

1 Choose your preferred single degree programme from the 14 OPTIONS available!

Like
MATH and SCIENCE?

NO



Not to worry, there are many other programmes in NTU that you can explore!

To find out more, scan the QR code or visit:
www.ntu.edu.sg/admissions

YES

Meet these requirements?

- Pass in H1/O' level Physics, or
- Physics at Standard Level or equivalent, or
- Overall Cap of 2.0 in Physics, or
- Junior High School Level Pass in Physics

YES

NO

Fret not! There are **6** programmes that you can choose from.



BIOENGINEERING*

A hybrid engineer equipped with a strong grasp of life sciences and engineering knowledge, you will solve real-world problems in the health and biomedical sectors.



CHEMICAL AND BIOMOLECULAR ENGINEERING*

You will be ready to address some of the world's most critical areas of needs, from energy efficiency improvements, low carbon and zero-emission technologies, to pharmaceuticals and water.



COMPUTER SCIENCE

Acquire in-depth knowledge on software design and construction with emphasis on creating practical design of efficient and reliable software while understanding the functionality and important features of the hardware required.



DATA SCIENCE AND ARTIFICIAL INTELLIGENCE*

Data, however complex, will not daunt you. With a strong foundation in computer science, statistics and mathematics, you will be ready to solve real-life problems as a data scientist, AI engineer or machine learning engineer in various industries! SkillsFuture Work-Study Degree Programme (WSDP) is available for this programme. Find out more on the right!



MATHEMATICAL AND COMPUTER SCIENCES*

Pursue your passion of solving mathematical challenges and designing software algorithms, data structures, etc. in this course. Become the next Information and Communications Technology (ICT) leader or entrepreneur in fast-developing areas like Financial Technology, Cybersecurity, and Data Analytics.



MARITIME STUDIES*

If you have always been fascinated with the maritime industry, this programme beckons you. Immerse yourself in the breadth and depth of shipping, business, management, and maritime science and technology knowledge. Ride the waves and look forward to an exciting career with Maritime Studies! SkillsFuture Work-Study Degree Programme (WSDP) is available for this programme. Find out more on the right!

With **8** programmes to choose from, you are spoilt for choice!



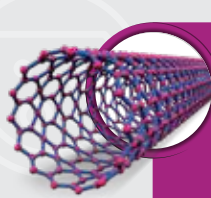
CIVIL ENGINEERING

Design, build, and maintain the foundation for our modern society – our infrastructures, roads, bridges, etc.



ENVIRONMENTAL ENGINEERING

Develop solutions to environmental problems like air and water pollution, and resource recovery. The world is literally in your hands.



MATERIALS ENGINEERING

Materials are fundamental to industries today and the future economy. Be part of this revolutionary and exciting engineering field! SkillsFuture Work-Study Degree Programme (WSDP) is available for this programme. Find out more on the right!



COMPUTER ENGINEERING

Trained in a distinctive fusion of computer engineering and electronics engineering, you will apply the broad knowledge of programming to build new computing platforms and technology.



ELECTRICAL AND ELECTRONIC ENGINEERING

Electrify the world as you revolutionise how people connect and empower future technologies.



INFORMATION ENGINEERING AND MEDIA

Marry your love of art and creativity with information, communications and digital media technology.



MECHANICAL ENGINEERING

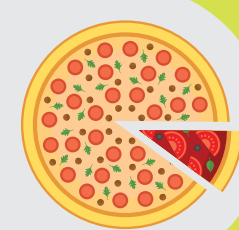
You combine creativity, knowledge and analytical tools to shape ideas into reality. SkillsFuture Work-Study Degree Programme (WSDP) is available for this programme. Find out more on the right!



AEROSPACE ENGINEERING

Soar to greater heights while you develop leading-edge technologies and integrate them into aerospace vehicle systems.

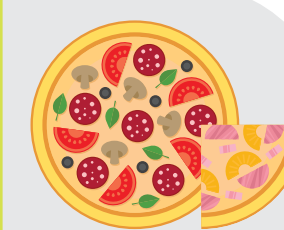
2 Challenge yourself further. Take up a MINOR, SECOND MAJOR or pursue a DOUBLE DEGREE.



MINORS

Choose from an array of minors that complement your single degree programme.

