

Engineering Education in Singapore

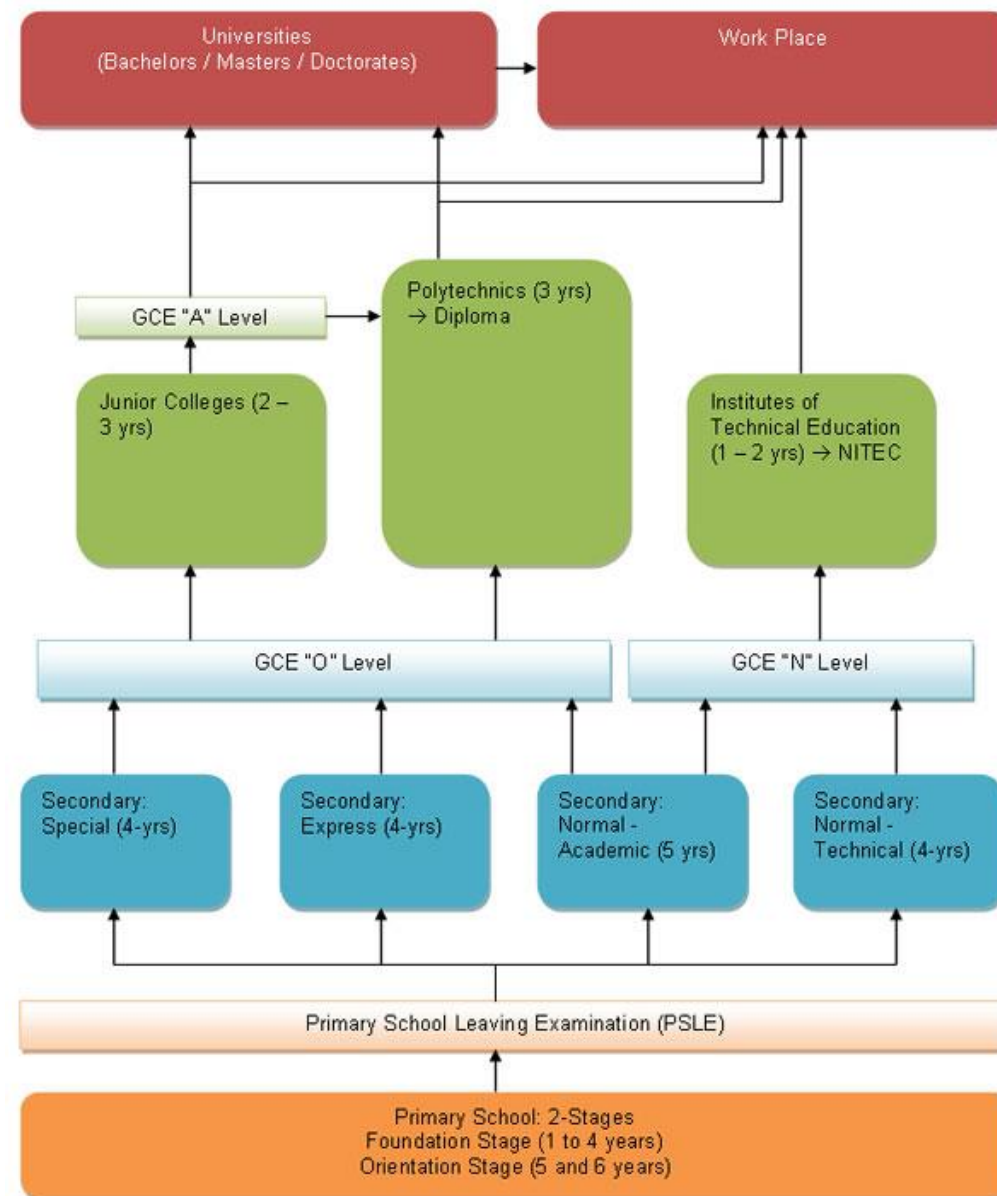
