



**NANYANG**  
TECHNOLOGICAL  
UNIVERSITY

*The Singapore 2010  
Youth Olympic Village*



The Best Choose

**NTU**

Why **Don't You?**

Undergraduate  
Prospectus

2010/2011

## **Contents:**

**MESSAGE FROM THE PRESIDENT • 02**  
**MESSAGE FROM THE DEAN OF ADMISSIONS • 03**

**DIVERSE DISCIPLINES WITH REAL-WORLD RELEVANCE • 04**  
**'CONNECT U' TO OUR ALUMNI AND NETWORK • 06**  
**GLOBAL PROGRAMMES • 09**  
**CAMPUS LIFE • 11**  
**IT CONNECTION • 13**  
**LIBRARY • 13**  
**URECA • 15**  
**SCHOLARSHIPS • 16**

**COLLEGE OF ENGINEERING • 18**  
School of Chemical and Biomedical Engineering • 20  
School of Civil and Environmental Engineering • 22  
School of Computer Engineering • 24  
School of Electrical and Electronic Engineering • 26  
School of Materials Science and Engineering • 28  
School of Mechanical and Aerospace Engineering • 30

**COLLEGE OF SCIENCE • 32**  
School of Biological Sciences • 34  
School of Physical and Mathematical Sciences • 36

**NANYANG BUSINESS SCHOOL • 38**  
Programmes • 40

**COLLEGE OF HUMANITIES, ARTS, & SOCIAL SCIENCES • 42**  
School of Art, Design and Media • 44  
School of Humanities and Social Sciences • 46  
Wee Kim Wee School of Communication and Information • 48

**NATIONAL INSTITUTE OF EDUCATION • 50**  
Programmes • 52

**SPORT SCIENCE & MANAGEMENT • 53**

**ESSENTIAL INFORMATION ON ADMISSION**  
Application for Admission • 54  
Application for Admission for International & Other Qualifications • 55  
Application Procedure for Students with International & Other Qualifications • 56  
Admission Criteria for Students with GCE 'A' Level Certificate & Local Polytechnic Diploma • 57  
Admission Criteria for Students with International Baccalaureate Diploma • 60  
Admission Criteria for Students with NUS High School Diploma • 63  
Admission Criteria for Students with International & Other Qualifications • 66

**FINANCIAL ASSISTANCE • 69**  
**TUITION FEES • 72**  
**ESTIMATED MONTHLY LIVING EXPENSES • 72**





## A Message from Dr Su Guanling President

Ranked among the top 1% of universities globally, NTU aims to nurture the next generation of students for a stellar future ahead. As with every batch of students each year, we are excited to welcome the thousands of talented young minds who will be pursuing an extraordinary and outstanding undergraduate experience with us.

Our comprehensive and innovative approach towards education and research contributes to our enduring success. At NTU, we look for faculty who have a passion for both research and teaching. Accordingly, we recruit leading researchers and scientists who lead by example and inspire our students to realise their full potential as entrepreneurial, technology-savvy leaders.

You will find that your learning journey at NTU can take you down many roads. This is due in part to the international make-up of our students, staff and faculty members, as well as our multidisciplinary approach to education. To bring out the best in our students, we offer a broad-based education in diverse disciplines, which challenges students to excel.

NTU prepares its students to take up global leadership roles through a strong academic foundation, overseas immersion, broad exposure to research and a vibrant campus experience. Students not only receive a quality tertiary education, but benefit from being immersed in a lively, global hub comprising some 23,000 undergraduates, 10,000 graduate students and 5,500 faculty and staff from more than 67 countries. The student body includes top scholars and international Olympiad medallists from the region and beyond.

Life at NTU is as exciting as you make it. Broaden your network by taking part in recreational and cultural activities. Participate in our wide range of clubs, societies and committees, to hone your leadership and management skills. Live in one of our 16 Halls of Residence and meet other bright young people from all over the world. It all adds up to a remarkable undergraduate experience that will open doors to great careers and provide a springboard to your future endeavours.

In 2010, our garden campus, housing Singapore's largest on-campus residence infrastructure, will be transformed into the inaugural Youth Olympic Village – home for thousands of international athletes and officials participating in the world's first Youth Olympic Games.

I invite you to join NTU and become part of our vibrant, cosmopolitan community. I look forward to welcoming you to the NTU family!

On behalf of the Nanyang Technological University, allow me to extend a warm welcome to you!

NTU is among the world's foremost modern research universities, internationally recognised by the community for its strong technological base and traditions, and for its highly rated business school. We are one of the top engineering colleges in the world, as well as the main science and technological university in Singapore. NTU makes significant contributions to research and innovation spearheaded by the Singapore National Research Foundation. We are particularly strong in biomedical sciences, environmental and water technologies and interactive and digital media. In addition, we are also developing innovative Arts and Humanities capabilities, a direction rarely taken up by other science and technological institutes.

NTU is highly ranked in both Asia and the world. We are rated globally among the top 75 comprehensive universities, and are also among the top 35 technology universities worldwide. In Asia, we are ranked among the top 15 universities. The international repute of NTU attracts a 2,700-strong teaching and research staff hailing from more than 50 countries, bringing dynamic international perspectives and years of solid industry experience. Indeed, learning at NTU transcends the boundaries of campus, city and country!

I firmly believe therefore that as a student you will have ample opportunities to interact with a range of personalities, cultures and characters in a vibrant, holistic and enriching environment. You will develop creativity, entrepreneurship, leadership and interpersonal skills through a broad-based tertiary education.

The University is fully committed to the development of multidisciplinary research, and we are excited by the recruitment of leading scientists from across the world following a renewed impetus in research. Coupled with the international background of your fellow students and faculty, you will find that your stay at NTU is well-balanced, progressive and rewarding.

In closing, I would like to encourage you to explore how our multidisciplinary approach promotes fresh, dynamic perspectives, allowing us to consistently produce some of the most sought-after graduates in the world. Should you have any enquiries, feel free to contact us via telephone, email, or in person. Our staff at the Office of Admissions and Financial Aid will assist you with any information that you might need.

I hope you will join the NTU family and I wish you every success in your quest for high quality education.



## A Message from Dr Lalit Goel Dean of Admissions

As a student of NTU, you gain much more than a research-intensive, world-class education with a global perspective. Our strong affiliations with major corporations and industry leaders bring an added depth to your education in terms of research and global internship opportunities.

# Diverse Disciplines

with Real-world  
Relevance



Globally acknowledged as a research-intensive university with strengths in science and technology, the Nanyang Technological University has four colleges with 12 schools, and the autonomously run National Institute of Education.

The **College of Engineering**, one of the largest in the world, offers pioneering programmes designed in response to changes in the industry needs, so you know that you'll be in high demand upon graduation.

Making its mark as an emerging leader in life sciences research, the **College of Science** creates other firsts as the only institution in Singapore to offer direct honours bachelor's degree programmes in the physical and mathematical sciences.

For a well-rounded business education, look no further and make our **Nanyang Business School** your institution of choice. The Nanyang Business School is the first and only Singapore business school to be ranked in the top 25 of the Financial Times Global MBA 2009 rankings.


The **College of Humanities, Arts, and Social Sciences** boasts Singapore's first professional art school offering degree courses in art, design and media; a humanities and social sciences school with programmes in English,

Psychology, Sociology and more; and a school of communication and information with programmes in journalism and media.

The **National Institute of Education**, Singapore's only teacher-training institute, is internationally acclaimed and plays an important role in developing high quality teacher-training programmes.

In pursuing her goal to be a great global university, NTU places equal emphasis on research excellence and quality of education. Our Mission of "nurturing creative and entrepreneurial leaders through a broad education in diverse disciplines" expresses our commitment to moulding the next generation of leaders through a multi-dimensional education that emphasises character building as much as academic learning. Through our NTU's Undergraduate Experience, you will benefit from a broad-based education in diverse disciplines, including residential living, internship opportunities, global experience and undergraduate research projects. Our vibrant student activities provide opportunities for leadership and team-building.

As a world-class university, NTU offers you an enriching and holistic tertiary education, based in a creative learning environment, nurturing you to develop to your fullest potential.



As an NTU student, the privileges you'll enjoy go beyond hands-on learning and industry immersion. You'll also enjoy associations that are integral to your holistic development. In addition to student bodies, you'll benefit from associating with our growing alumni, supported by the NTU Alumni Affairs Office (AAO).

# 'Connect U' to our alumni and network

Be 1 with over  
130,000 alumni  
worldwide

At AAO, we get involved with students from the very beginning. From the time you become a student of the University, we are there to support through our active involvement in student activities and the events organised by the various student bodies on campus. And when you graduate from NTU, AAO will still be there for you: We 'Connect U' now and beyond. We plan networking activities and invite all alumni to take part so they can stay in touch with faculty and peers. We believe our alumni play a key role in contributing towards our vision of becoming a great global university.

We encourage you, our future alumnus, to enlarge your circle of friends, engage AAO and tap on our services. Today, AAO has built a strong alumni network, with various chapters set up across the globe. Be one with us and you'll discover that

membership with a global network has its privileges.

### Alumni privileges

- Free lifelong alumni email account and Pmail forwarding service
- Free magazines – NTULink and @NTU
- Free electronic newsletter – ClassACT
- Reunions and social activities
- Alumni e-forum
- Access to the NTU Library at discounted subscription rates
- Courses organised by NTU's Centre for Continuing Education at discounted rates
- Access to Career Services provided by NTU Career Hub (Career & Attachment Office)
- Access to facilities at the Nanyang Executive Centre at discounted rates
- Solemnisation of marriage services
- OCBC-NTU VISA Gold Card

[www.ntu.edu.sg/Alumni](http://www.ntu.edu.sg/Alumni)



### **Ms Denise Tan Li Xuan**

Bachelor of Science (Honours) in Biological Sciences,  
Class of 2006  
Manufacturing Biotechnologist,  
Lonza Biologics Tuas

After my graduation from junior college in 2002, I wanted to continue my tertiary education in life sciences and NTU's School of Biological Sciences (SBS) stood out. SBS covered diverse areas of biological sciences; its curriculum more rigorous and stronger emphasis on building a solid foundation. I entered SBS as the pioneer batch of biological sciences students.

The skills I gained through presentations enhanced my ability to better present myself to my future bosses and clients. The professors demanded no less than quality work, pushing us to approach problems with in-depth analysis. Besides independent learning, we were encouraged to seek and explore internship opportunities on our own. Subsequently, while juggling classes, I secured myself a position in SGH to work on cancer biology which continued on as my final year thesis project.

I was heavily involved in the NTU Welfare Services Club, organising nation-wide fund raising events for the underprivileged and we were awarded the Commonwealth Youth Gold Award in 2004. Through these activities, I picked up leadership, time management skills and became a good team player, traits proved beneficial in my current job scope.

In 2006 while approaching graduation, my attachment program in the biopharmaceutical industry allowed me to spend 18 months in the U.S.A. to learn about large scale mammalian cell culture manufacturing technology. After which, I returned to Singapore and was part of the core team involved in leading the commissioning and validation work of a new plant.

I am forever grateful to NTU for inculcating in me a spirit always ready to take on new challenges and a place where life-long friendships were forged. Even if time reverses, NTU's School of Biological Sciences remains my top choice.



### **Ms Serene Loo**

Bachelor of Communication Studies, Class of 1999  
Master of Science (International Relations), Class of 2008  
News Presenter, Chinese News, Television,  
MediaCorp Pte Ltd

For my final year project at the School of Communication Studies (now known as the Wee Kim Wee School of Communication and Information), I filmed a video documentary about hospice patients with terminal illnesses going through the last journey of their lives. The filming, while inspiring and fulfilling, was plagued with challenges. I was really frustrated until my mate introduced a different perspective. We were students and the project was perhaps the best time we could afford to make mistakes and learn from them. Apart from picking up skills of telling a good story through a visual medium, the filming taught me ethics of documentary-making and journalism, propelling me towards becoming a professional and ethical journalist.

NTU also marked the start of my journey pursuing my dreams. It provided me with a great platform to learn about journalism and television production. After graduation, I took on the jobs of a documentary producer, a broadcast journalist and a news presenter. It was the perfect melding of my passion and interests. The training I had at NTU definitely provided me with an edge when pursuing these jobs. NTU has not only taught me knowledge and skills, it has also equipped me with a positive, passionate and "can-do" attitude towards life.

I stayed in Hall 10 for the large part of my university life. Many lasting friendships were forged in this time, even while waiting for my turn to use the bathroom in the communal toilets! Everyone would cook and eat together or jog around the campus or simply hang out. My father, who did not have the luxury of going to a university during his time, always looked at me with envy whenever he dropped me off at the hostel on Sunday nights. This was one of the most fun experiences of university life, an experience I will cherish for life!



### **Mr Ray Zhang**

Bachelor of Business, Class of 2006  
Area Director (Global Operations - North America),  
Contact Singapore

I am glad I chose NTU for my undergraduate studies. My three years in the Nanyang Business School gave me a head-start in my career without compromising on my learning and knowledge acquisition. I particularly like the broad-base education and the varieties of electives available for us to choose from.

I remember vividly the Business Communications classes where we created effective presentation materials and were presenting professionally. Our presentations were recorded on film and reviewed right after. We sure were nervous. But after that semester, we no longer stammer nor were petrified by the camera. That definitely helped me ace my presentation interviews.

We were given room for creativity and entrepreneurship, which in turn gave rise to the Human Resource Consulting Club. With the full support of the school and faculty members, we organised orientation programmes, networked with the industry practitioners & alumni, and fostered team building. I also took Spanish as an elective and was one of the founding members of the NTU Spanish Society.

I may have graduated a Business student specialising in Human Resource Consulting, I did not feel restricted to HR-related jobs. The NTU Business degree is our passport to a diverse and global career. I went from developing the Singapore lifestyle and sports business industry, at the Economic Development Board to promoting working and living in Singapore to talents from Southeast Asia at Contact Singapore.

Both the career and alumni offices provided valuable advice and network for students and alumni. I urged graduates to stay connected with NTU. Let NTU make an impact in your life today, and you will make an impact to someone and the society tomorrow.



### **Dr Zuruzi Abu Samah, PhD**

Bachelor of Engineering (Honours) in  
Materials Engineering, Class of 1997  
Senior Lecturer / Assistant Manager  
School of Engineering (Manufacturing),  
Nanyang Polytechnic

It was at NTU where I discovered my passion for scientific research, studied with passionate professors, and met people whom had a lasting impact on me. The Materials Engineering programme was an extended family with close friends and caring mentors interested in my academic and personal well-being.

NTU prepared me well for the competitive world of research. In addition to rigorous training, NTU provides plenty of research opportunities for undergraduates. I recall fondly collaborating with mentors and how this resulted in scientific publications with my name on them! These publications helped me win scholarships when I pursued my dream to do a PhD overseas. I am grateful to my NTU's mentors who helped me realise my dreams. In a way, my career choice of becoming a teacher was shaped by them; to help others fulfill their dreams.

I gained a lot from the NTU's undergraduate experience, not just in terms of academic training but lasting relationships that helped in my personal and career development. It is something that I would recommend to anyone!