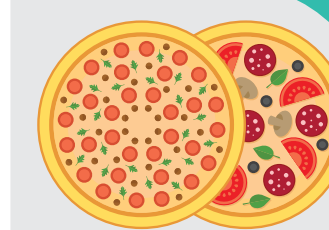
To find out more, please visit:
www.coe.ntu.edu.sg/Minor_Programme



SECOND MAJORS

Consider adding breadth to your single degree programme by taking up a Second Major.

Find out more about our Second Majors below.



DOUBLE DEGREES

Stretch your potential and go further with not one but two degrees.

Check out our double degree programmes below.



Second Major in Business

Combine the technical competencies of your Engineering or Maritime Studies major with the soft skills of management and leadership inherent in Business Studies.

Applicable for all Bachelor of Engineering programmes and Maritime Studies.

For more information on Engineering with a Second Major in Business, please visit:
www.coe.ntu.edu.sg/EngBizMajor

For more information on Maritime Studies with a Second Major in Business, please visit:
www.coe.ntu.edu.sg/ms



Second Major in Food Science and Technology

Develop modern technologies for urban farming, make food longer-lasting and safe for consumption, convert food waste into high-value food ingredients and increase environmental sustainability.

Applicable only for Bioengineering, and Chemical and Biomolecular Engineering programmes.

For more information, please visit:
www.ntu.edu.sg/FST



Second Major in Medical Biology

Master materials derived from and designed for biological systems; and pursue your interest in biology-centred materials and devices.

Applicable only for Materials Engineering programme.

For more information, please visit:
www.coe.ntu.edu.sg/MedBio



Second Major in Pharmaceutical Engineering

Be prepared for an exciting career in the pharmaceutical and healthcare industries with a solid foundation of knowledge in both biochemistry and materials science.

Applicable only for Bioengineering, and Materials Engineering programmes.

For more information, please visit:
www.coe.ntu.edu.sg/PE



Second Major in Society and Urban Systems

Engineer better societies and sustainable urban-built environments to improve the quality of life for people.

Applicable only for Civil Engineering, Electrical and Electronic Engineering, Environmental Engineering; and Mechanical Engineering programmes.

For more information, please visit:
www.coe.ntu.edu.sg/SUS

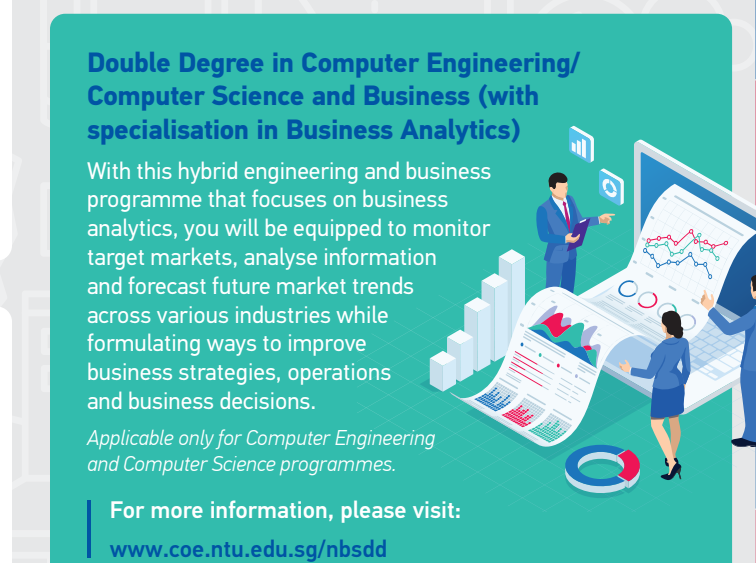


Double Degree in Engineering and Economics

Broaden your understanding of what economic and financial factors should be considered in engineering projects and vice-versa.

Applicable for all Bachelor of Engineering programmes.

For more information, please visit:
www.coe.ntu.edu.sg/DDEngEcon



Double Degree in Computer Engineering/Computer Science and Business (with specialisation in Business Analytics)

With this hybrid engineering and business programme that focuses on business analytics, you will be equipped to monitor target markets, analyse information and forecast future market trends across various industries while formulating ways to improve business strategies, operations and business decisions.

Applicable only for Computer Engineering and Computer Science programmes.

For more information, please visit:
www.coe.ntu.edu.sg/nbsdd



CoE SkillsFuture Work-Study Degree Programmes (WSDPs)

CoE has launched four SkillsFuture Work-Study Degree Programmes (WSDPs) by integrating institution-based learning with structured on-the-job training (OJT) in partnership with companies, to deepen students' industry exposure and enhance their readiness for the workplace after graduation.

