NUS National University of Singapore | College of Design and Engineering

Be More

Bachelor of Technology in

Engineering

Be Forward-Looking

CONTENTS

Be Among the Best

BACHELOR OF TECHNOLOGY IN ENGINEERING

The National University of Singapore (NUS) Bachelor of Technology (BTech) programmes are specially designed for polytechnic graduates working in the industry, and taught by highly-qualified faculty members in advanced teaching facilities at NUS.

Offered by the NUS College of Design and Engineering (CDE) in partnership with the NUS School of Continuing and Lifelong Education (NUS SCALE), the BTech in Engineering programmes are offered on a part-time basis and delivered via a modular structure. This allows students to study at their own pace, posing minimal disruption to their personal and work commitments. Typically, students will complete a programme in four years.

THERE ARE SIX DIFFERENT BTECH IN ENGINEERING DISCIPLINES TO CHOOSE FROM:

- **Chemical Engineering**
- **Civil Engineering**
- **Electronics Engineering**
- **Industrial & Management Engineering**
- **Mechanical Engineering**
- **Supply Chain Management**

All BTech Engineering programmes, except for Supply Chain Management, are accredited by The Institution of Engineers, Singapore (IES), which is a signatory of the Washington Accord, through its Engineering Accreditation Board (EAB). For more information on the accreditation status, please refer to https://www.ies.org.sg/accreditation.

WHY BTECH?

- Upgrade from a polytechnic Diploma to a Bachelor's Degree for better career progression opportunities.
- Be assured of a high-quality education, with a programme recognised for the practice of engineering at the professional level.
- Study at an individualised pace with a flexible programme structure.

NUS National University of Singapore | College of Design and Engineering

COLLEGE OF DESIGN AND ENGINEERING

Established in 2022, CDE is a fusion of two world-class schools with long, distinguished histories—the Faculty of Engineering and the School of Design and Environment. The goals of CDE are to nurture students into agile, future-ready talents and to attain global leadership in research, innovation, and enterprise across multiple disciplines. CDE offers its students distinctive disciplinary specialisations and interdisciplinary training experiences and equips them with skill sets and competencies to prepare for a complex and turbulent working environment.

For more information on CDE, please visit cde.nus.edu.sg.

NUS National University of Singapore | School of Continuing and Lifelong Education

SCHOOL OF CONTINUING AND LIFELONG EDUCATION

NUS SCALE was launched in June 2016 to support national manpower needs with high-quality and industry-relevant adult education and training programmes. Drawing on the multidisciplinary expertise of 16 other NUS faculties and schools, backed by cutting-edge research along with strong industry links, NUS SCALE equips youths, professionals, and organisations from the world over with the latest knowledge and skills demanded in the digital economy. Delivered with technology-enabled blended learning approaches, NUS' Continuing Education and Training (CET) programmes are designed to enhance both learning experiences and outcomes.

For more information on NUS SCALE, please visit scale.nus.edu.sg.

Be Ready for What Comes Next

JOINING THE BACHELOR IN TECHNOLOGY IN ENGINEERING PROGRAMMES

The BTech in Engineering programmes have one intake per year, in August. Applications to join this intake are accepted from December of the preceding year to January of the intake year.

ADMISSION REQUIREMENTS

Be at least 21 years old

For BTech (Chemical Engineering), BTech (Civil Engineering), BTech (Electronics Engineering) and BTech (Mechanical Engineering), have at least a Polytechnic Diploma in a relevant field of Engineering or equivalent local/foreign qualification

For BTech (Industrial & Management Engineering) and BTech (Supply Chain Management), have at least a Polytechnic Diploma or equivalent local/foreign qualification in any discipline, with evidence of strong mathematical or analytical content

Holders of a two-and-a-half-year Continuing Education and Training (CET) Part-time Local Diploma in Engineering/Applied Science/Business Practice/Infocomm Technology may apply only after successfully completing their local diploma, and are required to complete BTech Engineering Bridging Units (BEBUs)

Fulfil at least one of the following:

- Have at least two years of full-time working experience, or
- Have been fully discharged from their National Service (NS) liability, or
- Is currently employed on a full-time basis

IMPORTANT NOTES

Applicants are encouraged to submit any of the following information:

- Evidence of additional post-diploma/post-degree academic preparation, including advanced diploma and specialist diploma studies
- Availability of company sponsorship

The Admission Committee may require an applicant to sit for entrance examinations for further assessments

Part-time employment (i.e. working less than 35 hours a week) will not count towards full-time work experience

Exemption from age and work experience requirements may be granted to Singapore Citizens and Singapore Permanent Residents if they are:

- Sponsored by their company for a part-time undergraduate degree programme, or
- Currently employed in a job role/sector related to the part-time undergraduate degree programme

Notwithstanding these exemptions, NS-liable applicants must have been fully discharged from their full-time NS liability before they can be admitted. Supporting document(s) must be submitted, together with the admission application, for assessment. NUS reserves the right to determine if exemption will be granted, and the University's decision will be final and binding.

PROGRAMME STRUCTURE

An Academic Year at NUS has three terms:

- Semester 1 (August–December)
- Semester 2 (January–May)
- Special Term (May–July)

A typical study load is three courses per semester and two courses during the Special Term.

Lectures and tutorials are usually scheduled on weekday evenings at 6.00pm–9.30pm. Laboratory sessions (if any) may fall on a weekday evening or, occasionally, on Saturday mornings or afternoons.