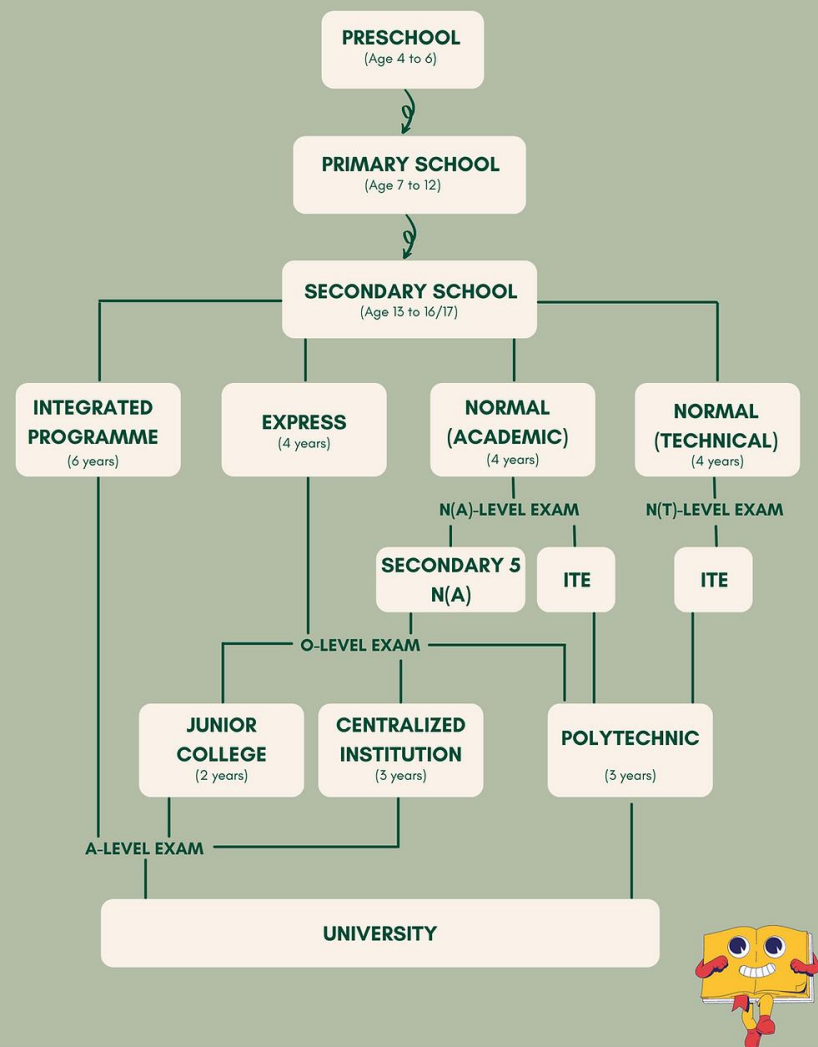


