



CET ACADEMY

The **CET Academy** drives Ngee Ann Polytechnic's (NP) continuing education initiative.

Its vision is to provide opportunities for the workforce to professionally upgrade themselves through various diploma, specialist and advanced diploma courses, and to harness the knowledge and skills of the workforce through short courses and customised in-company training.

Since 1985, the CET Academy has been providing a spectrum of high quality and affordable training programmes that cater to professionals in varied sectors of our economy. The Academy provides training to more than 3,000 working adults each year. Riding on this track record, NP has established itself as one of Singapore's key training providers in the area of CET.

BLUEPRINT FOR LIFELONG LEARNING

In March 2008, the Government announced the launch of the CET Master Plan, which serves as a comprehensive plan to prepare Singaporean workers for the future and develop a source of competitive advantage for Singapore. Under the CET Master Plan, the Ministry of Manpower intends to make adult training qualifications portable, establish

stronger linkages between CET and pre-employment education institutions, and set up more CET centres to deliver quality training for adult learners.

Separately, in support of the recommendations of the Committee on Aging Issues (CAI), the Government is encouraging more programmes and activities for seniors and by seniors, so that they can actively participate in society as well as continue to contribute.

Against this national backdrop, the CET Academy reinforces NP's commitment to play a substantive part in support of the Master Plan and the recommendations of the CAI, to offer adult education and training, and champion lifelong learning.

The Academy spearheads NP's effort by offering three main clusters of programmes:

- Part-time Diploma, Specialist Diploma and Advanced Diploma courses, as well as short courses and customised in-company courses
- Courses under the Singapore Workforce Development Agency's Workforce Skills Qualifications or WSQ framework
- Educational and enrichment programmes to cater to the learning needs of the silver population

COURSES OFFERED

The CET Academy offers a wide range of courses spanning the fields of Business, Finance & Accounting, Language, Life Skills, Media & Arts, Infocomm Technology, Engineering, Health & Life Sciences, Humanities and Early Childhood Education. The Academy also designs customised courses to help companies enhance the life skills and management acumen of their staff. This in turn helps staff meet their companies' organisational goals and strategies.

Flexibility is built into these courses to allow for self-paced learning. Students can choose from a wide variety of modules to match their job schedules and interests.

A combination of delivery modes, such as lectures, workshops, seminars and conferences, are used to facilitate a learning process that allows students to apply their knowledge at the workplace. Some modules are even delivered online so that students can engage in virtual learning.

Besides the wide range of short courses, the CET Academy offers the following part-time diploma, specialist and advanced diploma courses:

BUSINESS / FINANCE & ACCOUNTING

- Advanced Diploma in International Business
- Specialist Diploma in Franchise & Enterprise Management

EARLY CHILDHOOD EDUCATION

- Advanced Diploma In Early Childhood Intervention (Special Needs)
- Diploma In Early Childhood Care & Education – Teaching

ENGINEERING

- Diploma in Technology
NP's comprehensive Diploma in Technology programme has close to 1,400 students. Since its inception in 2003, the programme has produced more than 1,000 graduates. The programme offers a choice of **nine majors**:
 - ▶ Aerospace
 - ▶ Building Services
 - ▶ Electrical
 - ▶ Electronics
 - ▶ Logistics
 - ▶ Marine & Offshore
 - ▶ Mechanical
 - ▶ Mechatronics
 - ▶ Water & Environment
- Advanced Diploma in Industrial Engineering & Management
- Specialist Diploma in Facility Management
- Specialist Diploma in Logistics Management

HEALTH & LIFE SCIENCES

- Advanced Diploma in Critical Care Nursing
- Specialist Diploma in Molecular Biotechnology
- Specialist Diploma in Pharma & Biopharmaceutical Manufacturing

FACILITIES AND STAFF

CET Academy's facilities for student training and development include a Teaching Hub that houses 54 classrooms.

For the convenience of students, the Academy has also developed a series of online services and extended the office counter opening hours to enhance its services.

Trainers for these part-time courses are experienced and highly-qualified lecturers from both the polytechnic and industry.

COLLABORATIONS WITH INDUSTRIES AND GOVERNMENT AGENCIES

NP has developed strong partnerships with trade associations, professional bodies, self-help groups and government agencies to ensure that the courses offered are relevant to industries and in tandem with the latest economic and technological trends.

