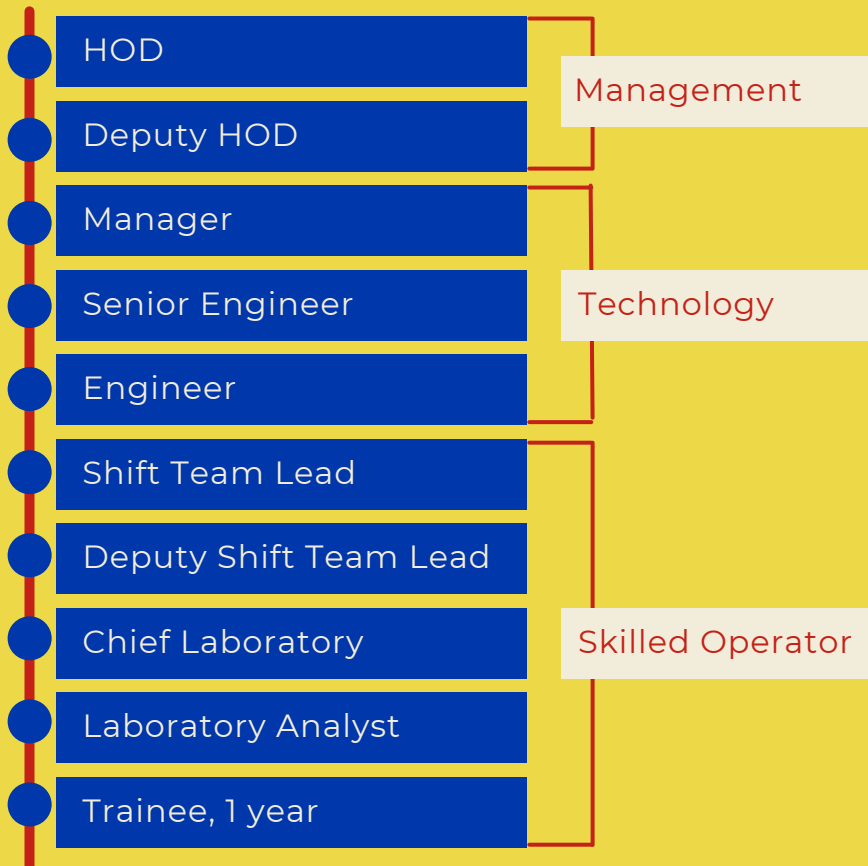
- PP1101 Chromatographic Analysis
- PP1102 Oil Analysis
- PP1103 Elemental Analysis
- PP1104 Environmental Monitoring
- PP1105 Electrochemical Analysis

Academic timeline of Laboratory Technology programme



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Career progression offered by Hengyi Industries Sdn Bhd (subject to changes from Hengyi Industries Sdn. Bhd).



Career Progression

Upon completion of the programme, graduates will have the opportunity to be employed by Hengyi Industries Sdn. Bhd as a laboratory analyst.

Other career opportunities:-

- Chemical companies
- Environmental agencies
- Specialist research organisations or consultancies
- Hospitals and clinics
- The Civil Service
- Water companies
- Pharmaceutical companies
- Food and drink companies

Further Studies

Graduates choosing to pursue further studies, may consider the following local universities (subject to CGPA obtained:-

- UBD
 - BSc in Chemical Science
 - BSc in Biology
 - BEng in General Engineering
 - BEng in Chemical and Process Engineering
 - BSc in Geoscience
- UTB
 - BEng (Hons) in Chemical Engineering

Testimony

"Choosing the Lab Tech programme was the best decision I made. It is very fun and the lecturer's are welcoming and understanding. This programme is not easy, however it encourages me to think more critically. After I graduate, I would like to work with Hengyi for the contract period and further my studies in a related field. I am also learning Mandarin and overall the programme will give me a promising work position in Hengyi Sdn. Bhd."

Nurfazana binti Muhammad Hannan
Intake 10 Student
Diploma in Laboratory Technology