# Global Programmes

<http://global.ntu.edu.sg/>



Global Programmes is a showcase of NTU global initiatives for our undergraduates to “get ahead” by exploring cultural, classroom and career experiences through various global programmes.

Spurred by our mission of Educating Leaders and Advancing Knowledge for Singapore and beyond, we have developed partnerships with prominent foreign universities and organisations at home and abroad to give you a dynamic global education experience.

Out-going exchange opportunities:

- Global Immersion Programme (GIP)
- International Student Exchange Programme (INSTEP)
- Global Summer Studies (GSS)
- Global Discovery Programme
- Overseas Attachment Programme

## Global Immersion Programme

NTU's flagship Global Immersion Programme (GIP) gives specially selected students the opportunity to go abroad for six-month work and/or study immersions in China, India, Indonesia, Europe (Switzerland, France and Germany), United States or Vietnam to gain a thorough global experience.

The GIP experience gives students a first-hand understanding of the unique culture, way of life, entrepreneurial spirit, and energy of some of the world's most exciting and dynamic economies. Combining rigorous academic grounding with global perspectives and exposure also helps students develop an edge in their career, build a global network, and achieve significant personal development.

## International Student Exchange Programme

With INSTEP you will have the opportunity to spend a semester or two living and studying abroad. You'll get to enjoy the challenge of stepping out for a real taste of international student life while pursuing your NTU degree. You will return not only with new knowledge, but broader perspectives, increased cultural understanding and lifelong friends. From Mexico to China to South Africa, a world of adventure awaits you. INSTEP partner universities include:

- McGill University, Canada
- Rice University, USA
- Royal Institute of Technology, Sweden
- Purdue University, USA
- University of Toronto, Canada
- University of Warwick, UK

## Global Summer Studies

Global Summer Studies (GSS) is a “study-n-play” programme that gives NTU undergraduates the opportunity during their May-July summer break to travel to an overseas university to participate in programmes and earn academic credits at the same time.

Open to all undergraduate students regardless of their year of study, GSS is held at selected partner universities around Asia, Europe and the Americas and offers programmes related to academic coursework, cultural immersion or language instruction.

Some of the benefits of GSS include:

- Earning as many as 8 academic units
- An international learning experience about the academic culture and heritage of the university and country
- An opportunity to gain global exposure and network with peers and professors at other prestigious universities such as UC Berkeley, Technical University of Munich, Chinese University of Hong Kong, and London School of Economics & Political Science, etc
- No limits on vacancies at universities under GSS (USA)

## Global Discovery Programme

Global Discovery Programme is a four-week study and visit programme that aims to give you a broad understanding of emerging economies such as Vietnam and India as potential career options.

Rather than simply presenting and discussing business-related issues within the confines of a classroom, the Programme encourages you to make your own evaluation through field trips and networking sessions with local representatives of business houses, management boards and investment firms. By the end of the Programme, you will gain a sweeping review of the historical evolution of the country/region, its political and administrative system and the economic transformation that is now taking place in each of these places – not to mention the excursions and visits to the many fascinating places of interests.

## Overseas Attachment Programme

In Year 2 or Year 3, you will have the opportunity to widen your perspective of the working world through the Overseas Attachment Programme, a unique learning process built on the partnership between NTU and your related industry.

With attachments available in Australia, China, France, Germany, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Nepal, Switzerland, Taiwan, Thailand, The Netherlands, United Arab Emirates, United Kingdom and United States, participation in the Programme will help you to enhance your employability and career mobility worldwide upon graduation.



An integral part of university life is the experience of living on campus. This gives you the convenience of easy access to the academic facilities, the 100-odd student organisations, as well as the opportunity to take part in many extracurricular activities designed to build character, provide experience and promote bonding. NTU's main 200-ha garden campus is home to 16 Halls of Residence, with a total capacity of 9226.

# Campus Life





### **Halls of Residence**

Our 16 undergraduate Halls of Residence are each equipped with:

- reading room
- music room
- computer room
- TV room
- laundry room
- kitchenette
- lounge
- ironing room
- wireless Internet access

### **Off-campus Accommodation**

NTU facilitates the search for accommodation outside campus by students by providing an online portal for members of the public who have rooms or apartments to be let out to post their information online.

### **Recreational Activities**

We expect you to work hard and play hard during your time at NTU. This is why the campus abounds in recreational facilities to help you unwind.

### **Student Activities Centre**

With a café, two lounges, a convenience shop and meeting rooms, the Student Activities Centre is the perfect place to interact or just chill out.

### **Sports and Recreation Centre**

At NTU, we actively promote healthy living through participation in sports and recreational events organised through the Sports and Recreation Centre. As an NTU student, you also have the opportunity to take part in a wide variety of sports at a competitive level, such as dragon boat racing, fencing and water polo.

The Centre offers the following facilities:

Indoor: activity rooms, fitness gyms, sports halls, squash courts, indoor bouldering wall, table tennis room

Outdoor: running track, archery range, basketball courts, cricket pitch, multi-purpose field, multi-purpose courts, sepak takraw courts, tennis courts

Aquatic: swimming pool, diving pool

# IT Connection



Whether on campus or at home, you can always stay connected with NTU via the computer. You can apply for professional internship, check examination details, view recorded lectures, select preferred courses, set up an online collaboration, share your thoughts and vote for popular ideas to enhance teaching and learning, right at your fingertips. All these are made possible with the high-speed wired campus network, NTUnet, as well as the campus-wide wireless network, NTUwireless.

With the high bandwidth, you are able to do video streaming which is gaining popularity in e-learning and campus-wide information dissemination, including coverage of 'live' events. NTUnet has the capacity to enable every PC on the campus network to receive multiple concurrent video streams such as CNA news and multimedia campus news.

NTU provides over 20,000 networked PCs for use by staff and students across campus. These are housed in convenient locations across campus, such as the central computer room, the libraries, schools and halls of residence.

If you are away from the campus, you can connect to the University's resources via 150 dial-in lines or your broadband account with Internet Service Providers (ISPs) anytime, anywhere.



# Library

NTU Library is a valuable partner to our NTU staff and students, providing a comprehensive range of information resources, tools, services and facilities to support their learning and research requirements.

## Extensive Resources

As an NTU student, you can enjoy access to a comprehensive range of physical resources:

- More than 694,000 books with about 69,000 volumes added per year
- 29,200 audio-visual items

and a depth of e-resources:

- 132 subscribed databases covering all disciplines
- 32,450 electronic and print journal titles

## Research Tools

To help you find the resources you require easily, the Library offers a range of information-finding and research tools:

- The user-friendly Library Catalogue enables you to search for books and audio visual materials, reserve them and renew your loans.
- You can browse journal articles and online materials through the Journal and Database A-Z Lists.
- The Library also provides tools for you to store, organise, format and annotate your search results.

## The Libraries

All library facilities are wireless enabled and together provide more than 600 computer work stations and networked printing facilities for users.

### • Art, Design & Media Library

ADM Library is located within the School of Art, Design & Media and is specifically designed to reflect the creative and artistic nature of its environment. It houses a growing collection of resources in the visual arts, architecture, drawing, design, illustration, painting and photography and a strong collection of AV materials. Interesting areas in the Library include a mini cinema, individual AV viewing carrels, a flexible seating space and a large, writable black glass wall.

### • Asian Communication Resource Centre (ACRC)

ACRC is located in the Wee Kim Wee School of Communication & Information and incorporates materials from the former Asian Media Information and Communication Centre (AMIC) Documentation Unit and the SCI Resource Centre. The collection comprises resources on advertising, broadcasting, communication studies, information studies, journalism, knowledge management, library science, media law and ethics, amongst others.

### • Business Library

This Library houses the core business collection comprising of books and journals in the field of accounting, banking, business law, entrepreneurship, finance, hospitality management, international business, management, marketing and strategy. It also holds the main audio-visual collection comprising music CDs as well as VCD and DVD titles in all subject areas and genres. Ample workstations and media viewing rooms are provided for the listening and viewing pleasure of these audio-visu-als. This Library is a popular place for many students as it has quiet spaces

## Friendly, Efficient Service

Take advantage of the specialist knowledge of our friendly librarians, who will be pleased to help you locate the information you seek. To upgrade your research skills, you can even attend classes, conducted by our librarians, on how to review literature, find and use information effectively and gain a deeper understanding of the scholarly communication environment.

and individual study rooms as well as spaces for collaborative work distributed over four floors.

### • Chinese Library

The interim Chinese Library houses resources in the Chinese language on Chinese literature and history, philosophy and religion, linguistics, politics, economy and sociology, management science and Traditional Chinese Medicine. It is a small but welcoming area popular with users wishing to read Chinese language materials.

### • Humanities & Social Sciences Library

This interim library provides a growing collection relating to psychology, sociology, history, linguistics, literature, philosophy and public administration. To meet the diverse needs of users, the library has facilities for group learning and quiet study. Facing a gentle green slope, it also offers a conducive setting for reflection and leisure reading.

### • Lee Wee Nam Library (Engineering and Science)

This is our flagship library building and was named in recognition for a generous donation by the family of the late Mr Lee Wee Nam. The library houses the Engineering and Science collections and the Library administration. This well-photographed building has reading space cater for both group discussions as well as individual quiet reading. The window seats, in particular at Level 5, overlook the green campus surroundings and have an excellent view of Jurong West and even parts of the Straits of Johor.

### • Wang Gungwu Library

In 2003, Professor Wang Gungwu made a generous book donation to the Resource Centre at the Chinese Heritage Centre. The Resource Centre was renamed Wang Gungwu Library in recognition of the Professor's contribution to research on Chinese overseas and for his generous donation. The library focuses on collecting materials related to Chinese overseas.

# URECA



URECA is the acronym for **U**ndergraduate **R**esearch **E**xperience on **C**ampus, a university-wide programme designed to cultivate a research culture amongst the most able undergraduates in NTU. The programme is available to undergraduates (second and third-years in four-year Bachelor's degree programmes and second-year in three-year Bachelor's degree programmes) who have excelled in their academic examinations. Though young by international standards, these NTU undergraduates, known collectively as NTU President Research Scholars, have a unique opportunity to touch, feel and experience research at a level not available elsewhere.

Under the URECA programme you will:

- experience research under the guidance of the professor and his/her research team
- choose a research project in any discipline in any school under any URECA professor and earn academic credits towards your degree.
- earn monetary allowance
- compete in a URECA poster competition with attractive awards
- be eligible for funding to present your paper at a reputable international conference
- receive the prestigious title "NTU President Research Scholar" or "DSO-URECA Research Scholar"
- have the opportunity to participate in FYP-URECA in your final year

## **DSO-URECA**

(Sponsored by DSO National Laboratories)

Offered to qualified Singaporean students to work on DSO-URECA projects jointly supervised by NTU professors and DSO scientists.

## **SIMTech-URECA**

(Sponsored by Singapore Institute of Manufacturing Technology)

Offered to URECA students to work on research projects jointly supervised by NTU professors and SIMTech scientists.

For more information, please visit [www.ntu.edu.sg/URECA](http://www.ntu.edu.sg/URECA)

# Scholarships



## Nanyang Scholarship

The Nanyang Scholarship is a prestigious award in recognition of academic excellence, talent, leadership and a passion to contribute to society. As a Nanyang Scholar, you will be able to develop creativity and interpersonal competence through the unique Leadership Training Programme. Coupled with the comprehensive curriculum that incorporates actual workplace experience and life skills, you can explore various possibilities to realise your full potential.

## Provisions of the Nanyang Scholarship

If selected as a scholar and upon maintaining satisfactory standard of performance and conduct, you will receive the following training and allowances throughout the course of your undergraduate study:

- Unique leadership training programme
- Priority for Global Immersion Programme
- Subsidised tuition fees (after Tuition Grant)
- Living allowance of S\$6,000 per academic year
- Book allowance of S\$500 per academic year
- Accommodation allowance up to S\$2,000 per academic year (applicable to scholars who reside in NTU hostels only)
- Settling-in allowance of S\$250 (one-off)
- Computer allowance of S\$1,500 (one-off)

## College Scholarship

The College Scholarship is a new scholarship launched by NTU in AY10/11. As a College Scholarship recipient, you will receive a waiver of subsidised tuition fees (after Tuition Grant) and a living allowance of S\$3,600 per academic year. The scholarship will be renewed on a semester basis subject to the student maintaining satisfactory standard of performance and conduct.

There is no bond attached to the Nanyang Scholarship and the College Scholarship apart from the three-year bond applicable to all Singapore Permanent Residents and International students under the Tuition Grant Scheme.

## Other Scholarships

NTU administers other merit-based awards such as the ASEAN Undergraduate Scholarship, LKY-STEP Award, Lee Hsien Loong Award for Outstanding All-Round Achievement, OCBC International Undergraduate Scholarship, SembCorp Industries Undergraduate Scholarship, SIA-NOL Undergraduate Scholarship, The Khoo Teck Puat Scholarship, University Engineering Scholarship and Wee Kim Wee Legacy Fund Undergraduate Scholarship.

For more information, please visit  
<http://admissions.ntu.edu.sg/UndergraduateAdmissions/Pages/Scholarships.aspx>

## CN Yang Scholars Programme

The CN Yang Scholars Programme is a premier undergraduate programme for Science and Engineering students with a deep passion for science. It is named in honour of Professor CN Yang, Nobel Laureate in Physics (1957) and one of our era's greatest scientists.

The programme shares the same philosophy as the Caltech Core Curriculum and the MIT General Institute Requirements in providing a strong and broad foundation in the basics of Science and Mathematics. This empowers the student to delve deeper into any discipline in Science, Technology, Engineering and Mathematics, and to develop an interest in forefront research.

After completing the core curriculum, a student may pursue any Engineering or Science Degree Programme. Every student will be assigned a mentor who will provide guidance for the student's whole academic programme at NTU. Upon completion of the challenging CN Yang Scholars Programme, the scholar will also be awarded a special certificate.

- The Nanyang scholarships will be awarded to successful local applicants with the following benefits:
  - Unique leadership training programme
  - Priority for Global Immersion Programme
  - Subsidised tuition fees (after Tuition Grant)
  - Living allowance of S\$6,000 per academic year
  - Book allowance of S\$500 per academic year
  - Accommodation allowance up to S\$2,000 per academic year (applicable to scholars who reside in NTU hostels only)
  - Settling-in allowance of S\$250 (one-off)
  - Computer allowance of S\$1,500 (one-off)
- Selected international students will be awarded one of the following scholarships:
  - Nanyang scholarship (for all nationalities)
  - ASEAN undergraduate scholarship (for Citizens or Singapore Permanent Residents of ASEAN countries except Singapore)
  - SembCorp undergraduate scholarship (for Citizens of Indonesia)
  - SIA-NOL undergraduate scholarship (for Citizens of India)
- Other highlights:
  - Guaranteed stay in NTU halls of residence
  - Participation in programmes offered by the NTU Institute of Advanced Studies
  - Opportunities to meet world-renowned academics
  - Priority in overseas exchange programmes and research attachments

Recipients of other scholarships are eligible to study the CN Yang Scholars Programme. Successful applicants are required to fulfill the terms and conditions of the scholarships.