Dr Sam Man Keong
President, SIET

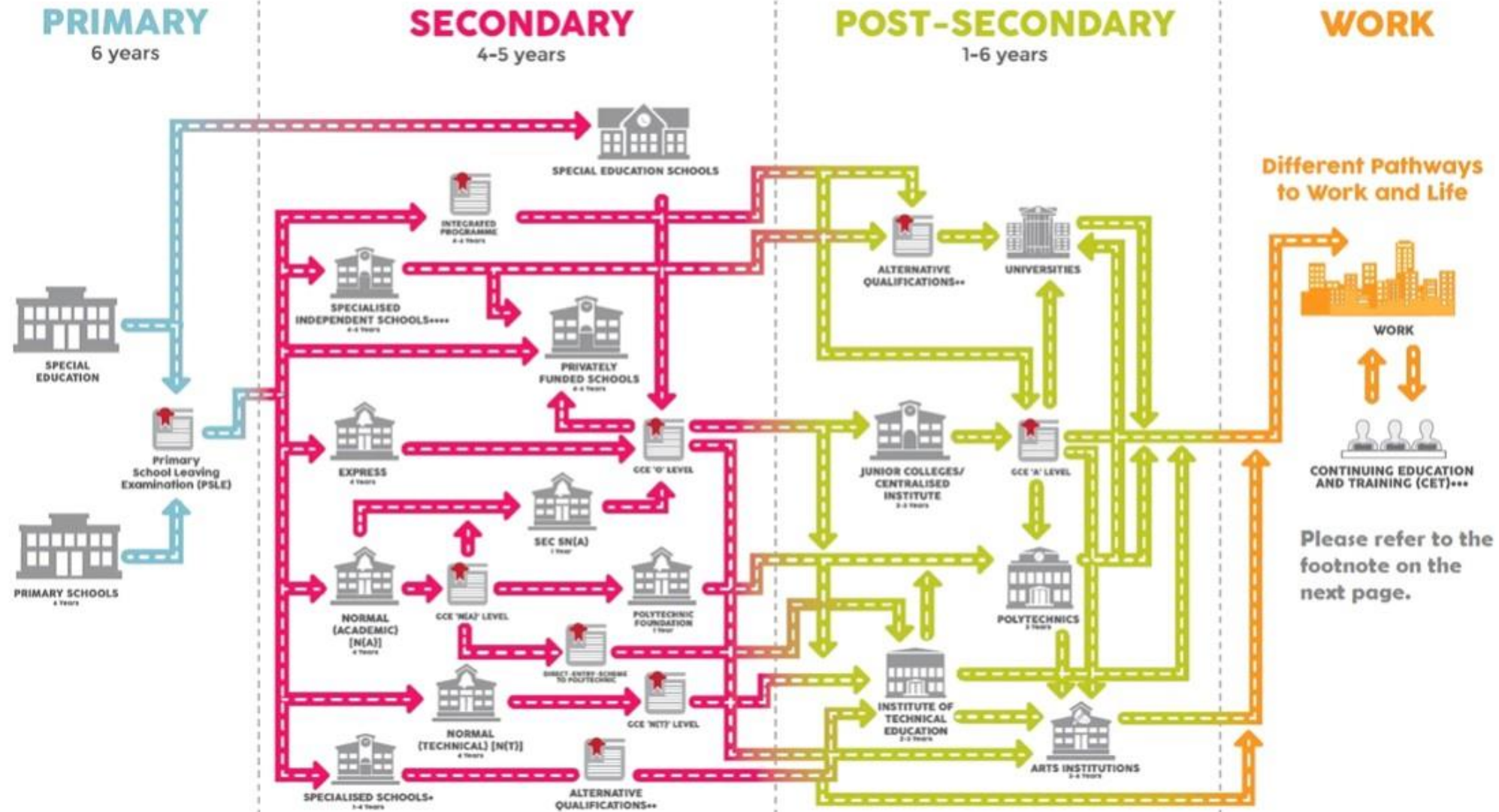
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Date: 21 June 2025