- The four programmes are:
- Data Science and Artificial Intelligence
 - Maritime Studies
 - Materials Engineering
 - Mechanical Engineering (Design Stream)

Students will be invited to apply in Year 2, Semester 1.

For more information, please visit:
www.coe.ntu.edu.sg/WSDP

Engineering Foundation Year

To foster greater interaction and collaboration among engineering students and students from all disciplines, CoE is introducing the 'Engineering Foundation Year' for all Year 1 engineering students. Year 1 courses will comprise foundation courses offered on an inter-college and intra-college basis. This promotes the cross-fertilisation of ideas and enriches students' learning as they approach subjects or problems with a multidisciplinary perspective and propose solutions derived at the interfaces of disciplines. This will in turn prepare students for the future workplace.



* If you are taking up Bioengineering with a Second Major in Pharmaceutical Engineering or Bioengineering/Chemical and Biomolecular Engineering with a Second Major in Food Science and Technology, you will require at least a pass in H1/O' Level Physics, Standard Level Physics, Junior High School Level Physics, or achieve an overall CAP of 2.0 in Physics.
+ Denotes Bachelor of Science programme.

Programmes (Direct Honours)		Minimum Subject Requirements for Admissions			
Bachelor of Engineering (B.Eng) Programmes		Singapore-Cambridge GCE 'A' Level	International Baccalaureate Diploma	NUS High School Diploma	International and Other Qualifications
- Aerospace Engineering^{^~+a} - Civil Engineering^{^a~+a} - Computer Engineering^{^~+a} - Electrical and Electronic Engineering^{^a~+a} - Engineering^{~+a} - Environmental Engineering^{^a~+a} - Information Engineering and Media^{^~+a} - Mechanical Engineering^{^a~+a}	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Computing/Physics, and - Pass in H1/'O' Level Physics¹ or equivalent	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Computer Science/Physics, and - Pass in Standard Level Physics² or equivalent	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics, and - Overall CAP of 2.0 in Physics³ or equivalent	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics, and - Pass in Junior High School Level Physics⁴
	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Computing/Physics	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Computer Science/Physics	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics
	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Physics, and - Pass in H1/'O' Level Physics¹ or equivalent	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Physics, and - Pass in Standard Level Physics² or equivalent	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics, and - Overall CAP of 2.0 in Physics³ or equivalent	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics, and - Pass in Junior High School Level Physics⁴
	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Engineering with a Minor in Business (Applicable to all single degree Engineering programmes listed above)	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Engineering with a Minor in International Trading (Applicable to all single degree Engineering programmes listed above)	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Bachelor of Science (B.Sc) Programmes					
- Data Science and Artificial Intelligence⁵ - Mathematical and Computer Sciences⁵ (Double Major)	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Computing/Physics	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Computer Science/Physics	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics
	4	- Pass in H1 Level Mathematics/'O' Level Additional Mathematics or equivalent, and - Pass in a H1 Level/'O' Level Science subject	- Pass in Standard Level Mathematics, and - Pass in Standard Level Biology/Chemistry/Physics	- Major CAP of 2.0 in Mathematics, and - Overall CAP of 2.0 in Biology/Chemistry/Physics	- Pass in Junior High School Level Additional Mathematics, and - Pass in Junior High School Level Biology/Chemistry/Physics/Science
Double Degree Programmes					
- Bachelor of Engineering (Computer Engineering) and Bachelor of Business (with specialisation in Business Analytics) - Bachelor of Engineering (Computer Science) and Bachelor of Business (with specialisation in Business Analytics)	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
	5	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Second Majors					
Bachelor of Engineering in your chosen major with a Second Major in Business	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Bachelor of Engineering in Bioengineering/Chemical and Biomolecular Engineering with a Second Major in Food Science and Technology	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Computing/Physics, and - Pass in H1/'O' Level Physics¹ or equivalent	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Computer Science/Physics, and - Pass in Standard Level Physics² or equivalent	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics, and - Overall CAP of 2.0 in Physics³ or equivalent	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics, and - Pass in Junior High School Level Physics⁴
Bachelor of Engineering in Materials Engineering with a Second Major in Medical Biology	4	Please refer to the minimum subject requirements for the Bachelor of Engineering in Materials Engineering programme stated above.			
Bachelor of Engineering in Bioengineering with a Second Major in Pharmaceutical Engineering	4	- Pass in H2 Level Mathematics, and - Pass in H2 Level Biology/Chemistry/Computing/Physics, and - Pass in H1/'O' Level Physics¹ or equivalent	- Pass in Higher Level Mathematics, and - Pass in Higher Level Biology/Chemistry/Computer Science/Physics, and - Pass in Standard Level Physics² or equivalent	- Major CAP of 2.0 in Mathematics, and - Major CAP of 2.0 in Biology/Chemistry/Physics, and - Overall CAP of 2.0 in Physics³ or equivalent	- Pass in Senior High School Level Mathematics, and - Pass in Senior High School Level Biology/Chemistry/Physics, and - Pass in Junior High School Level Physics⁴
Bachelor of Engineering in Materials Engineering with a Second Major in Pharmaceutical Engineering	4	Please refer to the minimum subject requirements for the Bachelor of Engineering in Materials Engineering programme stated above.			
Bachelor of Engineering in Civil Engineering/Electrical and Electronic Engineering/Environmental Engineering/Mechanical Engineering with a Second Major in Society and Urban Systems	4	Please refer to the minimum subject requirements for the respective single degree Engineering programmes stated above.			
Bachelor of Science in Maritime Studies with a Second Major in Business	4	Please refer to the minimum subject requirements for the Bachelor of Science in Maritime Studies programme stated above.			
Part-Time Bachelor of Engineering (B.Eng) Programmes					
- Computer Science - Electrical and Electronic Engineering - Mechanical Engineering	4	A relevant diploma from one of the local polytechnics. Final-year polytechnic students may apply.			

