

# SCHOOL OF CHEMICAL & LIFE SCIENCES



## EXPLORING NEW HORIZONS

Fascinated by the mysteries of life? Ever dreamt of creating new drugs or cutting-edge chemicals to benefit mankind? Then, let your passion and curiosity for science take flight at our School of Chemical & Life Sciences (SCL).

Choose from a diverse selection of exciting courses that cover a wide range of scientific disciplines, and learn how to make vaccines, pharmaceutical capsules and even solar panels. At SCL, you'll be trained to become a versatile and highly skilled technologist, well sought-after by the world's leading industry players.

### Why Chemical & Life Sciences?

- Be at the cutting-edge of science and exciting technologies that's changing the world we live in.
- Attain valuable skills and knowledge that will place you in high demand in the high-growth biomedical, pharmaceutical, alternative energy and food industries.

### Why SCL?

- Learn new technologies that will empower you to excel in your field.
- Benefit from the latest high-tech life sciences facilities, with extensive hands-on training in state-of-the-art and industry-standard laboratories.
- Work with leading biotech, pharmaceutical, chemical and food companies.
- Gain valuable practical experiences in our Bioinnovation Centre, Teaching Drug Store, Food Science Pilot Plant and Application Labs, and Chemical Pilot Plant on campus.

### Industry-linked

Benefit from our strong links to key industry partners including:

- bioMérieux Pte Ltd
- Eu Yan Sang International Limited
- ExxonMobil Asia Pacific Pte Ltd
- Hyflux Ltd
- Pall Filtration Pte Ltd
- Pfizer Asia Pacific
- Schering-Plough (Singapore)
- Shell Eastern Petroleum
- Sin Hwa Dee Foodstuff Industries Pte Ltd
- Yokogawa Engineering Asia

### Minimum Entry Requirements

- |   |             |
|---|-------------|
| a) English Language                     | Grade 1 - 7 |
| b) Elementary or Additional Mathematics | Grade 1 - 6 |
| c) A relevant Science subject           | Grade 1 - 6 |

### Enquiry Hotlines

Please contact us at **6550 0509/0511/0512** for enquiries on the following courses:

- Diploma in Biologics & Process Technology
- Diploma in Chemical & Green Technology
- Diploma in Chemical & Pharmaceutical Technology

Please call **6550 1500** for enquiries on the following courses:

- Diploma in Food Science & Nutrition
- Diploma in Medicinal Chemistry
- Diploma in Molecular Biotechnology
- Diploma in Pharmaceutical Sciences

You can also visit [www.nyp.edu.sg/scl](http://www.nyp.edu.sg/scl) for more information.

JAE CODE:  
**C49**

# DIPLOMA IN **BIOLOGICS & PROCESS TECHNOLOGY**

The Diploma in Biologics & Process Technology is a course that is specifically geared for the biopharmaceutical industry. It combines Biological and Chemical Sciences with engineering concepts, with a strong emphasis on biopharmaceutical technologies.

Learn to make high-value medicinal drugs from living cells, using the latest biotechnologies. Biologics – or Biopharmaceuticals – are medicinal products made from living cells like proteins and hormones. Some well-known biologics are insulin and vaccines like Cervarix and Gardasil, which act against the human papillomavirus (HPV) to prevent cervical cancer, as well as novel vaccines against Influenza A (H1N1). Across the world, there's a growing trend of pharmaceutical companies using this technology to produce new medicines. Be a part of this leading technology that is fast shaping our future.



## **This fits me to a T!**

This is the course for you, if you're:

- Fascinated by chemical processes
- Eager to unlock the secrets of vaccine development and production
- Keen to be at the frontline of technology development in biopharmaceuticals
- Interested in the manufacturing process of useful and specialised high-value drugs

## **What will I learn?**

- How to make and develop biopharmaceutical products
- How to work with DNA, proteins and cells in our fully-equipped high-tech biologics laboratories
- How to simulate, operate and optimise the chemical process
- Regulatory requirements and best practices in the biopharmaceutical industry
- Valuable practical knowledge and experience through attachments at world-class biopharmaceutical manufacturing firms

## **I want a great career!**

This diploma offers you exciting careers in:

- Biopharmaceutical Industry
- Pharmaceutical Industry
- Quality Control
- Clinical Trials and Project Management
- Research & Development
- Chemical Process Design
- Chemical Testing Laboratories

## **Uni, here I come!**

With this diploma, you can go on to pursue a Bachelor's degree at overseas and local universities, including:

- National University of Singapore
- Nanyang Technological University

"I really enjoyed my Final Year Project in Biologics & Process Technology. I've not only gained important knowledge, I've also enjoyed hanging out and learning together with my fellow project mates. The Final Year Project prepared me well for the industry as I had the opportunity to use the latest laboratory equipment, and dabble in forensics, R&D as well as Quality Control. It has been a totally awesome experience!"

### **Cheang Hui Xin**

Diploma in Biologics & Process Technology  
Year 3