For more information, please visit  
<http://www.ntu.edu.sg/cnyang-scholars>

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*I chose NTU as the place to gain my Bachelor's degree in EEE primarily because of the greater emphasis it placed on experiential learning. Tutorial questions encourage students to seek alternative perspectives, resulting in an increased ability to solve complex problems. In addition, my knowledge of electronic circuits was appreciated during my internship, another highlight of the NTU Undergraduate programme.*”

**Sureshkumar Chandrasekar**

*School of Electrical & Electronic Engineering*

## College of Engineering

As one of the largest engineering colleges in the world with six constituent Schools, 16,000 students, 600 faculty and 1,200 non-faculty staff, the College of Engineering offers a rich array of multidisciplinary programmes and specialisations catering to the varied interests, talents and career aspirations of our students.

We aim to nurture well-rounded engineer leaders who are flexible across disciplines and not limited by national boundaries. The holistic and versatile education you receive at the College gives you a strong and sustainable foundation for an exciting future, diversity in engineering professions and global leadership.

**NEW**

### **Bachelor of Engineering<sup>#</sup> with Business Minor**

This is a new programme jointly offered by the College of Engineering and the Nanyang Business School. The curriculum is purposefully structured such that the Engineering core inculcates analytical, problem-solving and entrepreneurial skills in students, while the Business minor empowers them with the know-how in the various aspects of business management. The programme is a winning combination that will equip graduates with the necessary technical skills and a good understanding of today's business essentials, giving them a head-start in their careers.

*# Applicable to all single Engineering degree programmes except Maritime Studies*



# School of Chemical and Biomedical Engineering



Comprising the Division of Chemical and Biomolecular Engineering and the Division of Bioengineering, the School of Chemical and Biomedical Engineering (SCBE) aims to train a new generation of engineers through a rigorous undergraduate curriculum that integrates principles of engineering with fundamentals of life and chemical sciences.

SCBE combines modern infrastructure and state-of-the-art research and teaching facilities housed in two buildings totalling 30,000 square metres to provide you with a stimulating learning environment and opportunities to identify and pursue personal and professional goals.

## Programmes Offered

- **Bachelor of Engineering in Chemical & Biomolecular Engineering**  
This programme amalgamates principles of chemical engineering and life sciences (biology, biochemistry and genetics) to facilitate the development of safe, profitable and environment-friendly processes for the synthesis and manufacture of products from chemical/biological raw materials.
- **Bachelor of Engineering in Bioengineering**  
This programme blends modern biological principles with advanced engineering methods in electronics, materials, mechanics, biocomputing and informatics to train high-standard engineers for biomedical and biotechnology industries as well as healthcare and clinical services.

[www.ntu.edu.sg/scbe](http://www.ntu.edu.sg/scbe)



## Unique Features

Provides educational experiences that facilitate you to gain a strong grounding in engineering principles and a thorough understanding of the fundamentals of the biomedical and chemical sciences. You will have the opportunity to undergo multidisciplinary training in emerging areas of relevance to your degree programme. With the rigorous training, you can also look forward to developing good communication and systematic problem-solving skills.

- [Double Degree in Bachelor of Engineering \(Chemical & Biomolecular Engineering/Bioengineering\) & Bachelor of Arts \(Economics\)](#)

This five-year double degree programme, awarded by SCBE and the School of Humanities and Social Sciences, aims to equip you with a strong foundation in the fundamentals of Bioengineering or Chemical & Biomolecular Engineering principles and knowledge of Economics. The combined technical and analytical skills will be highly valued in the competitive economy.

## Career Prospects

Chemical and biomolecular engineers obtain training in diverse areas and hence possess the flexibility to adapt to different industrial sectors, in particular the chemical and pharmaceutical sectors. Graduates can find challenging opportunities in traditional as well as emerging engineering fields such as petrochemicals, biopharmaceuticals, specialty chemicals, food/flavours/fragrances, nanotechnology and others.

The booming biomedical engineering and sciences sector is slated to be a key engine of Singapore's future growth. Bioengineers, being well-versed in both engineering and biomedical sciences, find attractive opportunities in industries, research institutes, hospitals and organisations that deal with biomedical instrumentation, medical devices, biomaterials, drug discovery and others. Alternatively, they may continue their study in medical schools or top PhD programmes around the world.

# School of Civil and Environmental Engineering



As a civil engineer and environmental engineer, you build the world's infrastructure. You erect structures, both modest and magnificent, bring fresh water to the masses, dispose or recycle the wastes they generate, and move people and goods safely and efficiently from one location to another. In the new millennium, civil and environmental engineers will be challenged to find the best solutions to the most pressing problems of society in an environmentally sustainable manner.

The vision of the School of Civil and Environmental Engineering (CEE) is to be a leading school for sustainable built environment. Trained by CEE, you will be at the forefront of tomorrow's civil and environmental engineering standards.

## Programmes Offered

- **Bachelor of Engineering in Civil Engineering**  
During this four-year course, you can expect a well-balanced curriculum with exposure to the theoretical and practical aspects of engineering practice as well as emphasis on self-exploration and creativity.
- **Bachelor of Engineering in Environmental Engineering**  
This programme offers you a comprehensive and multi-disciplinary education through the application of Science and Engineering principles for the management and protection of our environment. The professionally oriented learning experience serves as a good foundation for a challenging career in Environmental Engineering.

[www.ntu.edu.sg/cee](http://www.ntu.edu.sg/cee)

- **Double Degree in Bachelor of Engineering (Civil Engineering/Environmental Engineering) & Bachelor of Arts (Economics)**

These five-year programmes offered by CEE and the School of Humanities and Social Sciences will give you a greater appreciation of both engineering and economic environments and offer you unparalleled prospects in today's competitive business landscape. Armed with two honours degrees, you will be able to choose from a plethora of careers in civil/environmental engineering, financial and business services industries.

- **Bachelor of Science in Maritime Studies**

The Maritime Studies Programme is a four-year programme with a primary focus on shipping, business management, maritime science and technology. In your third year, you will travel to Norway to study at the Norwegian School of Management (BI) for a semester.

- **Bachelor of Science in Maritime Studies with Business Major**  
CEE offers a double major programme which combines BSc (Maritime Studies) with a Business Major from the Nanyang Business School. You will benefit from these programmes' cross-disciplinary approach and strong industry support, enjoying expanded career options and enhanced employability.

## Unique Features

At CEE, you are provided with a comprehensive and broad-based education that emphasises critical thinking and communication skills, preparing you for successful engineering practice, advanced studies, professional responsibility and life-long learning. The research you conduct will contribute to both the civil and environmental engineering industries and society by advancing the profession and improving the quality of life.

## Career Prospects

Civil Engineering graduates can look forward to a wide range of career prospects in fields like infrastructure planning and development, project procurement and management, water resources engineering, while Environment Engineering graduates can advance into areas of environmental technologies development, water and wastewater treatment, wastewater reclamation and reuse, membrane technologies, and desalination and resource recovery. Graduates from our Maritime Studies programme can look forward to global maritime careers to complement Singapore's drive to become an international maritime centre.



# School of Computer Engineering



Building over 20 years of experience, the School of Computer Engineering (SCE) has designed diverse quality programmes that are in-step with the needs of tomorrow's global economy. Our programmes are uniquely created to equip you with the relevant tools to make in-roads into a plethora of industries such as infocomm, banking and finance, research and development, digital media, animation and gaming. Students will have access to state-of-the-art facilities as well as wide learning opportunities while being mentored by the finest faculty in the fields of Computer Engineering and Computer Science.

At SCE, lessons go beyond textbooks and classrooms. You will acquire critical hands-on experience through project-based learning, carefully selected industrial attachments and overseas exchange programmes. The learning culture at SCE transforms students into resourceful and independent professionals who are equipped with the readiness and mental resilience for lifelong learning and leadership. Our degree programmes are based on the recognition that it is essential for you to be able to meet goals and rise to challenges.

## Programmes Offered

- **Bachelor of Engineering in Computer Engineering**  
You will gain a broad knowledge of programming and electronics and develop specialist skills in software and firmware design as well as hardware interfacing. By graduation, the combination of sound knowledge and practical skills you would have attained will stand you in good stead for a career in industry and commerce.
- **Bachelor of Engineering in Computer Science**  
The Computer Science curriculum trains you to apply computing technology efficiently through the design of efficient algorithms and data structures, design methodologies and language paradigms. There is also an emphasis on the practical design of efficient and reliable software to meet given specifications.

[www.sce.ntu.edu.sg](http://www.sce.ntu.edu.sg)



- **Double Degree in Bachelor of Engineering (Computer Science) & Bachelor of Business (Information Technology)**  
This hybrid curriculum has been specially designed to seamlessly integrate both computing and business elements. In this four-year double degree programme from SCE and the Nanyang Business School, you will be trained in the fundamentals and the combined application of technical and soft skills of business and computing.
- **Double Degree in Bachelor of Engineering (Computer Science /Computer Engineering) & Bachelor of Arts (Economics)**  
These five-year programmes offered by SCE and the School of Humanities and Social Sciences will give you a greater appreciation for both engineering and economic environments and offer you unparalleled prospects in today's competitive business landscape. Armed with two honours degrees, you will be able to choose from a plethora of careers in infocomm, financial and business services industries.
- **NTU-Georgia Tech Integrated Programme in Bachelor of Engineering (Computer Science/Computer Engineering) awarded by NTU & Master of Science (Computer Science) awarded by Georgia Institute of Technology, USA**  
Gain a comprehensive all-round education with a global perspective on this fast-track programme in which you will spend 3 years in SCE, building a strong foundation in Computer Science/Computer Engineering, and spend the next 1 to 1-1/2 years at Georgia Tech's College of Computing.

## Unique Features

### ELITE

Distinct to SCE, you will be able to participate in the ELITE (Enhanced Learning in Infocomm Technology) Programme. Together with IDA and its industry partners, this programme seeks to provide undergraduates the opportunity to sharpen their skills through a variety of activities that seek to complement a classroom-based learning experience. These include industrial mentorship and enrolment in IDA-approved certification courses.

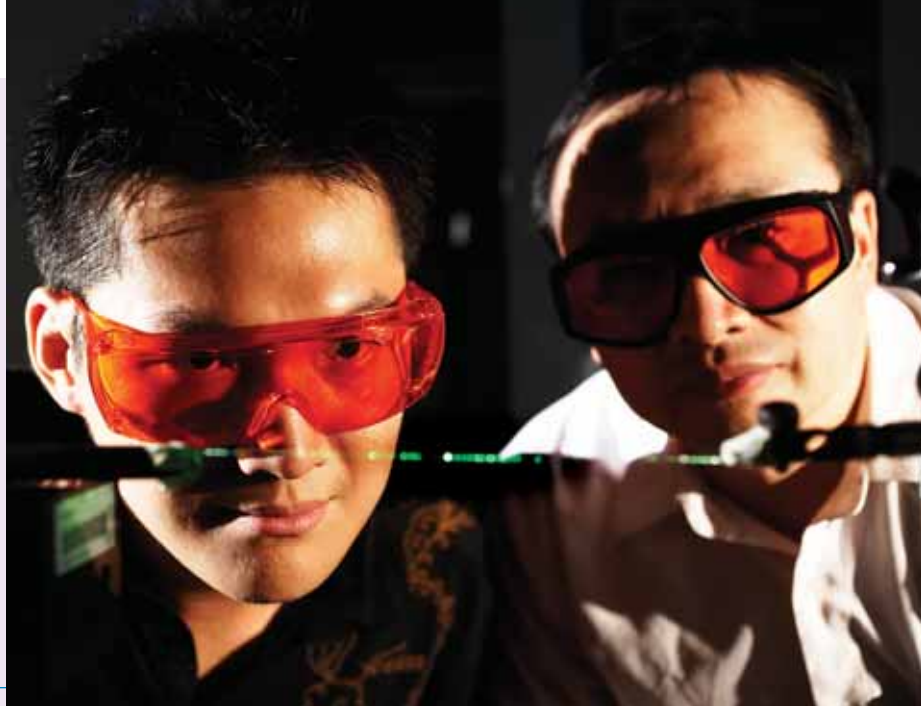
### IDA's National Infocomm Scholarship

Students admitted into SCE are eligible to apply for IDA's National Infocomm Scholarship. The National Infocomm Scholarship is sponsored by Infocomm companies such as IBM, Microsoft, Intel, Oracle, DBS, SingTel and StarHub. You can look forward to internships with your sponsoring company, and the opportunity to work in the company when you graduate.

## Career Prospects

As an SCE graduate, you can look forward to an endless list of exciting career opportunities in areas such as digital media, animation, research and development, consultancy as well as finance and banking. SCE programmes have provided our graduates with the edge to chart their careers in leading companies such as IBM, Oracle, Hewlett Packard, Lucasfilm Singapore, Koei Entertainment Singapore, Ubisoft, Singapore Technologies group of companies, Singapore Airlines, Government Investment Corporation, Credit Suisse, Barclays, etc.

# School of Electrical and Electronic Engineering



Whether you aspire to be an engineer, an entrepreneur, a banker or even a social scientist, we at the School of Electrical and Electronic Engineering (EEE) have exactly the environment and training that you will need to make your education “future-proof”. Gain a degree in Electrical and Electronic Engineering from one of the largest EEE schools in the world today. Built on a tradition of excellence, the School is renowned for its high academic standards and strong tradition in research. During your studies, you will benefit from the state-of-the-art equipment and teaching facilities, and the most modern, fully-equipped research laboratories.

## Programmes Offered

- [Bachelor of Engineering in Electrical & Electronic Engineering](#)

This four-year direct honours degree programme has the primary objective of providing professional training in Electrical, Electronic and Information Sciences and Engineering. The course is internationally renowned for its high academic standards and strong research orientation and is fully accredited by the Engineering Accreditation Board (EAB) of the Institution of Engineers, Singapore (IES), which is a full signatory member of the Washington Accord.

[www.ntu.edu.sg/eee](http://www.ntu.edu.sg/eee)

- **Double Degree in Bachelor of Engineering (Electrical & Electronic Engineering) & Bachelor of Arts (Economics)**

This five-year programme offered by EEE and the School of Humanities and Social Sciences will give you a greater appreciation for both economic and engineering environments. Armed with two honours degrees, you will be able to choose from a plethora of careers in electrical & electronic engineering, financial and business services industries.

- **Bachelor of Engineering in Information Engineering & Media**

As a rule, engineers and artists think and view things differently. This four-year multidisciplinary direct honours programme changes this by cultivating in students the twin perspectives of engineers and artists. This programme is hosted jointly by EEE with the School of Art, Design and Media, School of Computer Engineering, and Wee Kim Wee School of Communication and Information.

- **Double Degree in Bachelor of Engineering (Information Engineering & Media) & Bachelor of Arts (Economics)**

This five-year double degree programme is jointly offered by EEE and the School of Humanities and Social Sciences. This programme aims to equip graduates with technical skills in information, communications engineering, creative skills in media design and a strong foundation in economics.

- **NTU-Georgia Tech Integrated Programme in Bachelor of Engineering (Electrical & Electronic Engineering) awarded by NTU & Master of Science (Electrical & Computer Engineering) awarded by Georgia Institute of Technology, USA.**

Fast track your studies and earn two degrees in four years instead of the usual 5 to 5-1/2 years. Students will spend 3 to 4 years in EEE majoring in Information and Communications Engineering, and the next 1 to 1-1/2 years in Georgia Tech's School of Electrical and Computer Engineering, specialising in Computer Engineering and Telecommunications.

