The pioneer diploma course of its kind in Singapore that bridges engineering with life sciences

Jointly delivered by the School of Engineering and the School of Life Sciences & Chemical Technology, where staff hold product patents and perform world-class R&D

Six-month internship at hospitals, multinational corporations, research institutes and universities

High percentage of graduates secure places in local and overseas universities immediately after graduation

A business management minor that equips you with management and entrepreneurial skills, and widens your career path

NEW!
ABOUT THE DIPLOMA

Want to be at the forefront of medical innovation and technologies? With the Diploma in Biomedical Engineering (BME), you may just help to develop a surgical technique or medical device that speeds up a patient’s recovery.

In BME, you learn to apply life sciences and engineering to develop practical and innovative medical equipment and procedures. You will cover areas such as electronics, biophysics, medical instrumentation, cell and molecular biology, biomechanics and implants.

You will also learn to track research in technologies that yield new ways to eradicate diseases and raise the standard of healthcare.

To give you an added edge, you can opt for our new Business Management Minor. Delivered by Ngee Ann’s School of Business & Accountancy - the most established polytechnic business school - the business modules will equip you with knowledge and skills in entrepreneurship, management and marketing. A strong engineering foundation in biomedical engineering and competency in business knowledge will stand you in good stead in your career and degree pursuits. Armed with skills that are well sought-after, you can be sure of a wide range of career options and exciting opportunities ahead!

So, are you ready to become a competent biomedical engineer who unlocks and sustains the rapid development of Singapore’s heavily invested life sciences industry with the Diploma in Biomedical Engineering?

*Student intern at Changi General Hospital*
WHAT YOU WILL LEARN
Under our broad-based curriculum which aims to train you to be a competent and well-rounded professional, you will take modules in the following different areas:

Engineering
Be exposed to the breadth of engineering fields such as electrical, mechanical, computer programming and mathematics.

Biomedical
Learn about the design, use, calibration, maintenance and troubleshooting of medical equipment commonly found in hospitals.

Life Sciences
Gain a strong foundation in human anatomy & physiology, chemistry, cell & molecular biology plus essential medical terminologies.

Electronics
Be equipped with the necessary practical skills for electronic circuit construction, troubleshooting, measurement and analysis, and gain an in-depth understanding of the design and application of electronics in daily life.

Minor in Business Management  
Gain business knowledge and skills by pursuing this Minor. The modules covered include Starting & Managing an Enterprise, Marketing Fundamentals and Effective People Management.

Project or Internship
Go on an internship that allows you to practise your skills and knowledge in the real world, or undertake a project that enables you to apply the know-how you have gained.

Interdisciplinary Studies
Going beyond your core discipline, these modules aim to empower you with multidisciplinary skills, and nurture an innovative and entrepreneurial spirit to meet the challenges of the new economy. Take modules that fall under categories such as Communication, Innovation & Enterprise, Culture & Community, Arts and Humanities, Business, and Design.

For more information about course modules, log on to www.np.edu.sg/soe

WHAT YOU CAN BECOME
Singapore’s fast growing Biomedical Engineering segment accounts for more than half of all personnel employed in the biomedical services industry. Jobs abound in healthcare establishments like hospitals and medical centres, as well as in suppliers of medical equipment and service providers.

You will be much sought-after by the industry in the areas of servicing, maintaining and developing specialised medical devices. Depending on the job scope, you could also cover fields such as research, design and development.
FURTHER STUDIES
BME's diverse, multidisciplinary and yet in-depth curriculum allows you to pursue an array of undergraduate courses at local and overseas universities. For example, BME graduates have enrolled in the following undergraduate courses:

- Nanyang Technological University
  - Bachelor of Engineering (Computer Science/Engineering) & Master of Science (Computer Science)
  - Bachelor of Engineering (Electrical & Electronic Engineering)
  - Bachelor of Engineering (Bioengineering)
  - Bachelor of Engineering (Materials Engineering)
  - Bachelor of Science (Physics & Applied Physics) with Honours
- National University of Singapore
  - Bachelor of Engineering (Electrical Engineering)
  - Bachelor of Engineering (Bioengineering)
  - Bachelor of Science (Computational Biology)
- Singapore Management University
  - Bachelor of Business Management

You can also gain credit exemptions from the following overseas universities:

- King’s College London, United Kingdom
  - Bachelor of Science (Biomedical Science)
- The University of Sheffield, United Kingdom
  - Bachelor of Engineering (Biomaterial Science & Tissue Engineering)
  - Master of Engineering (Biomedical Engineering)
- University of New South Wales, Australia
  - Bachelor of Engineering in Electrical Engineering
  - Bachelor of Engineering in Biomedical Engineering
- Queensland University of Technology, Australia
  - Bachelor of Engineering (Medical)

Besides engineering degrees, you are also eligible to apply for non-engineering degree courses. With our Business Management Minor, you will certainly have a head-start in applying for business-related degree courses.

ENTRY REQUIREMENTS
To be eligible for consideration, candidates must have the following GCE ‘O’ Level examination (or equivalent) results and fulfil the aggregate computation requirements.

<table>
<thead>
<tr>
<th>Subject</th>
<th>‘O’ Level Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language*</td>
<td>1-7</td>
</tr>
<tr>
<td>Mathematics (Elementary/Additional)</td>
<td>1-6</td>
</tr>
<tr>
<td>Science (with Physics, Chemistry or Biology component)</td>
<td>1-6</td>
</tr>
<tr>
<td>Computer Studies or Design &amp; Technology</td>
<td></td>
</tr>
<tr>
<td>or Fundamentals of Electronics</td>
<td></td>
</tr>
</tbody>
</table>

The aggregate computation for selection is based on grades obtained for English, Mathematics, Science or Design & Technology or Food & Nutrition (Grade 1-9) or a relevant OSIE / Applied Subject and two other subjects.

* Candidates with English as a second language must have attained a minimum grade of 6.

Candidates with severe vision deficiency should not apply for the course. Those with colour appreciation deficiency may be considered, subject to an in-house test.

CONTACT US
For more information, contact Mr Gwee Choon Siong at 6460 6188 (tel), 6467 1730 (fax) or gcs@np.edu.sg (email).