The CET Academy's courses are usually developed in consultation with relevant partners through focus group discussions. This has resulted in the initiation of a number of joint programmes that cater to the needs of specific industry sectors.

ADMISSION REQUIREMENTS

Admission requirements vary, depending on the type of course selected. The course calendar and details are advertised regularly in the print media to provide up-to-date information for the public. Interested participants may log on to www.np.edu.sg/cet/ for further details.

APPLICATION PROCEDURES

Online application is available at www.np.edu.sg/cet/.

VENUE/TIME

Classes are normally conducted in the evenings at the NP campus. For customised in-house programmes, training can be conducted at the company's premises.

DISCOUNTS ON COURSE FEES

Ngee Ann graduates and Ngee Ann Alumni Association members are entitled to discounts of 10 per cent and 20 per cent respectively, when they enrol in any of the Polytechnic's part-time CET courses.

Current full-time students and staff at the Polytechnic are also eligible to apply for 10 per cent and 50 per cent discounts respectively on any CET courses conducted by the Polytechnic.

CONTACT US

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OPENING HOURS

Office opening hours:
Mon - Thu : 8.30 am - 6.00 pm
Fri : 8.30 am - 5.30 pm

Counter service hours:
Mon - Fri : 8.30 am - 7.00 pm

BUSINESS/FINANCE & ACCOUNTING

ADVANCED DIPLOMA IN INTERNATIONAL BUSINESS (ADIB)

(15-MONTH PART-TIME COURSE)

SCHOOL OF BUSINESS & ACCOUNTANCY

The 15-month part-time **Advanced Diploma in International Business (ADIB)** course is jointly offered and awarded by NP and the International Trade Institute of Singapore. As businesses internationalise, and with the increase in local multinational corporations, there is a need to develop people in global management skills. ADIB aims to develop a pool of executives for companies, especially those embarking on international business, in line with the government's emphasis on globalisation.

This course will help participants better operate and manage their businesses strategically in an increasingly complex multi-national global system. The course targets executives who are in business-related fields and those who wish to update their professional knowledge and business acumen in international business.

COURSE STRUCTURE

- International Business Environment
- Cross-Cultural Business Behaviour
- International Market Research
- Marketing Management
- Management Principles & Practices
- Cost Concepts
- E-Business Management
- E-Marketing
- Global Marketing
- Management of International Business
- International Marketing Communications
- International Operation & Human Resource Management
- Strategic Marketing Management
- International Finance
- Financial and Managerial Accounting
- Project (Modules 1 and 2)

BUSINESS/FINANCE & ACCOUNTING

SPECIALIST DIPLOMA IN FRANCHISE & ENTERPRISE MANAGEMENT (SDFEM)

(9-MONTH PART-TIME COURSE)

SCHOOL OF BUSINESS & ACCOUNTANCY

The nine-month part-time **Specialist Diploma in Franchise and Enterprise Management (SDFEM)** course is jointly offered and awarded by NP and the Franchising & Licensing Association of Singapore. In line with the current emphasis to develop the entrepreneurial spirit and Singapore brands, SDFEM aims to meet the educational and training needs of current and potential franchisors and franchisees.

The course is unique in focusing on both the cognitive and practical requirements of operating a franchise business, locally and overseas. It will expedite the process of acquiring the essential knowledge, attitudes and skills in developing and managing a franchise business. SDFEM will address the most current and important issues facing a franchisor and franchisee through the Special Topics Module. The course targets both potential and current franchisors and franchisees and anyone interested in the business opportunities offered via a franchising enterprise.

COURSE STRUCTURE

- Fundamentals of Franchise Management
- Financial Management
- Franchise Relationship Management & Licensing
- Marketing & Branding Strategy
- Internationalisation of a Franchise
- Enterprise Management (simulation game)
- Legal Aspects of Franchising and Licensing
- Special Topics and Start-up Business Planning
- Operations Management
- Integrated Studies (project based)

EARLY CHILDHOOD EDUCATION

ADVANCED DIPLOMA IN EARLY CHILDHOOD INTERVENTION (SPECIAL NEEDS) [AD-ECI (SN)] (15-MONTH PART-TIME COURSE)

SCHOOL OF HUMANITIES

The 15-month part-time **Advanced Diploma in Early Childhood Intervention (Special Needs) (AD-ECI (SN))** aims to produce high quality early childhood and special education teachers who can work with children with special needs or exceptionalities, including intellectual, physical and sensory disabilities, as well as children with communication, social, emotional and behavioural difficulties.