## Unique Features

### Choice of Broad EEE Education or Specialisations

Students can opt for either a broad-based Electrical and Electronic Engineering programme, or one of nine areas of specialisation which include Biomedical Electronics, Communication Engineering, Computer Engineering, Digital Media Processing, Integrated Circuit Design, Intelligent Systems & Control Engineering, Microelectronics, Photonics and Power & Clean Energy.

### IDA's National Infocomm Scholarship

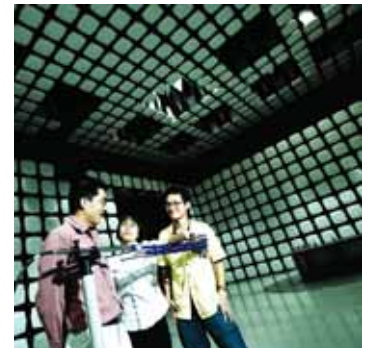
Students intending to major in Communications, Computer Engineering and Digital Media are eligible to apply for Infocomm Development Authority of Singapore (IDA)'s National Infocomm Scholarship.

### IC-Design/Wafer-Fabrication Specialist Manpower Programme (SMP) Scholarship

The SMP Scholarships are meant for undergraduates who specialise in IC Design or Microelectronics. Successful recipients of the scholarship will be offered an industrial attachment with a sponsoring company. The scholarships are offered to third or final year students of the School.

## Career Prospects

An EEE degree offers a wide range of career possibilities in aviation, biomedical, control and automation, defence engineering, IC manufacturing, internet services, optoelectronics, power generation and smart energy distribution, interactive and digital media, software & telecommunication services and wafer fabrication.



# School of Materials Science and Engineering



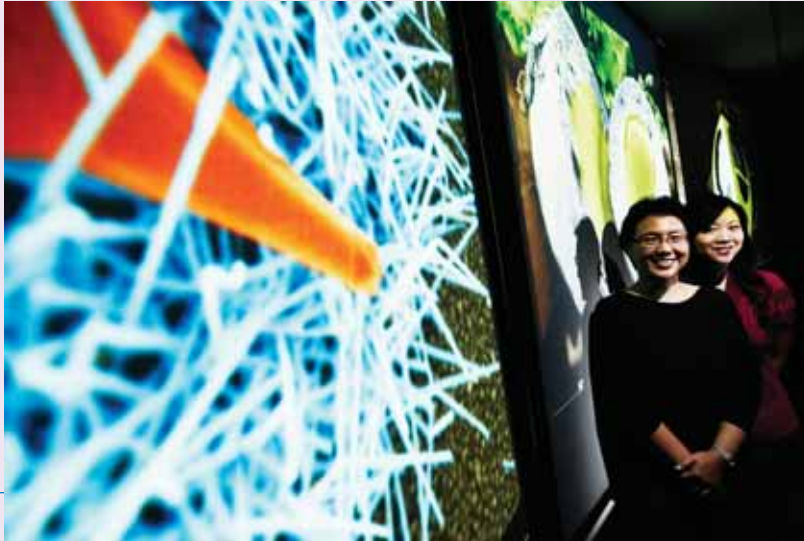
With the increasing demand for materials engineers, the School of Materials Science and Engineering (MSE) has now flourished into one of the world's largest materials engineering institutions. As a student, you will be provided with an integrated Science-driven and application-oriented Engineering education in advanced materials for cutting-edge technologies. You will be equipped with competency and knowledge in all aspects of materials such as biomaterials, defence materials, functional materials, polymer electronics and nanomaterials. You will understand how materials can be processed and modified to make the products of modern technology more durable, faster, lighter and better suited to human needs.

## Programmes Offered

- [Bachelor of Engineering in Materials Engineering](#)

This full-time four-year undergraduate programme leads to the degree of Bachelor of Engineering (Materials Engineering) with Honours. In Year 1, you are given a broad education in all important aspects of science and engineering. The fundamentals of materials science, processing, characterisation and applications of materials will be introduced in the second and third year. You will have the opportunity to undergo an industrial attachment in Year 3, and in Year 4, you are given the option to do advanced topics that lead to specialisations in various areas of materials engineering.

[www.mse.ntu.edu.sg](http://www.mse.ntu.edu.sg)



- Double Degree in Bachelor of Engineering (Materials Engineering) & Bachelor of Arts (Economics)

This five-year programme awarded by MSE and the School of Humanities and Social Sciences will give you a greater appreciation for both economic and engineering environments and offer you unparalleled prospects in today's competitive business landscape. Armed with two honours degrees, you will be able to choose from a plethora of careers in materials science and engineering, financial and business.

## Unique Features

MSE students are provided with a solid foundation in the study of the structure, properties and behaviour of materials. Intensive courses are incorporated to train you in specialised competencies using sophisticated characterisation and analysis facilities. You can also enjoy the option to study and participate in the development of the next generation of advanced materials for defence, clean energy and nuclear technologies. In addition to the comprehensive training, the School's excellent mentoring system with dedicated academic counsellors will guide you throughout your undergraduate candidature.

## Career Prospects

Materials Engineers are continually in high demand by industries all over the world for important positions in the aerospace, biomedical, defence, electronics, manufacturing, petrochemical and research sectors. Employers are impressed by the knowledge, expertise and calibre of MSE students. As one of our graduates, you could be employed by organisations like Shell, ExxonMobil, BSAF, Ciba Vision, Essilor, Hewlett Packard, 3M, DSO, ST Microelectronics, Advanced Micro Devices, Monetary Authority of Singapore, IMRE, DSI, IME, SIMTech, leading financial and educational institutions.

# School of Mechanical and Aerospace Engineering



We offer a stimulating environment that challenges the best minds through a host of exciting programmes in Mechanical and Aerospace Engineering (MAE). Our team of faculty hails from renowned universities worldwide and together, they cover some of the most sought-after fields of engineering, including aerospace, manufacturing, mechatronics, innovative design, nanotechnology, biomedical and informatics applications.

Students will have access to state-of-the-art facilities that will enhance their learning experience. In addition to this, we believe in taking a holistic approach to learning. We do this by offering a range of courses and enrichment programmes that aim to promote and nurture your creativity, leadership qualities, technopreneurism and problem-solving skills to give you the extra edge in the working world.

## Programmes Offered

- **Bachelor of Engineering in Aerospace Engineering**  
You will be trained in the core competency areas with an integrated system view of aircraft design, manufacturing and assembly under four knowledge domains:  
Aerospace materials and structures, aircraft propulsion, flight mechanics and control, and aerodynamics.

[www.ntu.edu.sg/mae](http://www.ntu.edu.sg/mae)



- **Bachelor of Engineering in Mechanical Engineering**  
This broad-based multi-disciplinary programme allows you to pursue a mainstream Mechanical Engineering degree or an in-depth specialisation in Design or Mechatronics from the second year of study. The Mainstream programme offers eight final-year specialisations: Aeronautical Engineering, Biomedical Engineering, Energy & the Environment, Innovative Design, Systems Engineering, Mechatronics & Control, Manufacturing Engineering and Marine & Offshore Engineering.
- **Double Degree in Bachelor of Engineering (Mechanical Engineering or Aerospace Engineering) & Bachelor of Arts (Economics)**  
This five-year double degree programme, awarded by MAE and the School of Humanities and Social Sciences, aims to equip you with excellent knowledge and competency in Mechanical or Aerospace Engineering and Economics. Armed with two honours degrees, you will be able to choose from a plethora of careers in aerospace, mechanical engineering, financial and business services industries.

## Unique Features

### Special Programmes

- **Product Development Challenge (PDC)**

This course offers students a platform to team up and take on an open-ended project to develop a product such as a race car or a football playing robot, and the opportunity to take part in international competition subsequently.

- **Engineering Innovation and Design (EID) Programme**

It is an ideal way to learn about technopreneurism. Students are given the opportunity to develop their high technology business ventures and present them to a panel of industrialists and venture capitalists.

- **Leadership Development Programme (LDP)**

This programme offers our brightest talents plenty of opportunity to enhance their leadership abilities through enrichment seminars and workshops, as well as helping the less fortunate locally and overseas.

## Career Prospects

In completing one of the programmes, you will be equipped to seek employment in at least one of the following fields: aircraft design and manufacturing, aerospace consulting, aircraft operations and maintenance, aviation regulation, defence science, logistics, manufacturing, marine and offshore engineering, pharmaceutical, petrochemical or biomedical engineering, product design, project planning and management, power generation and distribution.

“

*I chose NTU because with a robust curriculum, state-of-the-art facilities and plenty of research opportunities, I know I will be ready for the future.*”

”

**Noor Faezzah Bte Baharom**

*School of Biological Sciences*

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## College of Science

At the College of Science, you will learn to explore, discover and understand science; you will be a seeker of truth and beauty through theory, experimentation and simulation. You will develop strong skills in reasoning, quantitative and qualitative problem solving, and good communication. By the time you graduate, you will be a scientist or mathematician that employers value and demand. Our curricula and standards for the various disciplines are modelled after those of the best universities in the world. You can choose from a broad spectrum of four-year direct Bachelor of Science Honours degree programmes, and as a more able student, join our accelerated programme to graduate in three years. You may also qualify for the CN Yang Scholars Programme – NTU’s premier undergraduate programme for science and engineering students. Further opportunities exist for you to pursue your postgraduate degree by research.



Faiezah  
BIO SCIENCE

# School of Biological Sciences



The School of Biological Sciences provides each and every student with a truly international education in cutting edge Biomedical and Life Sciences. With faculty originating from over 20 different countries, students are immersed in an enriching culture of knowledge. Students can look forward to stimulating and challenging curricula that meets the discerning demands of both the Life Sciences and Biomedical industries worldwide.

## Programmes Offered

- **Bachelor of Science (Honours) in Biological Sciences**

In the first year students receive strong grounding in the disciplines of Chemical Biology, Structural and Computational Biology, Molecular and Cell Biology, and Genetics. Students will then specialise and focus on current topics such as Genomics, Neurobiology, Cancer Biology, Immunology, infectious diseases, stem cell biology and drug discovery. In the final year all students undertake full-time project work for an entire semester entering into either laboratory-based research or other key areas within the Life Sciences industry.

[www.sbs.ntu.edu.sg](http://www.sbs.ntu.edu.sg)



- **Double Degree in Bachelor of Science (Honours) in Biomedical Sciences & Bachelor of Medicine (Chinese Medicine)**  
This unique five-year double degree program elegantly blends the western approach to Biomedical Sciences with Traditional Chinese Medicine. The Bachelor of Science in Biomedical Sciences (Honours) is conferred by NTU. The Bachelor of Medicine (Chinese Medicine) is conferred by the Beijing University of Chinese Medicine (BUCM). The first three years of the double degree are taught at NTU, the final two years are taught at the BUCM in the People's Republic of China. This is a bilingual course with the languages of instruction being English and Mandarin.

## Unique Features

### Outstanding Faculty Members

Students are taught by a team of top-notch, internationally qualified faculty from over 20 nations; bringing unique perspectives, teaching methods and extensive contact networks from all corners of the globe. The School of Biological Sciences boasts renowned Nanyang Professors, Nanyang Assistant Professors and National Research Foundation Fellows among its ranks.

### Direct Honours Programmes

The School of Biological Sciences offers direct Honours programmes. This system gives all students, regardless of academic standing, exposure to advanced coursework and project work. Each student has the opportunity to graduate with an honours classification.

### Accelerated Bachelor of Science (Honours) Program

Academically outstanding undergraduate students will be invited to join the accelerated program. Within the accelerated program students can complete the Bachelor of Science (Honours) programme in 3.5 years instead of four years.

## Career Prospects

With the quest for understanding the processes of life, prevention and cure of disease and increasing quality of life comes a wide array of career prospects for science graduates. You, too, can become part of the exciting and high-growth Life Sciences industry. Our programmes will nurture your aspirations and upon graduation you will be equipped with practical and cutting-edge knowledge. Graduates can look forward to positions in: research and development, administration and management, scientific journalism and communication, medical sales and support services, diagnostic services, finance, teaching and marketing, to name just a few.

# School of Physical and Mathematical Sciences



The School of Physical and Mathematical Sciences (SPMS) recognises that the most exciting sciences and challenging problems of the 21st century will shift from the traditional to merging disciplines, and as such aims to educate a new generation of graduates who are driven by and enjoy questions at the interface of the sciences. Join us and you will gain a broad understanding and appreciation across disciplines and in-depth knowledge in your discipline of choice: Mathematics, Physics, or Chemistry that will stand you in good stead in the global economy.

## Programmes Offered

- [Bachelor of Science \(Honours\) in Chemistry & Biological Chemistry](#)

As a budding chemist, you will undergo rigorous training based on the American Chemical Society Curriculum. In addition to the core contents covered in our BSc (Hons) degree, you may also opt for concentrations in areas of Green Chemistry, Medicinal Chemistry and Food Science and Technology.

[www.spms.ntu.edu.sg](http://www.spms.ntu.edu.sg)

- **Bachelor of Science (Honours) in Mathematical Sciences**

Following 18 months of common courses designed to build a strong foundation, you will go on to specialise in either the Statistics stream where you learn a variety of statistical methods, with an emphasis on the tools used by working statisticians; the Applied Mathematics stream where you become an expert in the use of computation in a great variety of real-world applications; or the Pure Mathematics stream where you develop a deep and broad understanding of the logical structures underlying Mathematics. The overall emphasis is on breadth, flexibility and relevance.

- **Combined Degree in Bachelor of Science (Honours) in Mathematics & Economics**

Develop the skills most sought after by the financial services industry as you study the core of a full degree in both Mathematics and Economics. On the Mathematics side, the emphasis in the later years of study will be on numerical, computational, and statistical methods. On the Economics side, you will study courses based on quantitative techniques, as well as courses with a more descriptive flavour.

- **Bachelor of Science (Honours) in Physics**

The Physics degree is designed to equip you with solid analytical and computational skills, whilst providing strong experimental training. You may also opt for a concentration in Nanotechnology.

- **Bachelor of Science (Honours) in Applied Physics**

The Applied Physics degree emphasises the physical principles that are critical in driving frontier technology and applied research. You may opt for concentrations in Nanotechnology, Semiconductor Technology, Optical Technology, and Biophysics, or obtain a degree in Applied Physics with Innovation and Technopreneurship (APITech).

- **Bachelor of Science (Honours) in Physics with Mathematical Sciences Major**

Outstanding students interested in the deeper theoretical aspects of Physics can apply to be admitted to the degree programme where they will complete a first major in Physics, along with a second major in Mathematical Sciences. Through this degree programme, students can acquire a strong Mathematical foundation for future graduate studies in theoretical and computational Physics.



## Unique Features

This is the only three to four-year direct Honours programme in Chemistry, Physics, Mathematics and Physical Sciences in Singapore. It's a selective programme where ABB and above grades at A-level, or equivalent, are preferred.