The information contained in this leaflet is correct as of 31 December 2019. The university reserves the rights to update it from time to time. Please refer to the College's and Schools' websites for updates.

NOTES

- ¹ Pass in H1/'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.
- ² Pass in Standard Level Physics is only applicable to applicants who have not read Higher Level Physics.
- ³ Overall CAP of 2.0 in Physics is only applicable to applicants who have not majored in Physics.
- ⁴ Pass in Junior High School Level Physics is only applicable to applicants who have not read Senior High School Level Physics.

Applicants with only a H1 Level/'O' Level pass in Physics are required to read Physics A (PH1012) instead of Physics (PH1011) in Semester 1 of the first year. This course is not applicable to Computer Science and Computer Engineering.

- [^] This programme is also offered jointly with the College of Humanities, Arts and Social Sciences as a double degree programme with Economics.
- ^a This programme is also offered jointly with the College of Humanities, Arts and Social Sciences as a single degree programme with a Second Major in Society and Urban Systems.
- [~] The programme is also offered jointly with the Nanyang Business School as a single degree programme with a Second Major in Business.
- ⁺ This programme is also offered jointly with the Nanyang Business School as a single degree programme with a minor in Business.

^a This programme is also offered jointly with the Nanyang Business School as a single degree programme with a minor in International Trading.

[#] The programme is also offered jointly with the College of Science as a single degree programme with a Second Major in Medical Biology.

[£] This programme is also offered as a single degree programme with a Second Major in Food Science and Technology.

[®] This programme is also offered as a single degree programme with a Second Major in Pharmaceutical Engineering.

⁵ This programme is offered jointly with the College of Science as a single degree programme.

^{*} Students who are undecided on their Engineering major may opt for Engineering (i.e. Common Engineering) at the point of application. All Common Engineering students will read a semester of engineering studies after which they will be streamed into either Civil Engineering, Electrical and Electronic Engineering, Environmental Engineering, Materials Engineering or Mechanical Engineering at the end of Year 1, Semester 1. In all cases, admissions and streaming into an engineering major are merit-based.

DIPLOMA HOLDERS

Applicants should have a relevant diploma from one of the local polytechnics. Those with a Certificate of Merit, Diploma with Merit or Diploma with Distinction may apply for any programme in NTU regardless of the diploma.

For a list of acceptable local diplomas, please refer to: www.coe.ntu.edu.sg/PolyDiploma

INTERNATIONAL STUDENTS

International students must have completed at least 12 years of general education, or will be taking Year 12 national examinations in the year of application in order to be considered for admission. In addition to fulfilling the minimum entry requirements, applicants must also satisfy the minimum subject requirements.

For further details, please refer to: www.coe.ntu.edu.sg/InternationalOthers

Please refer to the College's and Schools' websites for more information on the Second Majors and Double Degree programmes.