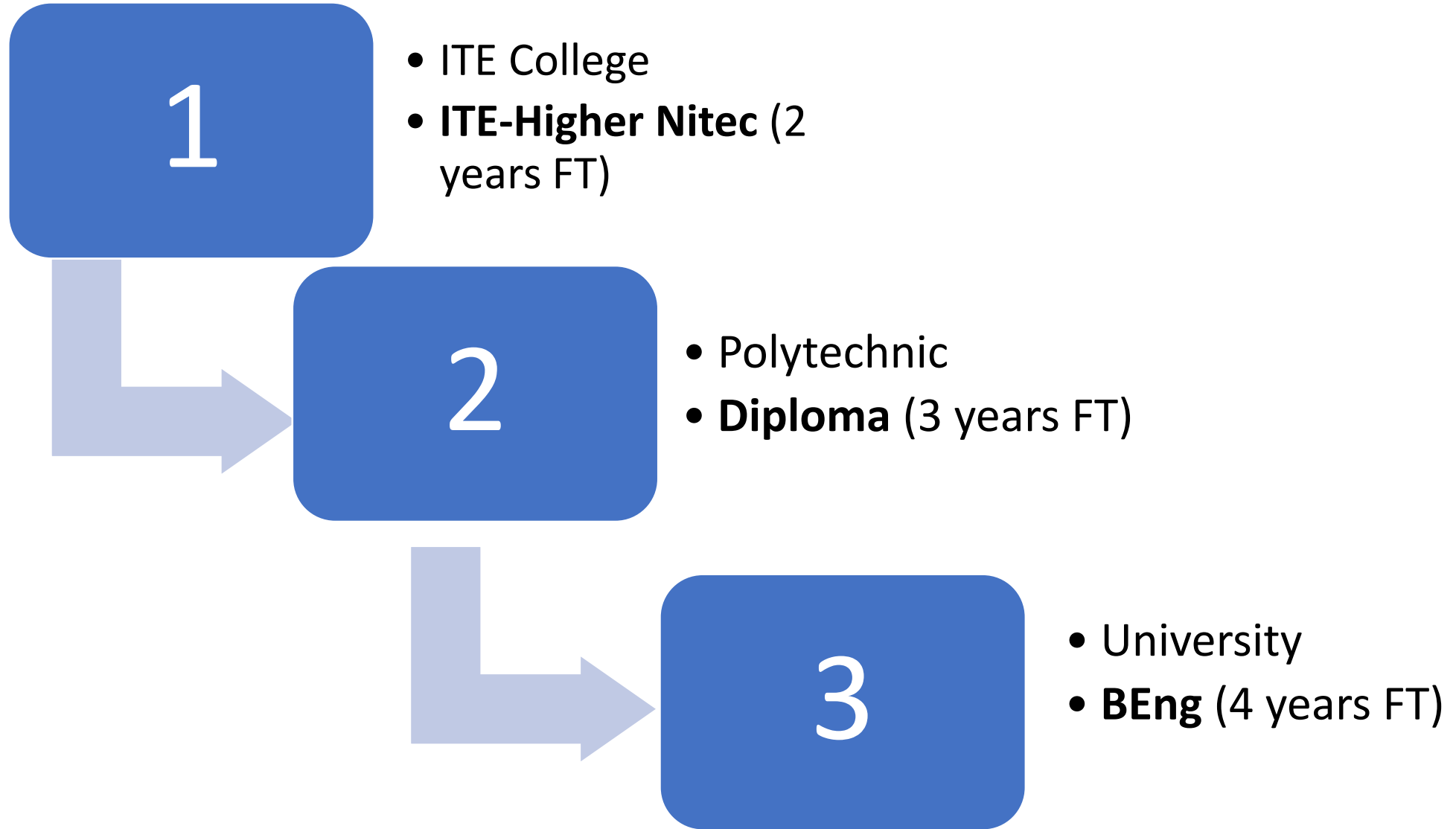
EDUCATION IN SINGAPORE



THE SINGAPORE EDUCATION LANDSCAPE



Possible Pathways in Engineering



Engineering Education in Singapore



1. Technical
Education

2. Polytechnic
Education

3. University
Education

Technical Education (ITE Colleges)

The **Institute of Technical Education (ITE)** is a post-secondary education institution and [statutory board](#) under the purview of the [Ministry of Education](#) in [Singapore](#).

Established by the [Ministry of Education](#), it was formerly known as Vocational and Industrial Training Board (VITB). ITE has three colleges, [ITE College Central](#), [ITE College East](#) and [ITE College West](#). It offers the Higher NITEC, Technical Diploma and Work-Study Diploma.

Apart from providing [vocational education](#) to [secondary school](#) graduates, ITE offers apprenticeships for the skilled trades and diplomas in vocational education for skilled technicians and workers in support roles in professions such as [accountancy](#), [architecture](#), [business administration](#), [engineering](#) and [nursing](#).

History

1960s to 1970s: Vocational and Industrial Training Board (VITB)

During the 1960s and 1970s, [vocational education](#) was managed by two separate statutory boards, the Adult Education Board (AEB) and the Industrial Training Board (ITB). They were merged in 1979 to form the Vocational and Industrial Training Board (VITB). The VITB was formed to promote and develop vocational education.

