

SCHOOL OF ENGINEERING



EMBRACE INNOVATION

Just think about it – who gave us electricity, cars, planes, computers, mobile phones and the Internet? These inventions have dramatically changed the way we live and work, and the brains behind them are none other than engineers, the architects of the future!

Engineers are so central to the progress of society that they are always in great demand. Come join our School of Engineering (SEG), and you too can look forward to exciting careers and further study opportunities. At SEG, you will receive a well-balanced engineering education, and benefit from our excellent industry partnerships.

Why Engineering?

- Engineering empowers you to translate the knowledge of science and technology into ideas for new products to make the world better, faster or smarter.
- Engineering professionals enjoy attractive starting salaries and diverse career choices, ranging from management to R&D.
- With our engineering diplomas well-recognised by reputable local and overseas universities, you can build a firm foundation in engineering that will open doors for you to exciting career possibilities and further studies.

Why SEG?

- Our graduates excel wherever they go; some are forging careers with MNCs, with high starting salaries, while others start their own businesses.
- Many of our graduates further their studies in reputed local and overseas universities; many are scholars of major corporations and government agencies.
- Our innovation-based curriculum, state-of-the-art facilities and excellent industry exposure provide an enriching learning experience for you to achieve a well-balanced and highly relevant engineering education.
- Our strong industry links ensure that our courses are relevant to the needs of industry.
- We are a leader in science and engineering R&D, with many innovations that contribute to the engineering field. You will benefit from this exciting intellectual environment.
- Every year, our students excel in local and international competitions, like the Microsoft Imagine Cup, Singapore Android Developer Challenge, Code:XtremeApps, Tan Kah Kee Young Inventors' Award, Singapore Robotic Games, WorldSkills Competition and the FIRA RoboWorld Cup.

Industry-linked

Our strong industry ties will enable you to learn in a holistic environment, using the latest technologies and up-to-date curriculum. We are proud of our strong and intensive partnerships with leading technology companies, including Microsoft, Siemens, DSO National Laboratories, Festo Pte Ltd and Hewlett-Packard. We are also the only institution to host various centres supporting enterprises in Singapore, including:

- The Centre of Innovation for Electronics with SPRING Singapore
- The MedTech Concept@NYP, a biomedical hub for collaboration among biomedical companies
- Industry Communities@NYP, comprising the IC Community, Wireless Community, Embedded Systems Community and Security Technology Community, supported by EDB
- The Centre for Digital & Precision Engineering, jointly funded by EDB

Minimum Entry Requirements

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|---|-------------|
| 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 diplomas:

- Aeronautical & Aerospace Technology
- Biomedical Engineering
- Digital & Precision Engineering
- Manufacturing Engineering
- Mechatronics Engineering
- Nanotechnology & Materials Science

Please call **6550 0836/0400** for enquiries on the following diplomas:

- Aerospace Systems & Management
- Electrical Engineering with Eco-Design
- Electronics, Computer & Communications Engineering
- Multimedia & Infocomm Technology
- Telematics & Media Technology

You can also visit www.nyp.edu.sg/seg for more information.

NANOTECHNOLOGY & MATERIALS SCIENCE

Nanotechnology & Materials Science has revolutionised the way we do things. Working on objects so small you cannot see them with the naked eye, studying science and engineering right down to the scale of an atom, NYP's Diploma in Nanotechnology & Materials Science imparts skills across multiple disciplines in different sciences.

Gain a strong foundation in the sciences, the study of materials, engineering principles and fundamentals of nanotechnology applications. You'll also learn about the properties and behaviours of materials and you will get the chance to handle advanced materials like polymers and ceramics. Then, apply this knowledge to improve products in a multitude of industries such as the electronics, consumer, chemical, medical, pharmaceutical and the renewable clean energy sectors.

This fits me to a T!

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

- Passionate about science and want to be at the forefront of one of the most important technology breakthroughs in recent times
- Inspired to create new and meaningful products using advanced materials

What will I learn?

- The science involved in producing advanced materials like polymers and ceramics, and to apply them to improve products
- Knowledge and skills in the fast growing area of nanotechnology, regarded as the enabling technology with the potential to deliver cheaper products that are smaller, better, faster, stronger and possess new and far greater functionalities
- Technical skills to design and develop the materials of tomorrow

"I am honoured and delighted to be one of the first batch of Nanotechnology & Materials Science students chosen for an overseas trip to Queen Mary, University of London for my Final Year Project. This has been a great opportunity to expand my knowledge and skills, and this overseas exposure will provide me with valuable experience both academically and later in my working life."

Lin Yun Cheng

Diploma in Nanotechnology & Materials Science
Year 3

I want a great career!

This diploma will open doors for you to high flying careers as:

- R&D Engineers
- Materials Technologists
- Process or Equipment Engineers
- Laboratory Technologists

Uni, here I come!

Further your studies at reputable local and overseas universities and enjoy advanced standing or module exemptions for relevant or equivalent degrees and programmes at many universities. These include:

Singapore

- National University of Singapore
- Nanyang Technological University

Europe

- Queen Mary, University of London
- Newcastle University

Australia

- Murdoch University
- La Trobe University