The usual duration to complete a programme is four to four-and-a-half years, with the maximum candidature being six years.

Be a Professional

Chemical Engineer • Design Engineer • Engineering Consultant • Process Engineer • Research Engineer • Sales Engineer

BACHELOR OF TECHNOLOGY
(Chemical Engineering)

The BTech (Chemical Engineering) programme prepares budding engineers to work with the industrial applications of chemical processes, equipping them with the necessary background and skills to design, develop and operate chemical processes to safely, sustainably and economically produce chemicals, petroleum products, food, pharmaceuticals and consumer goods.

"In today's context, employers want you to have working experience. I knew that having a reputable degree and working experience would be a combination that would open a lot more doors for me."

SUHANA BTE SAAD
BTech (Chemical Engineering) with Honours
Graduate 2020

Be a Professional

Civil Engineer • Certified Contractor • Infrastructure Project Manager • Consulting Engineer • Infrastructure Developer • Civil Engineering Policy Planner

BACHELOR OF TECHNOLOGY
(Civil Engineering)

The BTech (Civil Engineering) programme equips graduates with core civil engineering competencies and a wide range of integrative skills so that they can function as effective civil engineers in the planning, design and construction of public and private infrastructure at the national and global context.

"Studying for this degree has opened my mind. I am now more perceptive, resourceful and confident—all traits that were developed as the degree programme challenged us to cultivate our skillsets in doing research, finding solutions and thinking outside the box."

CHEN WEI
BTech (Civil Engineering) with Honours
Graduate 2020

Be a Professional

Electrical & Electronics Engineer • Communication Engineer • Computer Engineer • Process Engineer

BACHELOR OF TECHNOLOGY
(Electronics Engineering)

The BTech (Electronics Engineering) programme engages students in exciting and challenging areas such as mobile wireless communications, intelligent robots, embedded systems, multimedia sign processing, nanotechnology, very large-scale integration integrated circuit (VLSI IC) design, electrical energy systems and power electronic conversion—grooming the next generation of electrical and electronics engineers who will drive innovations and technological advances in computing, Internet technology and micro/nano electronics.

"Our lecturers are industry professionals themselves and it shows. I have seen classmates ask for advice on topics that we did not cover in class—but which are important to them in their full-time jobs—and the lecturers always offered sound guidance."

NG SHU ZHE
BTech (Electronics Engineering) with Honours
Graduate 2022

Be a Professional

Analyst • Data Analyst/Scientist • Project Engineer/Manager • Quality Engineer • Supply Chain Analyst

BACHELOR OF TECHNOLOGY
(Industrial & Management Engineering)

The BTech (Industrial & Management Engineering) programme equips students with the necessary skills and knowledge to support the management, operation and optimisation of systems producing goods and services, and prepares graduates for careers in sectors such as finance, manufacturing, healthcare, information technology and logistics & supply chains.

"You may be surprised at how much overlap there is between what you have been working on all day, and what you are learning that very evening. I love how I can easily apply what I have learnt in lectures, immediately into my job!"

VIVIAN TEH
BTech (Industrial & Management Engineering) with Honours
Graduate 2022

Be a Professional

Aerospace Engineer • Product Design Engineer • Product Quality & Test Engineer • Systems & Process Engineer

BACHELOR OF TECHNOLOGY
(Mechanical Engineering)

Mechanical Engineering is an evergreen field of engineering due to its wide spectrum of applications. The BTech (Mechanical Engineering) programme places strong emphasis on engineering fundamentals and applications to prepare students to excel in a rapidly changing technological environment across multi-disciplinary fields such as mechanics, fluid dynamics, energy analysis, robotics, advanced manufacturing and many more.

"You get to meet students from different walks of life (in the BTech in Engineering programme), some of whom are already holding managerial roles. Learning from their experience and industry knowledge is invaluable."

MUHAMMAD MUZAFFAR BIN MUSTAFA
BTech (Mechanical Engineering) with Honours
Graduate 2022

Be a Professional

Supply Chain Manager/ Analyst • Warehousing Expert • Procurement Specialist • Transportation Engineer

BACHELOR OF TECHNOLOGY
(Supply Chain Management)

The BTech (Supply Chain Management) programme ensures that graduates are equipped with the necessary logistics and supply chain management and engineering and analytical competencies to function effectively within multidisciplinary teams in the supply chain.

"My lecturers have been very accommodating with the time they give us for discussions. Tapping into their deep industry experience and insights has been very valuable, especially for my final-year projects."

CHEN YUE MING
BTech (Supply Chain Management) with Honours
Graduate 2022

Be a Bachelor of Technology in Engineering Graduate

HIGHLY RANKED
Among the best universities in the world

GLOBALLY RECOGNISED
Leader in Engineering educating

INDUSTRY-RELEVANT
Education linked to practical, real-world issues

NUS
National University of Singapore

WORKPLACE-READY
Curriculum designed for the jobs of tomorrow

STRONG REPUTATION
Graduates are sought-after in the talent market

Administered by:
NUS School of Continuing and Lifelong Education

Block AS8, 10 Kent Ridge Crescent, #03-01, Singapore 119260
Company Registration No: 200604346E

+65 6601 8888
scale.ug.enquiry@nus.edu.sg
scale.nus.edu.sg
nus.scale

VBTE30102023