1992: Institute of Technical Education (ITE)

The Institute of Technical Education (ITE) was established as a post-secondary education institution to improve the employability of vocational trainees and to restructure the VITB's programmes. The government decided that every student in Singapore had to have at least ten years of general education, with technically inclined students filtered into the [Normal \(Technical\) stream](#) in secondary schools as preparation. These students would then attend the ITE after they finished secondary school education.

Colleges

To refine technical education in Singapore, the "One ITE System, Three Colleges" Model of Education and Governance was introduced in 2005 to merge the 10 satellite campuses into 3 regional colleges.

- [ITE College Central](#)
- [ITE College East](#)
- [ITE College West](#)

Institute of Technical Education

工艺教育学院 (Chinese)

Institut Pendidikan Teknikal (Malay)

தொழில்நுட்பக் கல்வி இயக்ககம் (Tamil)



Agency overview

Formed	1 April 1992; 33 years ago
Preceding agency	Vocational and Industrial Training Board (VITB)
Jurisdiction	Government of Singapore
Headquarters	2 Ang Mo Kio Drive, Singapore 567720

Front facade of ITE Central College campus at Ang Mo Kio



ITE College East Campus



ITE College West Campus



Polytechnic Education

Polytechnic education in Singapore is a vital part of the post-secondary education system, focusing on **project-based learning** and practical skills. Typically, polytechnic courses span **three years**, allowing students to gain in-depth knowledge in their chosen fields.

Key aspects include:

- **Courses Offered:** Various diploma programs across disciplines such as engineering, business, and information technology.
- **Admission Criteria:** Students usually need to meet specific academic requirements and aggregate scores to qualify for admission.

There are currently 5 polys in Singapore.

1. Singapore Polytechnic (SP)
2. Ngee Ann Polytechnic (NP)
3. Nanyang Polytechnic (NYP)
4. Temasek Polytechnic (TP)
5. Republic Polytechnic (RP)



Singapore Polytechnic (Dover Road Campus)



Ngee Ann Polytechnic (Clementi Campus)



Temasek Polytechnic (Bedok campus)





Republic Polytechnic (Woodland campus)



University Education

University Education in Engineering



1. National University of
Singapore (NUS)

2. Nanyang Technological
University (NTU)

3. Singapore Institute of
Technology (SIT)



National University of Singapore (NUS)

National University of Singapore

Universiti Nasional Singapura (Malay)

新加坡国立大学 (Chinese)

சிங்கப்பூர் தேசிய

பல்கலைக்கழகம் (Tamil)



Coat of arms

Former names

Straits Settlements and
Federated Malay States
Government Medical
School (1905–1921)
King Edward VII College of
Medicine (1921–1949)
University of Malaya,
Singapore campus (1949–
1962)
University of Singapore
(1962–1980)
Nanyang University
(1956–1980)