AD-ECI (SN) is designed to train experienced educators/teachers and related professionals, who already hold a qualification in early childhood or special education at the degree or diploma level.

COURSE STRUCTURE

There are nine modules in the course:

- Typical & Atypical Early Childhood Development
- Issues & Trends in Special Needs and Early Childhood Intervention
- Assessment, Evaluation & Programming
- Early Years Curricula & Effective Intervention Strategies in Early Childhood and Special Needs (physical, sensory, intellectual, communication, social, emotional and behavioural difficulties, ASD, and ADHD)
- Working collaboratively with Parents & Other Professionals
- Leadership, Communication & Collaboration
- Research in Early Childhood Intervention
- Curriculum Studies
- Supervised Practicum

EARLY CHILDHOOD EDUCATION

DIPLOMA IN EARLY CHILDHOOD CARE & EDUCATION – TEACHING (DECCE-T) (30-MONTH PART-TIME COURSE)

SCHOOL OF HUMANITIES

The 30-month part-time **Diploma in Early Childhood Care and Education – Teaching (DECCE-T)** aims to produce high quality early childhood educators who will make a difference to classroom practices and be a professional educator. DECCE-T is designed to train in-service early childhood educators and candidates from other professions who are interested in a career switch.

COURSE STRUCTURE

There are 14 modules and four practicum attachments in the course:

- The Developing Child (I) & (II)
- Principles and Practices in Early Education
- Children's Health and Socio-emotional Well-being
- Language and Literacy
- The Early Educator as a Professional
- The Learning Environment and Behaviour Management
- Infant and Toddler Learning Environment
- The Child and the Creative Curriculum
- Working with the Exceptional Child
- The Child and the Inquiry Curriculum
- Social Studies in Early Education
- Curriculum Planning and Design
- Working with Families and Communities

ENGINEERING

DIPLOMA IN TECHNOLOGY (AEROSPACE) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Aerospace)** course is designed for working adults who wish to upgrade and update themselves in their current field of work. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, a student is required to complete at least 80 credit units, comprising core modules and elective modules. Elective modules can be selected from a wide range of subjects offered by various schools.

COURSE STRUCTURE

Stage 1

- Aerospace Fundamentals
- Applied Mechanics I
- Engineering Maths A

Stage 2

- Aerospace Maintenance Practices
- Aircraft Electrical Systems
- Engineering Maths B

Stage 3

- Thermofluid A
- Engineering Materials & Processes
- Applied Mechanics II
- Electives

Stage 4

- Thermofluid B
- Aerospace Materials & Processes
- Applied Strength of Materials
- Electives

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

Stage 5

- Flight Mechanics
- Human Factor & Aviation Legislation
- Aircraft Structures & Systems A
- Electives

Stage 6

- Aircraft Propulsion Theory and Systems
- Avionics Theory and Systems
- Aircraft Structures & Systems B
- Electives

ENGINEERING

DIPLOMA IN TECHNOLOGY (BUILDING SERVICES) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Building Services)** course is offered in response to strong demand from industry. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

This highly comprehensive programme consists of core and cross-disciplinary elective modules.

The core modules are modules related to the individual course discipline while the cross-disciplinary electives provide the opportunities for students to learn wide-ranging skills and knowledge outside the discipline. The courses have been designed to complement conceptual and theoretical knowledge with practical hands-on skills.

COURSE STRUCTURE

Stage 1

- Engineering Mathematics A
- Principles of DC Circuits
- Building CAD

Stage 2

- Engineering Mathematics B
- Principles of AC Circuits
- Analogue & Digital Electronics

Stage 3

- Building Water & Sanitary Services
- Building Electrical Services

Stage 4

- Fire Engineering
- Basic Air-Conditioning

Stage 5

- Fire Safety Management
- Applied Air-Conditioning
- Distribution System Design

Stage 6

- Building Automation System
- Building Services Integration & Coordination
- Building Construction

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (ELECTRICAL) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Electrical)** course is structured in a modular form based on a module credit system. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, students are required to complete core modules in all the six stages. Each of the core modules has 4 credit units. In addition, students are also required to complete another 24 credit units of elective modules.