## Career Prospects

As a graduate, you can look forward to a wide range of exciting career options in the private and public sectors in Singapore and abroad. These include exciting careers in hi-tech industries like pharmaceutical and chemical, banking & finance, defence, I.T. and telecommunications, medicine and genomic biology.

“

*I chose NTU because of its world class faculty, infrastructure and internationally recognised programmes. With NBS, NTU, I am guaranteed a rigorous and industry-relevant education that will prepare me adequately to meet the career challenges in today's dynamic business environment.*”

”

**Ivan Tan Hong Yi**

*Nanyang Business School*

# Nanyang Business School

At the Nanyang Business School (NBS), you will find a whole new world opening up to you. You will acquire more than a great globally-relevant business education. This is where you will emerge well-equipped with real-world knowledge as well as critical soft skills including problem-solving, communication, cultural intelligence, negotiation and leadership. This is where you will build relationships and networks, develop new interests and insights, and widen perspectives. With our innovative, highly realistic learning environment, international faculty, strong alliances with the world's leading institutions, extensive corporate networks, and commitment to both rigour and relevance, the Nanyang Business School is where you will learn to apply your knowledge to a wide range of real-world situations and to make significant contributions to organisations. This is where you will be ready to achieve your own measure of success in the real-world.



# Nanyang Business School



NBS is one of Asia's top business schools and one of only six business schools in Asia to be awarded accreditation by both the Association to Advance Collegiate Schools of Business (AACSB) and European Quality Improvement System (EQUIS). Accreditation by AACSB and EQUIS represent the highest standards of achievement for business schools worldwide. Only business schools that are able to continuously pass a strict set of standards that are designed to ensure that quality will be accredited. Our MBA programme was ranked first in Singapore and the world's 27th by the Financial Times Global MBA rankings in January 2010.

The rigorous curriculum, relevant to business practice, is taught under the guidance of nurturing professors who not only impart theoretical knowledge but also critical skills to meet the demands of the social and business environment.

NBS alumni networks span across 40 countries with many alumni holding leadership positions. These extensive networks offer a rich resource for internship opportunities and graduate recruitment.

## Programmes Offered

- **Bachelor of Accountancy**

Regarded as the region's most established programme, the three-year direct honours Accountancy degree is recognised as a professional accounting qualification in Singapore by the Institute of Certified Public Accountants of Singapore and the Accounting and Corporate Regulatory Authority. It is also one of only seven schools outside of the United States to be awarded the AACSB accreditation in Accounting. In addition, it is accredited by these institutes for entry into their respective programmes: Institute of Chartered Accountants in England and Wales, Institute of Chartered Accountants in Australia, CPA Australia, Association of Chartered Certified Accountants and Chartered Institute of Management Accountants.

Partnering the top U.S. accounting programme at the University of Illinois, Urbana-Champaign, for the last eight years, NBS has integrated their breakthrough "Project Discovery" to radically transform the way accounting is taught. Active learning methods based on real-world cases and projects are emphasised to develop critical thinking and communication skills. With continuously updated course content, we have a rich heritage of developing strategic thinkers and business leaders.

[www.nbs.ntu.edu.sg](http://www.nbs.ntu.edu.sg)

- **Bachelor of Business**

This rigorous and broad-based three-year accelerated honours programme is among the top business programmes in Asia. With our pragmatic, real-world focus, you will gain global perspectives and analytical skills. The team-based projects, simulations and integrative case studies ensure you will be ready to meet the demands of the business world.

This programme offers six cutting-edge and industry-relevant specialisations giving students an advantage in career choices matched with their aptitude and interests:

- **Actuarial Science:** recognised by the U.K. Institute of Actuaries (IOA), the programme qualifies our Actuarial Science students for up to eight exemptions from level one examinations offered by IOA
- **Banking & Finance:** recognised as a CFA (Chartered Financial Analyst) programme partner, this gives our Banking & Finance students a head-start in their preparation for the CFA qualification
- **Human Resource Consulting:** the only HRC specialisation unique to the Asia-Pacific region in training HR professionals for strategic roles in human capital development for competitive advantage
- **Information Technology:** provides a SAP Business Process Partner certification; combines and synergises IT competency with business domain knowledge to meet today's business needs
- **Marketing:** curriculum boasts a strong global perspective and real-world orientation
- **Tourism & Hospitality Management:** launched with the support of the Singapore Tourism Board; designed to meet the challenges of a growing and emerging tourism & hospitality industry

- **Double Degree in Accountancy & Business**

Leveraging on the synergies and strengths of our renowned Accountancy and Business programmes, this 3.5 to 4-year double degree programme with direct honours effectively equips graduates with multiple skill sets and knowledge to succeed in the complex and challenging world of business. Other programme features of this double degree include:

- 8-10 week professional attachment to industry
- Applied Research Project (ARP) to integrate and synthesise the in-depth knowledge gained through core courses and broad-based cross-disciplinary electives
- Undergraduate Research on Campus (URECA), a university-wide programme to cultivate a research culture amongst the most able undergraduates in NTU
- Flexible curriculum with your choice of university minors, wide-ranging electives and international exchange opportunities.

- **Double Degree in Bachelor of Engineering (Computer Science) & Bachelor of Business (Information Technology)**

This fusion of two different programmes – Business and Computer Science – allows students to broaden their scope and leverage on a kaleidoscope of career opportunities. Jointly offered with NTU's School of Computer Engineering, graduates of this 4-year double degree programme will graduate with the degrees of Bachelor of Business (Information Technology) and Bachelor of Engineering (Computer Science). Its comprehensive and well-rounded curriculum hones students' business management skills and also equips them to excel at software application and development.

## Unique Features

- Home to one of the world's top 25 MBA programmes (Financial Times 2009)
- Only business school from Singapore to be accredited by both AACSB & EQUIS
- One of only five schools outside of the US with the AACSB accreditation in Accounting
- 3-year direct honours programme
- 50 years of heritage in educating top accountants
- Project Discovery - innovative Accountancy curriculum and pedagogy
- Diverse and unique business specialisations valued by premier employers

## Career Prospects

NBS graduates are highly sought after by employers for their acute problem-solving skills and the ability to apply knowledge, think analytically and creatively. They are also valued for their adaptability, leadership qualities as well as effective teamwork. Our graduates have found success in major local and international organisations such as the Big 4 Accounting firms, Bank of America, Barclays Capital, Citibank, Credit Suisse, Deutsche Bank, Intercontinental Hotel Group (IHG), JP Morgan, L'Oréal, Merrill Lynch, P&G, Royal Bank of Scotland, Shell, Sheraton Hotels, Singapore Exchange, Thomson Reuters, Towers Watson and UBS.

“

*The School offers a direct-honours course in Psychology and invites practitioners in the industry to teach the professional modules. Furthermore, the school offers ample opportunities for the students to be exposed to research at the undergraduate level and on overseas study experience.*”

**Yammie Chin Shi Yun**

*School of Humanities and Social Sciences*

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College of  
Humanities,  
Arts, and  
Social  
Sciences

At the College of Humanities, Arts, and Social Sciences, you have the opportunity to work both within and beyond your primary discipline, and at the exciting fringes where disciplines meet. The College is committed to offering a stimulating education in several major disciplines located in three distinct schools: the School of Art, Design and Media, Singapore's first professional art school to offer degree programmes in art, design and interactive digital media; the Wee Kim Wee School of Communication and Information, Asia's top school in mass communication; and the School of Humanities and Social Sciences, an energetic school offering a well-rounded multidisciplinary education in the humanities and social sciences. You will find the College a place where diversity, commitment and the spirit of intellectual adventure are encouraged and nourished.



Sport Psychology

Psychology

Essentials

Psychology

Psychology

Psychology

Psychology

# School of Art, Design and Media



Students in the School of Art, Design and Media (ADM) bring their imagination and critical thinking skills to their work in the Fine and Applied Arts. From drawing, painting, 2-, 3-, and 4- dimensional designs, to digital animation, film and multimedia, they explore the form and function of designed communication, objects and products, new entertainment content, artistic expression and interactive experiences. Students work with a directed problem-solving method that leads them to become independent thinkers. They are expected to develop their own individual vision while maintaining a strongly supportive, collaborative spirit.

Housed in the new grass-roofed Art, Design & Media building, the school is equipped with exceptional hands-on studios, digital creation laboratories, media studios and open spaces

which rival the creative workplaces of industry practitioners.

Graduates are prepared to undertake professional posts in top design and media enterprises, create entrepreneurial enterprises in design, become top image makers, photographers, animators, experience designers, and filmmakers. Our students are equipped for further study in Master and Doctoral programmes in design, cultural theory, arts or media studies at international schools.

The students are in excellent hands – ADM's international faculty is a collective of talented and accomplished, arts, design, and media practitioners and scholars who have been selected for their extensive backgrounds in their fields of expertise.

[www.ntu.edu.sg/adm](http://www.ntu.edu.sg/adm)

## Programmes Offered

- **Bachelor of Fine Arts in Digital Animation**

The BFA in Digital Animation is an advanced programme focused on animation in all its forms. It is designed to provide students with the fundamentals of the art and craft of animation as well as new ideas and techniques emerging in the field. The curriculum allows you to choose from areas of concentrations including 2D hand-drawn animation, 3D character animation, stop-motion, experimental and creative visual effects. The programme is structured to emphasise creativity, imagination and critical thinking with the aim of giving you the conceptual and creative tools necessary to become an animator of world-class calibre.



- **Bachelor of Fine Arts in Digital Filmmaking**

The BFA in Digital Filmmaking offers a comprehensive education in the theory and practice of narrative film production. The curriculum provides students with a foundation in existing cinematic and production techniques as well as recognising that the future of film lies in its relationship with new technologies. With the latest resources in digital filmmaking at their disposal, students will be nurtured to lead the challenge of the next generation.

- **Bachelor of Fine Arts in Photography and Digital Imaging**

Prepare to explore traditional, experimental and technological genres of imaging through the photographic medium and learn techniques from established darkroom techniques to cutting-edge digital practices. Portfolio work and studio practices developed in parallel to the courses students examine the history and critical theories of photography, providing students with the creativity and technical prowess to master the photographic medium.

- **Bachelor of Fine Arts in Interactive Media**

Designed to cultivate the conceptual and practical skills expected of a first-rate multidisciplinary creative artist, the programme's focus is threefold: interactive installation and device creation; game design, and scenography and interactive theatre design. In the practical component, students can expect to create works with video and sound, design and execute virtual and real stage settings for live actors and dancers, and create a computer game from conception to completion.

- **Bachelor of Fine Arts in Product Design**

Beyond problem-solving skills, in-depth analysis of users, markets and cultural values, students learn to redefine problems and question traditional methods while developing new perceptions and thinking. Through close interaction with faculty and working in a dynamic laboratory and workshop environment, students gain the experience, knowledge and vision to create innovative works of strong conceptual value.

- **Bachelor of Fine Arts in Visual Communication**

The BFA in Visual Communication at the School of Art, Design & Media prepares students as versatile designers in a rapidly evolving field. Based on craft, concept and critical thinking, and entrenched in a culture of experimentation; this programme creates socially responsible and strategic designers, capable of solving multi-faceted design challenges in editorial, advertising, illustration, publishing, interactive, new media, packaging, identity, experiences, motion graphics, installations, and exhibitions.

## Unique Features

ADM offers interdisciplinary learning and rigorous conceptual development with a wide range of available majors and minors. Students will also be exposed to intensive studio practice and have the opportunity to undertake professional internships and attachments for a solid grounding in real-life experience. With NTU's Overseas Exchange Programme, students can spend up to six months at leading overseas universities.

## Career Prospects

Graduates can look forward to rewarding careers in digital animation, digital filmmaking, photography and digital imaging, interactive media, product design and visual communication.

# School of Humanities and Social Sciences



Whether you are looking to work in the creative industries or in social work, the School of Humanities and Social Sciences (HSS) provides the tools to make it happen for you. As a student of HSS, you will be challenged to question, analyse, reflect, and create in a specifically designed curriculum that values curiosity and commitment, rigour and resourcefulness.

HSS offers you a wide range of majors and minors to meet your needs and passions. You will find that you develop skills that equip you with invaluable talents that will make you valuable in a variety of different careers.

## Programmes Offered

- [Bachelor of Arts \(Honours\) in Chinese](#)  
This four-year programme provides you with a concrete foundation for the reading of both classical and modern texts, core competency in essential areas of the language as well as education and training that prepares you for specialised reading in Chinese literature, language and studies.
- [Bachelor of Arts \(Honours\) in Economics](#)  
This four-year degree programme enables students to delve more deeply into their chosen areas of specialisation. Students who excel in their studies have a chance of graduating earlier. Students are offered one of 3 areas of concentration: Development and Public Policy, Finance and Business, or Quantitative Economics.

[www.ntu.edu.sg/hss](http://www.ntu.edu.sg/hss)

- **Bachelor of Arts (Honours) in English Literature**

This four-year direct honours programme includes study in both traditional areas of English Literature and contemporary innovative approaches to the subject. You will be able to choose multiple areas of specialisations in a variety of elements including comparative literature, Singaporean and Asian literature, dramatic literature, critical and literary theory, cultural studies, film studies, post modernism and gender studies.

- **Bachelor of Arts (Honours) in Linguistics and Multilingual Studies**

The interdisciplinary nature of this direct honours degree ensures that you will develop a profound understanding of the functions of language and its relevance to a broad range of disciplines. A major in this degree programme will create diverse opportunities not only in the many sub-fields of linguistics, but also in any career in which communication and analytical thinking play a pivotal role.

- **Bachelor of Arts (Honours) in Psychology**

The broad-based course in the scientific study of human behaviour provides you with an adequate grounding in the basics of psychology, complementing study in a variety of subjects including business, cultural studies, economics, linguistics, sociology, life sciences and medicine. By electing to pursue the major programme, you will also research the major areas of psychology.

- **Bachelor of Arts (Honours) in Sociology**

Through this rigorous direct honours programme, you will learn to analyse the social conditions that make a significant impact on human lives. In cultivating an awareness of the social implications of personal choices, organisational decisions and public policies, sociology develops the ability to think through complex issues and to move beyond conventional wisdom – and this ability is essential in many organisations and vocations today.

- **Double Degree in Bachelor of Engineering (Honours) & Bachelor of Arts (Honours) in Economics**

This double degree programme is jointly offered by the College of Engineering and the School of Humanities and Social Sciences from academic year 2008/09 onwards. This five-year programme aims to equip graduates with excellent knowledge and competency in Engineering and Economics.

- **Combined Degree in Bachelor of Science (Honours) in Mathematics & Economics**

Since academic year 2006/07, the Division of Economics and the Division of Mathematical Sciences in the School of Physical and Mathematical Sciences jointly offer a new degree, the Bachelor of Science (Honours) in Mathematics and Economics. It is a direct honours degree that integrates the curriculum of two leading disciplines.



## Unique Features

### **HSS Professional Attachment Programme**

HSS also offers the HSS Professional Attachment Programme, which exposes you to the working world through internships and professional attachments and places you in a better position to compete in the job market after graduation.

## Career Prospects

HSS opens doors to a wide variety of careers. Your new-found skills are much in demand in institutions such as banks, civil service, education, social work, journalism, advertising, publishing, human resources, management, public administration, arts administration and creative industries.

