

Post-Diploma Certificate in Cell & Molecular Biology

Modules	
1	Cell Biology (36 hours)
2	Molecular Biology (36 hours)
3	Applied Genomics And Proteomics (36 hours)
4	Mammalian Cell Culture (36 hours)

Biopharmaceutical production involves the large scale production of DNA and protein-based drugs. The PDC in Cell & Molecular Biology (PDC-CMB) will cover essential techniques and knowledge required by persons employed or seeking employment in the biopharmaceutical industry. It will focus on molecular biology, protein technology and cell culture techniques which are important in the analysis, production and development of biopharmaceuticals and provide a solid foundation in both the molecular and cellular techniques which are integral to the analysis and production of modern biopharmaceuticals. Students will also learn advanced topics in gene cloning, protein expression and mammalian cell culture.

Topics covered under this PDC include:

- Principles and practices of DNA and protein Analyses (gel electrophoresis, polymerase chain reaction, spectrophotometry, chromatography, etc)
- Aseptic technique
- Mammalian cell culture techniques and medium preparation
- Mycoplasma and virus detection
- Gene cloning

This PDC is a practice-based qualification with laboratory work being a major component of the curriculum.

The PDC-CMB is suitable for:

- Persons employed in biopharmaceuticals who wish to expand their job scope
- Persons seeking employment in the biopharmaceutical industry
- Technologists working in other fields who wish to upgrade their skills to gain employment in areas related to molecular and cellular technology.

The curriculum will cover both basic and advanced topics and is suitable for persons with no prior knowledge of biological science. Engineers, chemists, production technologists and IT professionals will find this course useful should they wish to transit into new areas of employment.