COURSE STRUCTURE

Stage 1

- Principles of DC Circuits (PDC)
- Basic Electronics and Devices (BED)
- Engineering Mathematics A (EMA)

Stage 2

- Principles of AC Circuits (PAC)
- Principles of Digital Electronics (PDE)
- Engineering Mathematics B (EMB)

Stage 3

- Electrical Circuit Analysis (ECA)
- Analog Circuits and Applications (ACA)

Stage 4

- Electric Machinery (EMAC)
- Principles of Control Systems (PCS)

Stage 5

- Distribution System Design (DSD)
- Distribution System & Protection (DSP)

Stage 6

- Electrical Metrology & Practice (EMP)
- Power Electronics & Applications (PEA)

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (ELECTRONICS) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Electronics)** course is structured in a modular form based on a module-credit system. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, students are required to complete core modules in all the six stages. Each of the core modules has 4 credit units. In addition, students are also required to complete another 24 credit units of elective modules.

COURSE STRUCTURE

Stage 1

- Basic Electronics and Devices (BED)
- Principles of DC Circuits (PDC)
- Engineering Mathematics A (EMA)

Stage 2

- Principles of Digital Electronics (PDE)
- Principles of AC Circuits (PAC)
- Engineering Mathematics B (EMB)

Stage 3

- Analog Circuits and Applications (ACA)
- Mini-Electronic Control Project (MECP)

Stage 4

- Basic Internetworking (BI)
- Principles of Control Systems (PCS)

Stage 5

- Principles of Photonics (PP)
- Routing Principles (RP)

Stage 6

- Basic Microcontroller Programming (BMP)
- Digital Signal Processing and Applications (DSPA)

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (LOGISTICS)

(3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Logistics)** course addresses the needs of employers in the logistics service industry, manufacturing logistics and other logistics-related sectors, as well as the needs of employees who wish to upgrade their skills. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

The course equips students with up-to-date logistics operations, technological, and management know-how, as well as business and IT skills essential for logistics management in the new economy.

COURSE STRUCTURE

Stage 1

- Introduction to Logistics
- Global Logistics Management
- Chemical Logistics

Stage 2

- Purchasing Management
- Operations Planning & Control
- Electives

Stage 3

- Warehousing Management
- Distribution Management
- Inventory Management
- Electives

Stage 4

- Supply Chain Management
- Electronic Logistics
- Enterprise Information Systems
- Electives

Stage 5

- Business Finance
- Principles of Marketing
- Electives

Stage 6

- Business Process Engineering
- Quantitative Logistics Analysis
- Electives

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of online elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (MECHANICAL)

(3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Mechanical)** course is designed for working adults who wish to upgrade and update themselves in their current field of work. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, a student is required to complete at least 80 credit units, comprising core modules and elective modules. Elective modules can be selected from a wide range of subjects offered by various schools.

COURSE STRUCTURE

Stage 1

- Principles of DC Circuits
- Engineering Materials & Processes
- Engineering Maths A

Stage 2

- Applied Mechanics I
- Computer-aided Engineering Drafting
- Engineering Maths B

Stage 3

- Applied Mechanics II
- Mechanical Design
- Electives

Stage 4

- Fundamentals of Thermofluid
- Principles of AC Circuits
- Electives

Stage 5

- Applied Fluid Mechanics
- Applied Thermodynamics
- Electives

Stage 6

- Applied Strength of Materials
- Engineering System Design
- Electives

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (MECHATRONICS) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Mechatronics)** course is designed for working adults who wish to upgrade and update themselves in their current field of work. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, a student is required to complete at least 80 credit units, comprising core modules and elective modules. Elective modules can be selected from a wide range of subjects offered by various schools.

COURSE STRUCTURE

Stage 1

- Principles of DC Circuits
- Engineering Maths A
- Computer Programming

Stage 2

- Applied Mechanics I
- Basic Electronic Devices
- Engineering Maths B

Stage 3

- Applied Mechanics II
- Principles of Digital Electronics
- Computer-aided Engineering Drafting
- Electives

Stage 4

- Applied Strength of Materials
- Mechanical Design
- Automation Technology
- Electives

Stage 5

- Mini Electronic Control Project
- Instrumentation & Control Technology
- Electives

Stage 6

- Engineering System Design
- Basic Micro-controller Programming
- Electives

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (MARINE & OFFSHORE) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Marine & Offshore)** course is designed for working adults who wish to upgrade and update themselves in their current field of work. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

To graduate, a student is required to complete at least 80 credit units, comprising core modules and elective modules. Elective modules can be selected from a wide range of subjects offered by various schools.