# Wee Kim Wee School of Communication and Information



Be part of the learning process at the Wee Kim Wee School of Communication and Information (WKWSCI), one of Asia's best in communication education and research. As a student of WKWSCI, you can follow in the footsteps of the many WKWSCI media graduates who have significantly contributed to the media scene locally and overseas.

The School's established ties with the local industry and strong international links with elite communication and information partners ensure a curriculum that is highly relevant and richly rewarding. You have the choice of five Divisions offering a selection of communication courses that include Journalism and Publishing, Broadcast & Cinema Studies, Public and Promotional Communication, Communication Research, and Information Studies.

## Programmes Offered

- [Bachelor of Communication Studies \(Honours\)](#)

The four-year curriculum is an invigorating first step into the exciting and dynamic world of media communication. As part of your studies, you will enjoy opportunities for exchange study trips to renowned universities in the United States, Europe, Australia and Asia. A professional internship with major local and overseas media players further broadens your experience and allows you to start building important industry contacts. Choose from six different concentrations to follow your unique passion:

- Broadcast and Cinema Studies
- Advertising
- Public Relations
- Journalism
- Communication Policy and Research
- Interdisciplinary

[www.ntu.edu.sg/sci](http://www.ntu.edu.sg/sci)



## Unique Features

A career in media is an exciting and rewarding prospect. At WKWSCI, you'll learn the ropes from seasoned professionals, and acquire what it takes to succeed in media. From journalism to public relations, from TV production to information technology, you will pick up an essential grasp of what media is completely about. We don't believe in mere theoretical education. We have plenty of modern, state-of-the-art facilities to complement your learning process. TV studios, Radio Production studios, focus group rooms – we have every tool needed to prepare you for a successful career in media.

## Career Prospects

A degree with WKWSCI will open avenues of opportunity with the media giants in Singapore and abroad in the following industries: Journalism, Broadcast and Cinema Studies, Advertising, Publishing, Human Resources, Management, Public Administration, Arts Administration and Creative Industries.

“

*I chose NIE because I believe NIE is able to provide me with a holistic education that will develop me into a successful global citizen to meet the challenges of the future.*”

**Christopher Ng Wen Hoe**  
*National Institute of Education*

# National Institute of Education

The National Institute of Education (NIE), Singapore, is a founding member of the International Alliance of Leading Education Institutes and an integral part of Singapore's education system for the past 60 years. NIE prepares new teachers, provides ongoing professional development to existing teachers and school leaders, and conducts extensive educational research. Our aim is to develop education professionals who embrace the philosophy of being leaders in the service of learners.

NIE's programmes provide student teachers with a strong educational foundation, pedagogies for effective teaching and specialised subject knowledge in at least one academic discipline. Our initial teacher preparation programmes offer two teaching tracks for either primary or secondary school teaching. There are multiple pathways catering to student teachers with diverse educational backgrounds. Apart from the Bachelor of Arts/Science (Education) programmes, NIE also offers the Postgraduate Diploma in Education for university graduates and Diploma in Education for those with pre-university qualifications.

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## Programmes Offered

- **Bachelor of Arts (Education)/Bachelor of Science (Education)**

The four-year Bachelor of Arts (Education) and Bachelor of Science (Education) programmes are designed to provide you with an integration of school-relevant academic content and effective pedagogical practices. The programmes aim to equip you with the necessary knowledge and skills required for the rigours and challenges of the teaching profession.

- **Diploma in Education**

The Diploma in Education (Dip Ed) offered by NIE is another pathway to a meaningful career in teaching. Completion of this two-year programme also allows you to pursue further academic or professional qualifications later in your teaching career.



## Unique Features

### **Preparing you to be more than just an educator**

NIE's programmes immerse you in a range of character development activities that helps develop your leadership, communication and soft skills. One such activity is the Group Endeavours in Service Learning (GESL) project that gives you the opportunity to reach out to and benefit a community of your choice.

### **Opportunities to participate in International Student Exchange Programmes**

Our international links with partner teacher education institutes and organisations presents opportunities for exchanges, study tours and more!

### **Teaching practice**

Teaching practice or Practicum in schools helps you connect theory to practice, and prepares you to master the realities of teaching and handling instruction in schools

## Career Prospects

As a graduate of NIE's degree programmes, you are a fully qualified education professional, able to nurture and groom young minds and talents for our nation. The MOE provides many opportunities and career pathways for teachers in its service to develop and grow in the profession. Outside of the MOE, your skills will be very much in demand by other local and international schools, including those within the private sector.

[www.nie.edu.sg](http://www.nie.edu.sg)

# Sport Science and Management



With Singapore poised to become a centre for sport development and innovation within the region, there is an increasing need for qualified sport professionals who are well-equipped in the study of sport management and possess the necessary soft skills to help develop human resources in the area of exercise and sport science.

Sport Science and Management (SSM) is the only degree programme by an autonomous university in Singapore and the region that offers undergraduates academic and professional pathways to sport-related careers.

The four-year direct honours programme offers relevant knowledge in sport science and management and helps develop pertinent skills for engagement in the sport industry.

## Unique Features

Specifically conceptualised to train qualified sport professionals, SSM undergraduates are provided with relevant research and appropriate industry experience via the academic project and the internship programme during their studies.

Outstanding undergraduates have the opportunities to spend up to six months at overseas universities as part of an exchange experience. Overseas expedition stints organised in collaboration with industry partners also give our undergraduates the opportunities for personal growth, team and leadership development.

With state-of-the-art sport science laboratories as well as other facilities at NTU, and well-qualified academic staff, SSM provides an excellent learning experience that prepares students for exciting careers in the sport industry.

## Career Prospects

SSM grooms you to be inspiring leaders of the burgeoning regional sport and leisure industry; to contribute significantly to heightened demands for well-qualified sport administrators, sport/event managers, sport scientists/researchers, sport/fitness trainers or coaches, sport writers, and marketers.

[www.ssm.ntu.edu.sg](http://www.ssm.ntu.edu.sg)

# Application For Admission

Students, regardless of nationality, should apply under one of the following application groups that correspond to their qualifications.

Application Group	Application Period	Application Fee
<b>Singapore-Cambridge GCE 'A' Level</b> Applicants, regardless of nationality, presenting the Singapore-Cambridge GCE 'A' Level certificate.	Start: Early March 2010  End: 1 April 2010	VISA or Mastercard or DBS/POSB ATM - S\$10
<b>Local Polytechnic Diploma</b> Applicants, regardless of nationality, presenting the local polytechnic diploma or 5 semester results from one of the five local polytechnics in Singapore; or the local diploma from Nanyang Academy of Fine Arts (NAFA), LASALLE College of the Arts or Building and Construction Academy (BCA); or a Diploma in Sports Management & Exercise Science by the Singapore Sports School-Auckland University of Technology (SSS-AUT).	Start: 1 February 2010  End: 28 February 2010	
<b>NUS High School Diploma</b> Applicants, regardless of nationality, presenting the NUS High School Diploma awarded by NUS High School of Mathematics & Science.	Start: 15 December 2009  End: 15 January 2010	
<b>International Baccalaureate Diploma</b> Applicants, regardless of nationality, presenting the International Baccalaureate (IB) Diploma.	Start: 9 October 2009  End: 31 March 2010	<ul style="list-style-type: none"> <li>• Singaporean or Singapore Permanent Resident Applicants - VISA or Mastercard or DBS/POSB ATM - S\$10</li> </ul>
<b>International &amp; Other Qualifications</b> Applicants, regardless of nationality, presenting an International qualification (e.g. Malaysia STPM/UEC, India Standard 12, Indonesia SMA UAN, PRC Gao Kao, Vietnam High School Graduation Certificate, etc.) or Other qualifications not specified in the preceding groups above.	Please refer to the table on page 55.	<ul style="list-style-type: none"> <li>• International Applicants - Bank draft - S\$30 or US\$30 / Visa or Mastercard - S\$20</li> </ul>
<b>Part-Time B.Eng</b> Applicants, regardless of nationality, who have graduated with a relevant diploma from one of the five local polytechnics in Singapore. Final year polytechnic students may also apply.	Start: 5 December 2009  End: 31 January 2010	Cash or Cheque* - S\$70  VISA or Mastercard or DBS/POSB ATM - S\$65  *We only accept cheques drawn on banks in Singapore

**Note:**

1. Former or current students of National University of Singapore (NUS) or Singapore Management University (SMU) seeking admission may apply under one of the application groups listed above.
2. Former Nanyang Technological University (NTU) students seeking re-admission; or current NTU students seeking change of programme to Arts (Education) and Science (Education) may apply under one of the application groups listed above.
3. Returning National Servicemen with places already reserved in NTU and who wish to submit new applications may do so by applying under one of the application groups listed above.

# Application for Admission for International & Other Qualifications

## (Academic Year 2010/2011)

International students must have completed at least 12 years of general education up to GCE Advanced Level or acceptable equivalent qualifications to be considered for admission. The more common international qualifications that we consider for admission and the application period for the respective international qualifications are given below. Applicants with other equivalent qualifications from countries that are not listed here may also apply.

INTERNATIONAL QUALIFICATION	APPLICATION DETAILS	APPLICATION PERIOD
<ul style="list-style-type: none"> <li>Malaysia Unified Examination Certificate (UEC)</li> </ul>	<ul style="list-style-type: none"> <li>E1119 English certificate is compulsory if you are applying for non-engineering/non-science programmes except Chinese programme.</li> </ul>	15 Sep 2010 - 15 Jan 2011
<ul style="list-style-type: none"> <li>PRC National College Entrance Examination (Gao Kao)</li> </ul>	<ul style="list-style-type: none"> <li>Apply with Senior Middle 1 &amp; 2 results together with IELTS/TOEFL/SAT1 if you are taking Gao Kao in 2011.</li> <li>Apply with Gao Kao result together with IELTS/TOEFL/SAT1 if you have already taken Gao Kao.</li> <li>Apply via Ameson Chinese Elite Identification Scheme (ACEIS). Visit <a href="http://aceis.ameson.org/">http://aceis.ameson.org/</a> for further details.</li> </ul> <p><i>Admissions interview will be conducted for selected candidates.</i></p>	
<ul style="list-style-type: none"> <li>SMA Ujian Akhir Nasional (UAN)</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with Rapor SMA Year 10 and Year 11 results before closing date if you are taking UAN in 2011.</li> </ul>	1 Oct 2010 – 15 Dec 2010
<ul style="list-style-type: none"> <li>Australia TEE, NSW HSC, SAM, VCE, Tasmanian HSC</li> </ul>	<ul style="list-style-type: none"> <li>Please apply before closing date and submit HSC results and TER/UAI/ENTER score once available if you are in the final year of study.</li> </ul>	1 Oct 2010 – 15 Dec 2010 (for students studying in Indonesia) 1 Oct 2010 – 31 Jan 2011
<ul style="list-style-type: none"> <li>Vietnam High School Graduation Certificate</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with Senior High School Year 10 and Year 11 results before closing date if you are taking national examination in 2011.</li> </ul>	1 Oct 2010 – 31 Dec 2010
<ul style="list-style-type: none"> <li>Canada HSC-Ontario Diploma, British Columbia High School Certificate</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with final term grades before closing date and submit actual results within 3 days after release if you are in Grade 12.</li> </ul>	1 Oct 2010 – 31 Jan 2011
<ul style="list-style-type: none"> <li>Myanmar Higher School Certificate (HSC)</li> </ul>	-	
<ul style="list-style-type: none"> <li>German Abitur</li> <li>Kazakhstan High School Certificate</li> <li>Philippines Higher School Certificate (HSC)</li> <li>New Zealand NCEA</li> <li>South Korea Scholastic Examination</li> <li>Thailand Mathayom 6</li> <li>Turkish High School Certificate</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with final term grades before closing date if you are in the final year of high school.</li> </ul>	
<ul style="list-style-type: none"> <li>American High School Diploma</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with final term grades before closing date if you are in the final year of high school.</li> </ul>	1 Oct 2010 – 31 Mar 2011
<ul style="list-style-type: none"> <li>India Standard 12</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with Standard 10 results before closing date if you are taking Standard 12 examination in 2011. Actual Standard 12 results need to be submitted within 3 days after release for final decision.</li> </ul>	
<ul style="list-style-type: none"> <li>International Baccalaureate Diploma (IB)</li> <li>French Baccalaureate (FB)</li> </ul>	<ul style="list-style-type: none"> <li>If you are taking IB/FB examination in 2011, please apply before closing date and submit predicted results. Actual results need to be submitted within 3 days after release for final decision.</li> </ul>	
<ul style="list-style-type: none"> <li>Malaysia Sijil Tinggi Persekolahan Malaysia (STPM)</li> </ul>	<ul style="list-style-type: none"> <li>E1119 English certificate or MUET is compulsory if you are applying for non-engineering/non-science programmes except Chinese programme.</li> </ul>	
<ul style="list-style-type: none"> <li>Mauritius Higher School Certificate (HSC)</li> </ul>	-	
<ul style="list-style-type: none"> <li>'A' Level (AQA, Brunei, Cambridge, Edexcel, Hong Kong, Maldives, Sri Lanka, London) Certificate</li> </ul>	<ul style="list-style-type: none"> <li>Admission is based on at least 3 'A' level subjects in a single sitting. Please submit predicted 'A' level grades from your high school if actual results is not available at the point of application. Actual 'A' level results need to be submitted within 3 days after release for final decision.</li> </ul>	
<ul style="list-style-type: none"> <li>All other international qualifications not listed</li> </ul>	<ul style="list-style-type: none"> <li>Please apply with final term grades before closing date if you are in the final year of high school.</li> </ul>	1 Oct 2010 – 31 Jan 2011

# Application Procedure for Students with International & Other Qualifications

## Application Procedure

Applications have to be submitted online at <http://admissions.ntu.edu.sg/UndergraduateAdmissions/Pages/InternationalOthers.aspx>

A non-refundable and non-transferable application fee of S\$30 or US\$30 (inclusive of S\$10 or US\$10 handling charge) is applicable for payment by a bank draft payable to “Nanyang Technological University”. Please write your application number and name on the back of the bank draft. If you choose to pay online by credit card, you will enjoy a discounted application fee of S\$20. The application fee for Singaporeans and Singapore Permanent Residents is S\$10.

Please print checklist and send the following supporting documents together with the bank draft (where applicable) to the Office of Admissions and Financial Aid not more than one week after the application closing date.

- Birth certificate or passport
- Junior High School national examination results\* (eg. Malaysia SPM, India Standard 10)
- Senior High School internal examination results\* (eg. Indonesia Rapor SMA Year 10 and Year 11, Vietnam Year 10 and Year 11) if you have not taken your senior high school national examination

- Senior High School national examination results\*, if applicable (e.g. Indonesia UAN, Vietnam HSC)
- Actual IB/'A' Level (AQA, Brunei, Cambridge, Edexcel, Hong Kong, Maldives, Sri Lanka, London)/India Standard 12 examination results\*, when available (required)
- University entrance examination results\*, if any
- University academic transcripts\* (for current or former university students)
- TOEFL, SAT1 or IELTS (Compulsory for PRC Gao Kao applicants only)

\*certified by school principal or teacher or any gazetted officer

## ENTRANCE EXAMINATION

International students with Malaysia STPM, Malaysia UEC, 'A' Level (AQA, Brunei, Cambridge, Edexcel, Hong Kong, London, Maldives, and Sri Lanka), India Standard 12, Mauritius HSC, PRC Gao Kao, American High School Diploma, German Abitur, French Bacculaureate, IB Diploma, NCEA & NZ Scholarships are not required to take the entrance examination. In addition, applicants who have won gold, silver or bronze medals in International Olympiads Competition will be exempted from taking the entrance examination.