Type

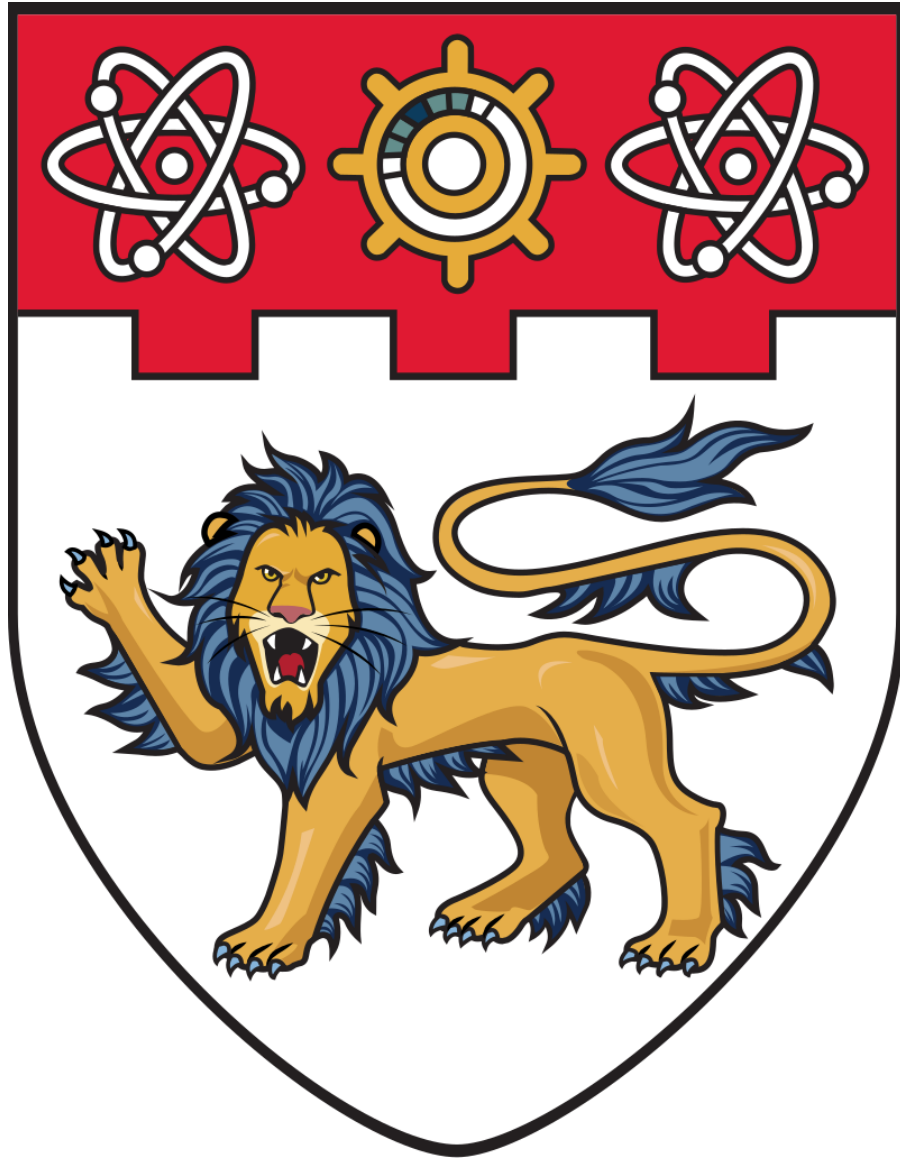
Public research university

Established

3 July 1905; 119 years ago
(as King Edward VII
College of Medicine)
8 August 1980; 44 years
ago (as National University
of Singapore)

The **National University of Singapore (NUS)** is a [national public research university](#) in [Singapore](#). It was officially established in 1980 by the merging of the University of Singapore and [Nanyang University](#).

The university offers degree programmes in disciplines at both the undergraduate and postgraduate levels, including in the sciences, medicine and dentistry, design and environment, law, arts and social sciences, engineering, business, computing, and music. NUS's main campus is located adjacent to the [Kent Ridge](#) subzone of [Queenstown](#).^[6] The [Duke–NUS Medical School](#) is located at the [Outram](#) campus.^[7] The [Bukit Timah](#) campus houses the [Faculty of Law](#) and [Lee Kuan Yew School of Public Policy](#). NUS's affiliated faculty members and researchers include one [Nobel Prize](#) laureate,^[8] one [Tang Prize](#) laureate, and one [Vautrin Lud](#) laureate.



Nanyang Technological University (NTU)

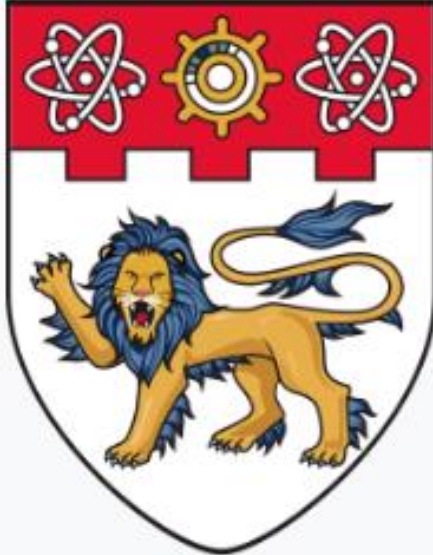
Nanyang Technological University

南洋理工大学 (Chinese)

Universiti Teknologi Nanyang (Malay)

நன்யாங் தொழில்நுட்ப

பல்கலைக்கழகம் (Tamil)



Coat of arms

Former name

Nanyang Technological
Institute (1981–1991)

Type

Public research university^[1]

Established

8 August 1981; 43 years
ago^{[2][3]} (as Nanyang
Technological Institute)

1 July 1991; 33 years
ago^[4] (as Nanyang
Technological University)

Nanyang Technological University (NTU) is a public [research](#) university in [Singapore](#). Founded in 1981, it is also the second oldest [autonomous university](#) in the country.