COURSE STRUCTURE

Stage 1

- Applied Mechanics I
- Engineering Materials & Processes
- Engineering Maths A

Stage 2

- Applied Mechanics I
- Naval Architecture 1
- Engineering Maths B

Stage 3

- Applied Strength of Materials
- Naval Architecture 2
- Principles of DC Circuits
- Electives

Stage 4

- Fundamentals of Thermofluid
- Offshore Engineering
- Principles of AC Circuits
- Electives

Stage 5

- Naval Architecture 3
- Marine Engineering 1
- Electives

Stage 6

- Marine Engineering 2
- Ship Design
- Electives

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

DIPLOMA IN TECHNOLOGY (WATER & ENVIRONMENT) (3-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The three-year part-time **Diploma in Technology (Water & Environment)** course is offered in response to strong demand from industry. Candidates need to meet the minimum entry requirements including at least three years of relevant working experience.

This highly comprehensive programme consists of core and cross-disciplinary elective modules.

The core modules are modules related to the individual course discipline while the cross-disciplinary electives provide the opportunities for students to learn wide-ranging skills and knowledge outside the discipline. The courses have been designed to complement conceptual and theoretical knowledge with practical hands-on skills.

COURSE STRUCTURE

Stage 1

- Engineering Mathematics A
- Environmental Chemistry
- Environmental Biology

Stage 2

- Ecological Studies
- Pest & Vector Control

Stage 3

- Environmental Health & Safety
- Drainage & Sewerage Systems

Stage 4

- Water Quality Monitoring & Control
- Environmental Legislation & Regulations

Note on Electives

For the electives, students can choose from a list of core/non-core electives offered. They can also select from a list of on-line elective modules.

ENGINEERING

ADVANCED DIPLOMA IN INDUSTRIAL ENGINEERING & MANAGEMENT (AD-IEM) (18-MONTH PART-TIME COURSE)

SCHOOL OF ENGINEERING

The 18-month part-time **Advanced Diploma in Industrial Engineering & Management (AD-IEM)** course is designed for working professionals or individuals who wish to acquire and upgrade themselves with the necessary tools and management skills in the areas of Industrial Engineering, Quality Engineering and Management.

AD-IEM provides participants with the necessary quality tools and management skills for a career in the areas of Industrial Engineering, Quality Engineering and Management. Generally, each module has an average of 60 hours of lectures, tutorials and mini-project work.

The course is accredited by the Professional Engineers Board under the Continuing Professional Development Programme for professional engineers in Singapore. Participants will gain 480 PDU upon completion of the course. Course participants must complete this course with at least an 80 per cent attendance rate.

COURSE STRUCTURE

Semester 1

- Quality Engineering (Taguchi Methods)
- Total Quality Management
- Productivity and Performance Measurement

Semester 2

- Technology Management
- Engineering Operations Management
- Six Sigma Philosophy

Semester 3

- Operations Research & Project Management
- In-House/Company Project

ENGINEERING

SPECIALIST DIPLOMA IN FACILITY MANAGEMENT (SD-FM) (1-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The one-year part-time **Specialist Diploma in Facility Management (SD-FM)** course is designed for degree and diploma holders who are currently in, or intend to pursue, a career in Facility Management.

Students are required to complete all five course modules as follows:

COURSE STRUCTURE

- Electrical and Communication Systems
- Mechanical Systems
- Security & Risk Management
- Managing Facilities
- Sustainable Facility Management

ENGINEERING

SPECIALIST DIPLOMA IN LOGISTICS MANAGEMENT (SDLM) (1-YEAR PART-TIME COURSE)

SCHOOL OF ENGINEERING

The one-year part-time **Specialist Diploma in Logistics Management (SDLM)** course was developed, in conjunction with IE Singapore and Ministry of Manpower in April 2002, to cater for the increasing training and education needs of the logistics industry.