Applicants with other qualifications may be required to take an entrance examination before a final decision on admission is made. Details of the examination will be made known to shortlisted applicants.

# Admission Criteria for Students with GCE 'A' Level Certificate & Local Polytechnic Diploma

## Minimum Requirements

You are offering the Singapore-Cambridge GCE 'A' level Examination in the English medium and must have obtained all of the following:

- At least two passes in subjects at H2 level and attempted General Paper (GP) or Knowledge & Inquiry (KI) in the same sitting;
- Meet one of the following Mother Tongue Language (MTL) requirement:
  - A minimum of 'S' grade in H1 MTL or General Studies in Chinese or H2 Mother Tongue Language & Literature (MTLL) taken at 'A' level
  - Pass in MTL 'B' syllabus taken at 'A' level
  - A minimum of D7 in Higher MTL taken at 'O' level

In addition to fulfilling the above admission requirements, below are the minimum subject requirements of the degree programmes that you also need to fulfil.

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Engineering</b>		
Aerospace Engineering	H2 level pass in Mathematics and Physics or Chemistry or Biology or Computing and 'O' level or equivalent pass in Physics+	
Bioengineering		
Business & Computing (Double Degree)		
Civil Engineering		
Computer Engineering		
Computer Science		
Electrical & Electronic Engineering		
Engineering		
Engineering <sup>^</sup> & Economics (Double Degree) <sup>^</sup> in a specific field of Engineering		
Environmental Engineering		
Information Engineering & Media		
Integrated Programmes◆ • BEng [CS] & MSc [CS] • BEng [CE] & MSc [CS] • BEng [EEE] & MSc [ECE]		
Mechanical Engineering		
Materials Engineering		
Materials Engineering & Economics (Double Degree)		
Chemical & Biomolecular Engineering	H2 level pass in Mathematics and Chemistry and 'O' level or equivalent pass in Physics+	
Chemical & Biomolecular Engineering & Economics (Double Degree)		
Maritime Studies#	H1 level pass in Mathematics or 'O' level or equivalent pass in Additional Mathematics and 'O' level or H1 level pass in a Science subject	
Maritime Studies with Business Major#		

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Humanities, Arts, &amp; Social Sciences</b>		
Art, Design & Media	<p>'O' level or equivalent pass in Mathematics</p> <p>In addition, candidates are required to submit the following five (5) submission items.</p> <p><b>Part 1 – These are compulsory assignments to fulfill.</b></p> <ul style="list-style-type: none"> <li>• A portfolio or demo reel of personal artwork, including projects developed in secondary education. The portfolio should demonstrate general artistic proficiency plus ability in the desired area of BFA expertise (i.e. animation, photography, design, etc).</li> <li>• A short written composition in English of no more than 400 words explaining why you are uniquely qualified to enter a specific BFA programme.</li> </ul> <p><b>Part 2 – Please submit three (3) pieces from an assigned set of four designs that will demonstrate your abilities in the areas of:</b></p> <ul style="list-style-type: none"> <li>• Conceptual and Visual Problem Solving. Using visual elements and symbols, create a composition that visually describes a verbal metaphor.</li> <li>• Design Ability. Using a set of defined elements – spatial, conceptual structural, and possible even auditory stimuli, design a 3D form or spatial environment that satisfies the stated design brief.</li> <li>• Narrative and Storytelling. Using a set of images write a story in a maximum of 3 paragraphs.</li> <li>• Drawing and Visualization. Create a drawing of a specific object, demonstrating your skill in handling pencil or pen on paper.</li> </ul> <p>These assignments are to be completed in a specific material and size requirement. The specific assignments are available on the School of Art, Design &amp; Media website.</p>	
Communication Studies	Good pass in General Paper or Knowledge & Inquiry, at least B in order to be considered	
Chinese	Pass in H2 level Chinese or good pass in H1 level Chinese or 'O' level Higher Chinese or distinction in 'O' level Chinese	On a selective basis
Economics	H1 level pass in Mathematics or 'O' level or equivalent pass in Additional Mathematics	On a selective basis
English Literature	Good pass in General Paper or Knowledge & Inquiry or H2 level English Literature	On a selective basis
Linguistics & Multilingual Studies	Good pass in General Paper or Knowledge & Inquiry	On a selective basis
Psychology	H1 level pass in Mathematics or 'O' level or equivalent pass in Additional Mathematics	On a selective basis
Sociology	Good pass in General Paper or Knowledge & Inquiry	On a selective basis

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Science</b>		
Biological Sciences	H1 level pass in Mathematics and H2 level pass in Physics or Chemistry or Biology	On a selective basis
Biomedical Sciences & Chinese Medicine (Double Degree)	H1 level pass in Mathematics and H2 level pass in Physics or Chemistry or Biology and 'O' level pass in Chinese	On a selective basis
Chemistry & Biological Chemistry	H2 level pass in Chemistry and Mathematics or Physics	
Mathematical Sciences	H2 level pass in Mathematics	
Mathematics & Economics (Combined Degree)		
Physics / Applied Physics		
Physics with Mathematical Sciences Major	H2 level pass in Physics and Mathematics	
<b>Nanyang Business School</b>		
Accountancy	H1 level pass in Mathematics or 'O' level or equivalent pass in Additional Mathematics	On a selective basis
Business		
Accountancy & Business (Double Degree)		
<b>National Institute of Education</b>		
Arts (Education)*	2 subjects taken at H1 level, including a pass in General Paper or Knowledge & Inquiry, taken at one and the same sitting	Yes
Science (Education)*	Pass in at least 5 subjects including English as a First Language taken at 'O' levels Pass in Mathematics at either 'O' level or at least at H1 level in the 'A' level examinations	
<b>Sport Science &amp; Management</b>		
Sport Science & Management#	H1 level pass in Mathematics or 'O' level or equivalent pass in Additional Mathematics	On a selective basis

+ 'O' Level pass in Physics is only applicable to applicants who have not read H2 level Physics.

◆ [CE]: Computer Engineering; [CS]: Computer Science; [ECE]: Electrical & Computer Engineering; [EEE]: Electrical & Electronic Engineering

# Programmes leading to Bachelor of Science degree.

\* These degree programmes offer many courses which may require further subject prerequisites. Please refer to the National Institute of Education (NIE) website for details.

### Admission Criteria for Local Polytechnic Diploma Holders

Top local polytechnic graduates who hold a diploma with merit or a diploma with distinction, are invited to apply for any degree programme in NTU, regardless of the diploma they hold. Eligible applicants may be considered for direct entry to second year engineering degree programme. Polytechnic students in their final semester may apply with their first 5 semesters' results. They may submit final semester's result when available.

# Admission Criteria for Students with International Baccalaureate Diploma

## Minimum Requirements

You are offering the International Baccalaureate (IB) Diploma, and will have completed at least 12 years of general education in the year of admission.

In addition to fulfilling the above admission requirements, below are the minimum subject requirements of the degree programmes that you also need to fulfil.

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Engineering</b>		
Aerospace Engineering	Mathematics at Higher Level and Physics or Chemistry or Biology or Computer Science at Higher Level and Physics at Standard Level or equivalent+	
Bioengineering		
Business & Computing (Double Degree)		
Civil Engineering		
Computer Engineering		
Computer Science		
Electrical & Electronic Engineering		
Engineering		
Engineering <sup>^</sup> & Economics (Double Degree) <sup>^</sup> in a specific field of Engineering		
Environmental Engineering		
Information Engineering & Media		
Integrated Programmes◆ • BEng [CS] & MSc [CS] • BEng [CE] & MSc [CS] • BEng [EEE] & MSc [ECE]		
Mechanical Engineering		
Materials Engineering		
Materials Engineering & Economics (Double Degree)	Mathematics and Chemistry at Higher Level and Physics at Standard Level or equivalent+	
Chemical & Biomolecular Engineering	Mathematics at Standard Level and Physics or Chemistry or Biology at Standard Level	
Chemical & Biomolecular Engineering & Economics (Double Degree)		
Maritime Studies#	Mathematics at Standard Level and Physics or Chemistry or Biology at Standard Level	
Maritime Studies with Business Major#		

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Humanities, Arts, &amp; Social Sciences</b>		
Art, Design & Media	<p>Mathematics at Standard Level</p> <p>In addition, candidates are required to submit the following five (5) submission items.</p> <p><b>Part 1 – These are compulsory assignments to fulfil</b></p> <ul style="list-style-type: none"> <li>• A portfolio or demo reel of personal artwork, including projects developed in secondary education. The portfolio should demonstrate general artistic proficiency plus ability in the desired area of BFA expertise (i.e. animation, photography, design, etc).</li> <li>• A short written composition in English of no more than 400 words explaining why you are uniquely qualified to enter a specific BFA programme.</li> </ul> <p><b>Part 2 – Please submit three (3) pieces from an assigned set of four designs that will demonstrate your abilities in the areas of:</b></p> <ul style="list-style-type: none"> <li>• Conceptual and Visual Problem Solving. Using visual elements and symbols, create a composition that visually describes a verbal metaphor.</li> <li>• Design Ability. Using a set of defined elements - spatial, conceptual structural, and possible even auditory stimuli, design a 3D form or spatial environment that satisfies the stated design brief.</li> <li>• Narrative and Storytelling. Using a set of images write a story in a maximum of 3 paragraphs.</li> <li>• Drawing and Visualization. Create a drawing of a specific object, demonstrating your skill in handling pencil or pen on paper.</li> </ul> <p>These assignments are to be completed in a specific material and size requirement. The specific assignments are available on the School of Art, Design &amp; Media website.</p>	
Communication Studies	A good pass in English	Yes
Chinese	A good pass in Chinese at Standard Level	On a selective basis
Economics	A good pass in Mathematics at Standard Level and a good pass in English	On a selective basis
English Literature	A good pass in English	On a selective basis
Linguistics & Multilingual Studies	A good pass in English	On a selective basis
Psychology	A good pass in Mathematics at Standard Level and a good pass in English	On a selective basis
Sociology	A good pass in English	On a selective basis

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Science</b>		
Biological Sciences	Mathematics at Standard Level and Physics or Chemistry or Biology at Higher Level	On a selective basis
Biomedical Sciences & Chinese Medicine (Double Degree)	Mathematics at Standard Level and Physics or Chemistry or Biology at Higher Level and Chinese at Standard Level	On a selective basis
Chemistry & Biological Chemistry	Chemistry at Higher Level and Mathematics or Physics at Higher Level	
Mathematical Sciences	Mathematics at Higher Level	
Mathematics & Economics (Combined Degree)		
Physics / Applied Physics	Physics and Mathematics at Higher Level	
Physics with Mathematical Sciences Major		
<b>Nanyang Business School</b>		
Accountancy	Mathematics at Standard Level	On a selective basis
Business		
Accountancy & Business (Double Degree)		
<b>National Institute of Education</b>		
Arts (Education)*	Mathematics and English A1 at Standard Level	Yes
Science (Education)*	Pass in at least 5 subjects including English as a First Language taken at 'O' level or Junior High School Level, where applicable	
<b>Sport Science &amp; Management</b>		
Sport Science & Management#	Mathematics at Standard Level	On a selective basis

+ Pass in Physics at Standard Level is only applicable to applicants who have not read Physics at Higher Level.

◆ [CE]: Computer Engineering; [CS]: Computer Science; [ECE]: Electrical & Computer Engineering; [EEE]: Electrical & Electronic Engineering

# Programmes leading to Bachelor of Science degree.

\* These degree programmes offer many courses which may require further subject prerequisites. Please refer to the National Institute of Education (NIE) website for details.

# Admission Criteria for Students with NUS High School Diploma

## Minimum Requirements

You are offering the NUS High School Diploma and must fulfil one of the following Mother Tongue Language (MTL) requirements:

- A pass in MTL 'B' or a grade 'S' for General Studies in Chinese or H1 MTL or H2 MTLL at 'A' level
- A minimum of D7 in Higher MTL taken at 'O' level
- An MOE-approved MTL-in-lieu or MTL-exemption

In addition to fulfilling the above admission requirements, below are the minimum subject requirements of the degree programme that you also need to fulfil.

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Engineering</b>		
Aerospace Engineering	Major CAP of 2.0 in Mathematics and Physics or Chemistry or Biology+	
Bioengineering		
Business & Computing (Double Degree)		
Civil Engineering		
Computer Engineering		
Computer Science		
Electrical & Electronic Engineering		
Engineering		
Engineering <sup>^</sup> & Economics (Double Degree) <sup>^</sup> in a specific field of Engineering		
Environmental Engineering		
Information Engineering & Media		
Integrated Programmes◆ • BEng [CS] & MSc [CS] • BEng [CE] & MSc [CS] • BEng [EEE] & MSc [ECE]		
Materials Engineering		
Mechanical Engineering		
Chemical & Biomolecular Engineering		
Chemical & Biomolecular Engineering & Economics (Double Degree)		
Maritime Studies#	Major CAP of 2.0 in Mathematics and Overall CAP of 2.0 in Physics or Chemistry or Biology	
Maritime Studies with Business Major#		

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Humanities, Arts, &amp; Social Sciences</b>		
Art, Design & Media	<p>Major CAP of 2.0 in Mathematics</p> <p>In addition, candidates are required to submit the following five (5) submission items.</p> <p><b>Part 1 – These are compulsory assignments to fulfil</b></p> <ul style="list-style-type: none"> <li>• A portfolio or demo reel of personal artwork, including projects developed in secondary education. The portfolio should demonstrate general artistic proficiency plus ability in the desired area of BFA expertise (i.e. animation, photography, design, etc).</li> <li>• A short written composition in English of no more than 400 words explaining why you are uniquely qualified to enter a specific BFA programme.</li> </ul> <p><b>Part 2 – Please submit three (3) pieces from an assigned set of four designs that will demonstrate your abilities in the areas of:</b></p> <ul style="list-style-type: none"> <li>• Conceptual and Visual Problem Solving. Using visual elements and symbols, create a composition that visually describes a verbal metaphor.</li> <li>• Design Ability. Using a set of defined elements - spatial, conceptual structural, and possible even auditory stimuli, design a 3D form or spatial environment that satisfies the stated design brief.</li> <li>• Narrative and Storytelling. Using a set of images write a story in a maximum of 3 paragraphs.</li> <li>• Drawing and Visualization. Create a drawing of a specific object, demonstrating your skill in handling pencil or pen on paper.</li> </ul> <p>These assignments are to be completed in a specific material and size requirement. The specific assignments are available on the School of Art, Design &amp; Media website.</p>	
Communication Studies	Good Overall CAP in English Language	Yes
Chinese	Good Overall CAP in Chinese Language	On a selective basis
Economics	Major CAP of 2.0 in Mathematics and Good Overall CAP in English Language	On a selective basis
English Literature	Good Overall CAP in English Language	On a selective basis
Linguistics & Multilingual Studies	Good Overall CAP in English Language	On a selective basis
Psychology	Major CAP of 2.0 in Mathematics and Good Overall CAP in English Language	On a selective basis
Sociology	Good Overall CAP in English Language	On a selective basis

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Science</b>		
Biological Sciences	Major CAP of 2.0 in Mathematics and Physics or Chemistry or Biology	On a selective basis
Biomedical Sciences & Chinese Medicine (Double Degree)	Major CAP of 2.0 in Mathematics and Physics or Chemistry or Biology Good Overall CAP in Chinese Language	On a selective basis
Chemistry & Biological Chemistry	Major CAP of 2.0 in Chemistry and Mathematics or Physics	
Mathematical Sciences	Major CAP of 2.0 in Mathematics	
Mathematics & Economics (Combined Degree)		
Physics / Applied Physics		
Physics with Mathematical Sciences Major	Major CAP of 2.0 in Physics and Mathematics	
<b>Nanyang Business School</b>		
Accountancy	Major CAP of 2.0 in Mathematics	On a selective basis
Business		
Accountancy & Business (Double Degree)		
<b>National Institute of Education</b>		
Arts (Education)*	Major CAP of 2.0 in Mathematics and Good Overall CAP in English Language	Yes
Science (Education)*		
<b>Sport Science &amp; Management</b>		
Sport Science & Management#	Major CAP of 2.0 in Mathematics	On a selective basis

+ An overall CAP of 2.0 in Physics is applicable to applicants who have not majored in Physics.