The university is organised across numerous colleges and schools, including the College of Engineering, College of Science, Nanyang Business School, [Lee Kong Chian School of Medicine](#), College of Humanities, Arts and Social Sciences, College of Computing and Data Science, Graduate College, [National Institute of Education](#), and [S. Rajaratnam School of International Studies](#). NTU is also home to two Research Centres of Excellence – the Singapore Centre on Environmental Life Sciences Engineering, and Institute for Digital Molecular Analytics and Science, and many University Research Institutes such as Earth Observatory of Science (which was a Research Centre of Excellence from June 2008 to June 2023, and transitioned to a University Research Institute in July 2023).

NTU's main campus covers 200 hectares (490 acres) of land, making it the largest university campus in Singapore.

The main campus is located in the western part of Singapore. Apart from its main campus, NTU also has a medical campus in [Novena](#), Singapore's healthcare district. As a large, comprehensive, university, it has 37,458 enrolled students, and 7,997 faculty and staff as of 2024.



**SINGAPORE
INSTITUTE OF
TECHNOLOGY**

Singapore Institute of Technology (SIT)

Singapore Institute of Technology

Institut Teknologi Singapura (Malay)

新加坡理工大学 (Chinese)

சிங்கப்பூர் தொழில்நுட்ப கல்வி
நிறுவனம் (Tamil)



Type	Autonomous university ^[1]
Established	May 2009; 16 years ago
Endowment	S\$447.78 million ^[2]
President	Chua Kee Chaing
Provost	John Thong
Academic staff	350++
Students	10,000++ ^[3]
Address	1 Punggol Coast Rd, Singapore 828608, Singapore

The **Singapore Institute of Technology (SIT or Singaporetech)** is a [public autonomous university](#) in [Singapore](#). The university offers industry-focused, applied degree programmes; it confers its own degree programmes as well as specialised degree programmes with overseas universities.

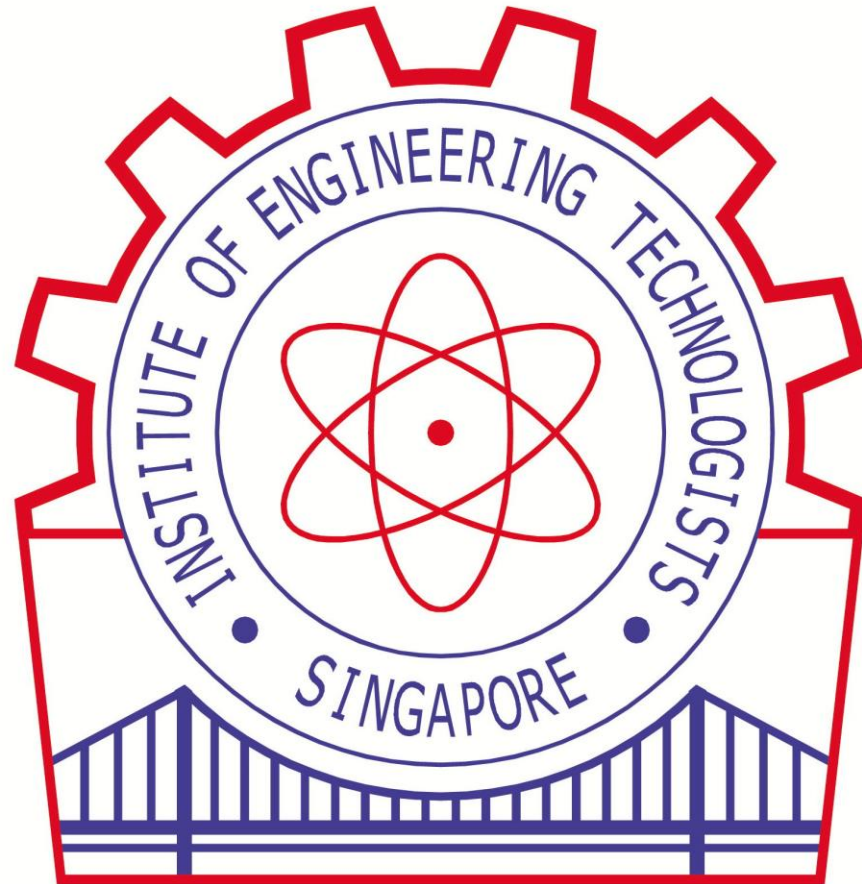
The university's degree programmes are grouped into five clusters: Engineering (ENG), Food, Chemical and Biotechnology (FCB), Infocomm Technology (ICT), Health and Social Sciences (HSS), and Business, Communication and Design (BCD).