Besides upgrading the skills of existing logistics professionals, the SDLM also aims to convert non-logistics professionals and re-skilling them as logistics professionals to meet the increasing demand for logistics services. Since the introduction of the Specialist Diploma in 2002, more than 300 logistics professionals have been successfully trained by NP.

COURSE STRUCTURE

Semester 1

- Logistics Planning & Control
- Supply Chain Management
- Warehousing Management

Semester 2

- Distribution Management
- E-Logistics
- International Purchasing

HEALTH & LIFE SCIENCES

ADVANCED DIPLOMA IN CRITICAL CARE NURSING (ADCCN) (8-MONTH PART-TIME COURSE)

SCHOOL OF HEALTH SCIENCES

The eight-month part-time **Advanced Diploma in Critical Care Nursing** is a Singapore Nursing Board accredited course that provides training in the area of critical care nursing. The course aims to train nurses to improve the standard of care provided to critically ill patients and their families, to facilitate early and accurate diagnostic assessment, to advance the science of critical care nursing and to support research initiatives.

Participants will be exposed to various technologies relevant to the field such as dialysis, intra-aortic balloon counter pulsation, mechanical ventilation, cardiac monitoring and pacing, implantable pacemaker, and neurological invasive monitoring.

The set-up available at the School of Health Sciences will be an effective learning tool for hands-on management of life-threatening situations in simulated clinical environment with the use of the high fidelity human simulators.

This course is tailored for nurses working in intensive care units, high dependency units and medical - surgical wards who wish to acquire advanced competency and advanced skills and knowledge in critical care nursing.

COURSE STRUCTURE

- Advanced Nursing Science I
- Advanced Nursing Science II
- Advanced Nursing Practice
- Advanced Health Assessment
- Advanced Clinical Pharmacology
- Medical-Legal & Ethical Issues
- Management and Counselling
- Research
- Clinical-On-The-Job-Training (480 hours in own hospitals)

HEALTH & LIFE SCIENCES

SPECIALIST DIPLOMA IN MOLECULAR BIOTECHNOLOGY (SD-MBT) (1-YEAR PART-TIME COURSE)

SCHOOL OF LIFE SCIENCES & CHEMICAL TECHNOLOGY

The one-year part-time **Specialist Diploma in Molecular Biotechnology (SD-MBT)** is tailored to meet the needs of those who are keen to keep pace with the latest developments in the area of life sciences. It allows participants to re-engineer their careers to meet challenges in the dynamic life science industry.

COURSE STRUCTURE

There are 10 modules offered in this course. The duration of each module is 35 hours (one month). Participants are required to complete four core modules and **three modules from Group A or three modules from Group B** (or seven modules in total) for the award of SD-MBT.

THE FOUR CORE MODULES ARE:

- Cell Biology
- Microbiology
- Molecular Biology
- Cell Culture

GROUP A MODULES ARE:

- Analytical Biochemistry
- Advances in Genomics
- Proteomics

GROUP B MODULES ARE:

- Bioinformatics
- Applied & Molecular Microbiology
- Immunology & Hybridoma Technology

The four core modules are offered every semester, while Group A and Group B alternate each year. To graduate, students must complete a total of seven modules.

Graduates of the Specialist Diploma have the option to undertake the remaining three modules as short course participants.

HEALTH & LIFE SCIENCES

SPECIALIST DIPLOMA IN PHARMA & BIOPHARMACEUTICAL MANUFACTURING (SD-PBM) (1-YEAR PART-TIME COURSE)

SCHOOL OF LIFE SCIENCES & CHEMICAL TECHNOLOGY

The one-year part-time **Specialist Diploma in Pharma and Biopharmaceutical Manufacturing (SD-PBM)** provides a unique pathway for students to develop skills and knowledge required for careers in organisations involved in the manufacturing of pharmaceuticals and biopharmaceuticals.

The industrial focus and hands-on training are key elements of the course which will enable participants to re-engineer their skills to meet the challenges of the vibrant Biomedical Science Manufacturing Sector.

COURSE STRUCTURE

There are seven modules in the course:

- Basic Concepts of Biotechnology
- cGMP Compliance
- Upstream Processing
- Downstream Processing
- QC Analytics & Instrumentation
- Validation
- QA & Documentation

The duration of each module is 35 hours (1 month).