The university's campus is located at 1 Punggol Coast Road in [Punggol](#), within the [North-East Region](#) of the country. The centralised campus in [Punggol](#) is next to the new [Punggol Coast MRT station](#).^[7] The university will be integrated with [Punggol Digital District](#) built by [JTC Corporation](#) in Punggol Downtown and Northshore district.

SIT's centralised campus in Punggol in 2024.

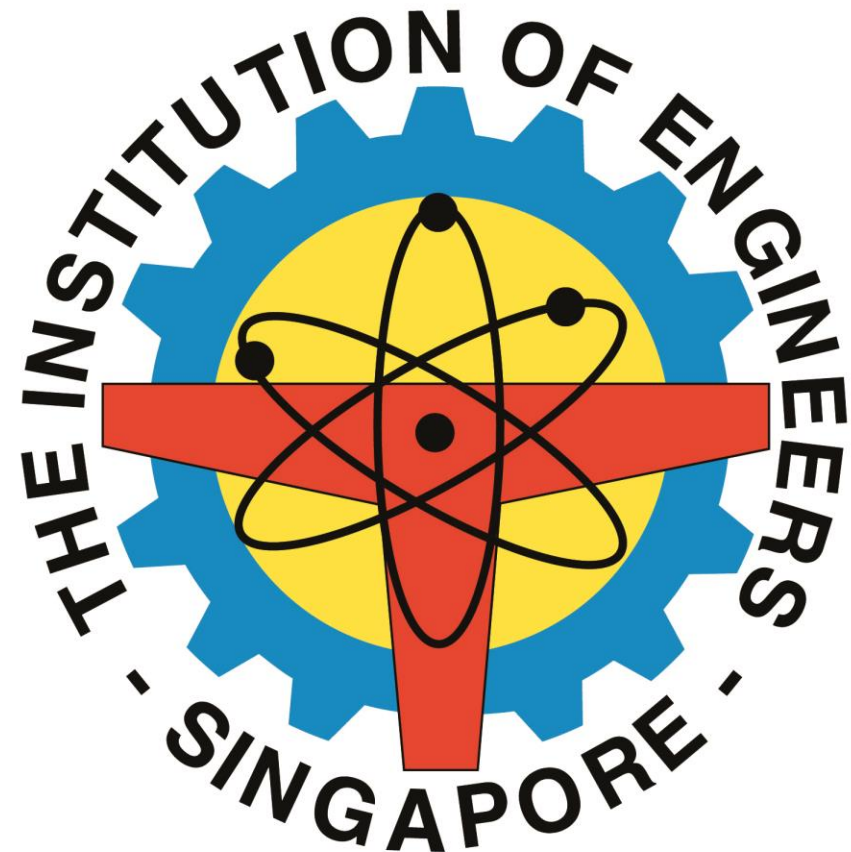


Professional Bodies In Engineering In Singapore



Founded 1980

**For Engineering Technologists
& Technicians/Poly & ITE Graduates**



**For Professional Engineers/
University graduates**