◆ [CE]: Computer Engineering; [CS]: Computer Science; [ECE]: Electrical & Computer Engineering; [EEE]: Electrical & Electronic Engineering

# Programmes leading to Bachelor of Science degree.

\* These degree programmes offer many courses which may require further subject prerequisites. Please refer to the National Institute of Education (NIE) website for details.

# Admission Criteria for Students with International & Other Qualifications

## Minimum Requirements

You 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.

Submission of IELTS, TOEFL and SAT1 scores are optional except for students with PRC Gao Kao qualification (i.e. students who will be taking Gao Kao in June 2010 and those who have already taken Gao Kao). Only scores obtained in the 3 years leading up to the application deadline will be considered.

In addition to fulfilling the above admission requirements, below are the minimum subject requirements of the degree programmes that you also need to fulfil.

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Engineering</b>		
Aerospace Engineering	Mathematics and Physics or Chemistry or Biology at Senior High School Level and Physics at Junior High School Level+	
Civil Engineering		
Electrical & Electronic Engineering		
Environmental Engineering		
Engineering		
Information Engineering & Media		
Mechanical Engineering		
Business & Computing (Double Degree)		
Engineering <sup>^</sup> & Economics (Double Degree) <sup>^</sup> in a specific field of Engineering		
Integrated Programmes◆ • BEng [EEE] & MSc [ECE]		
Bioengineering	Mathematics and Physics or Chemistry or Biology or Computer Science at Senior High School Level and Physics at Junior High School Level+	
Bioengineering & Economics (Double Degree)		
Computer Engineering		
Computer Engineering & Economics (Double Degree)		
Computer Science		
Computer Science & Economics (Double Degree)		
Integrated Programmes◆ • BEng [CS] & MSc [CS] • BEng [CE] & MSc [CS]		
Chemical & Biomolecular Engineering	Mathematics and Chemistry at Senior High School Level and Physics at Junior High School Level+	
Chemical and Biomolecular Engineering & Economics (Double Degree)		
Materials Engineering	Mathematics and Physics or Chemistry or Biology at Senior High School Level and Physics at Junior High School Level+	
Materials Engineering & Economics (Double Degree)		
Maritime Studies#	Additional Mathematics and Physics or Chemistry or Biology or Science at Junior High School Level	
Maritime Studies with Business Major#		

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Humanities, Arts, &amp; Social Sciences</b>		
Art, Design & Media	<p>Mathematics at Junior High School Level</p> <p>In addition, candidates are required to submit the following five (5) submission items.</p> <p><b>Part 1 – Compulsory Assignments</b></p> <ul style="list-style-type: none"> <li>• A portfolio or demo reel of personal artwork, including projects developed in secondary education. The portfolio should demonstrate general artistic proficiency plus ability in the desired area of BFA expertise (i.e. animation, photography, design, etc)</li> <li>• A short written composition in English of no more than 400 words explaining why you are uniquely qualified to enter a specific BFA programme.</li> </ul> <p><b>Part 2 – To submit three (3) pieces from an assigned set of four designs that will demonstrate your abilities in the areas of:</b></p> <ul style="list-style-type: none"> <li>• Conceptual and Visual Problem Solving. Using visual elements and symbols, create a composition that visually describes a verbal metaphor.</li> <li>• Design Ability. Using a set of defined elements - spatial, conceptual structural, and possible even auditory stimuli, design a 3D form or spatial environment that satisfies the stated design brief.</li> <li>• Narrative and Storytelling - using a set of images write a story in a maximum of 3 paragraphs.</li> <li>• Drawing and Visualization - create a drawing of a specific object, demonstrating your skill in handling pencil or pen on paper.</li> </ul> <p>These assignments are to be completed in a specific material and size requirement. The specific assignments are available on the School of Art, Design &amp; Media website.</p>	
Communication Studies	A good pass in General Paper or English at Senior High School Level	Yes
Chinese	A good pass in Chinese at Junior High School Level	On a selective basis
Economics	A good pass in Mathematics and General Paper or English at Senior High School Level	On a selective basis
English Literature	A good pass in General Paper or English at Senior High School Level	On a selective basis
Linguistics & Multilingual Studies	A good pass in General Paper or English at Senior High School Level	On a selective basis
Psychology	A good pass in Mathematics and General Paper or English at Senior High School Level	On a selective basis
Sociology	A good pass in General Paper or English at Senior High School Level	On a selective basis

Programme	Minimum Subject Requirements	Selection Test / Interview
<b>College of Science</b>		
Biological Sciences	Mathematics at Junior High School Level and Physics or Chemistry or Biology at Senior High School Level	On a selective basis
Biomedical Sciences & Chinese Medicine (Double Degree)	Mathematics and Chinese at Junior High School level and Physics or Chemistry or Biology at Senior High School Level	On a selective basis
Chemistry & Biological Chemistry	Chemistry and Mathematics or Physics at Senior High School Level	
Mathematical Sciences	Mathematics at Senior High School Level	
Mathematics & Economics (Combined Degree)		
Physics / Applied Physics		
Physics with Mathematical Sciences Major	Physics and Mathematics at Senior High School Level	
<b>Nanyang Business School</b>		
Accountancy	Additional Mathematics at Junior High School Level	On a selective basis
Business		
Accountancy & Business (Double Degree)		
<b>National Institute of Education</b>		
Arts (Education)*	Pass in English and Mathematics at Senior High School Level	Yes
Science (Education)*	Pass in at least 5 subjects including English as a First Language taken at Junior High School Level Preferably a good score for IELTS or TOEFL	
<b>Sport Science &amp; Management</b>		
Sport Science & Management#	Additional Mathematics at Junior High School Level	On a selective basis

+ Junior High School Level in Physics is only applicable to applicants who have not read Physics at Senior High School Level.

◆ [CE]: Computer Engineering; [CS]: Computer Science; [ECE]: Electrical & Computer Engineering; [EEE]: Electrical & Electronic Engineering

# Programmes leading to Bachelor of Science degree.

\* These degree programmes offer many courses which may require further subject prerequisites. Please refer to the National Institute of Education (NIE) website for details.



## Financial Assistance

At NTU, we believe in helping students realise their fullest potential. To give those with financial difficulty equal opportunity for a university education, there is a range of assistance schemes to help local and international students with tuition fees and personal expenses.

FINANCIAL ASSISTANCE SCHEME	PURPOSE	
	TO PAY FOR TUITION FEES	TO DEFRAY LIVING EXPENSES
<ul style="list-style-type: none"> <li>• Tuition Fee Loan</li> <li>• CPF Education Scheme</li> <li>• Mendaki Tertiary Tuition Fee Subsidy</li> </ul>	✓	
<ul style="list-style-type: none"> <li>• Study Loan</li> </ul>	✓	✓
<ul style="list-style-type: none"> <li>• Bursaries</li> <li>• Work Study Scheme</li> </ul>		✓
<ul style="list-style-type: none"> <li>• Personal Computer Loan</li> </ul>	To purchase Notebook or Desktop PC	
<ul style="list-style-type: none"> <li>• Overseas Student Programme Loan / Travel Awards</li> </ul>	To defray flight and living expenses while on overseas study / attachment programmes	

To find out more information regarding the financial assistance schemes and application procedures, please visit

<http://admissions.ntu.edu.sg/UndergraduateAdmissions/FinancialAssistance/pages/default.aspx>

# Financial Assistance At A Glance

SCHEME	ELIGIBILITY	QUANTUM (P.A.)	GUARANTOR	REPAYMENT & INTEREST
<b>Tuition Fee Loan Scheme (TFL)</b>	<p>Full-time undergraduates of all nationalities, regardless of family income</p> <p>(Refer to Notes)</p>	Up to 90% of subsidised tuition fee payable by Singaporeans for the same programme	One guarantor aged between 21 and 60 years old. Singaporean guarantor to be provided for Singaporean students. Singapore Permanent Resident (SPR) and non-Singaporean guarantors will be accepted for SPR and International students respectively	<p>Minimum \$100/month repayment over a period of 20 years</p> <p>Interest free until graduation and thereafter interest at average prime rate of the 3 local banks</p>
<b>Study Loan (SL)</b>	<p>Full-time undergraduates of all nationalities</p> <p>Per Capita Income of family must be less than or equal to S\$2,400/month for Singaporean and SPR students, and less than or equal to S\$1,200/month for International students</p> <p>Must be held concurrently with one or combination of the following: TFL / CPF Education Scheme / Mendaki TTFS</p> <p>(Refer to Notes)</p>	<ul style="list-style-type: none"> <li>• 10% of the subsidised tuition fee payable by Singaporeans for the same programme</li> <li>• Optional living allowance loan of up to S\$3,600 per academic year</li> </ul>	One guarantor aged between 21 and 60 years old. Singaporean guarantor to be provided for Singaporean students. SPR and non-Singaporean guarantors will be accepted for SPR and International students respectively	<p>Minimum \$100/month repayment commencing 6 months after graduation, or on securing employment whichever is earlier</p> <p>Repayment period between 5 - 20 years</p>
<b>CPF Education Scheme</b>	<p>Full-time undergraduates</p> <p>(Refer to Notes)</p>	Up to 100% of subsidised tuition fee (It does not cover miscellaneous fees and hostel fee)	NA	<p>Minimum \$100/month repayment to commence 1 year after graduation over a period of 12 years</p> <p>Interest at current CPF interest rate computed from date of withdrawal</p>
<b>Post Secondary Education Account (PSEA)</b>	Students with funds in their own and siblings' accounts	Funds in students' and siblings' accounts	NA	NA

SCHEME	ELIGIBILITY	QUANTUM (P.A.)	GUARANTOR	REPAYMENT & INTEREST
<b>Mendaki Tertiary Tuition Fee Subsidy (TTFS)</b>	Malay Singaporean students who have enjoyed free secondary and/or pre-university education  Monthly gross family income is below S\$3,000	70% - 100 % of subsidised tuition fee	NA	NA
<b>NTU-Administered Bursaries</b>	For financially needy undergraduates  Per Capita Income of family must be less than or equal to S\$1,700/ month for Singaporean students  Subject to fund availability for non-Singaporean students	S\$800 and above	NA	NA
<b>Personal Computer Loan (PC Loan)</b>	Per Capita Income of family must be less than or equal to S\$1,200/ month  Subject to fund availability	S\$1,500	One guarantor	Repayment 3 months after graduation over a period of 3 years  Loan is interest-free
<b>Overseas Student Programme Loan/Travel Awards</b>	For financially needy full-time undergraduates on selected study or exchange or attachment programmes	Depends on country of study	One loan guarantor	Loan repayment after graduation over a period of 5 years  Loan is interest bearing after graduation
<b>Work Study Scheme (WSS)</b>	Full-time undergraduates of all nationalities	Depends on the scope of work	NA	NA

*Notes:*

- Students will only be covered under these schemes for the first 3 years of the Biomedical Sciences & Traditional Chinese Medicine degree programme.*
- International students paying non-subsidised tuition fees are not eligible to apply for financial aid schemes.*
- NIE BA (Education) and BSc (Education) trainee teachers whose tuition fees are paid by MOE and/or are in receipt of salary, stipend, allowances, bursaries, scholarships or other forms of financial assistance from MOE are not eligible to apply for the NTU-administered financial assistance schemes except for the PC Loan.*

# Tuition Fees

## For Academic Year 2010-11 Freshmen



The tuition fees, which shall remain fixed throughout the duration of the degree programme, are shown in the table below for Academic Year (AY) 2010/11 freshmen.

Programme of Study	Singapore Citizens		Singapore Permanent Residents		International Students	
	Subsidised Tuition Fee	Non-Subsidised Tuition Fee (not receiving Tuition Grant)	Subsidised Tuition Fee	Non-Subsidised Tuition Fee (not receiving Tuition Grant)	Subsidised Tuition Fee	Non-Subsidised Tuition Fee (not receiving Tuition Grant)
<ul style="list-style-type: none"> <li>All Programmes (except for the programmes listed below)</li> </ul>	S\$6,890	S\$25,230	S\$8,270	S\$25,230	S\$11,030	S\$25,230
<ul style="list-style-type: none"> <li>Accountancy</li> <li>Business</li> <li>Accountancy &amp; Business (Double Degree)</li> <li>Business &amp; Computing (Double Degree)</li> </ul>	S\$7,490	S\$27,460	S\$8,990	S\$27,460	S\$11,990	S\$27,460

- All amounts quoted are exclusive of GST.
- For students paying subsidised fees, GST on the tuition fee is subsidised by MOE.
- For students paying non-subsidised fees, GST on the tuition fee is to be borne by the student.

For more information on tuition fees, please visit

<http://admissions.ntu.edu.sg/UndergraduateAdmissions/Pages/FeesTuitionGrant.aspx>

Estimated Monthly Living Expenses	
Accommodation (on-campus)	S\$160 – S\$200
Meals	S\$300 – S\$400
Transport, Books, Personal Expenses	S\$100 – S\$250
<b>Total</b>	<b>S\$560 – S\$850</b>

**Office of Admissions and Financial Aid  
Nanyang Technological University**

Student Services Centre, Level 2  
42 Nanyang Avenue, Singapore 639815

[www.ntu.edu.sg](http://www.ntu.edu.sg)

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**FOR LOCAL STUDENTS**

Tel: (65) 6790 5972/5055 | Fax: (65) 6794 6510  
Email: [adm\\_local@ntu.edu.sg](mailto:adm_local@ntu.edu.sg)

<http://admissions.ntu.edu.sg>

Reg. No. 2006304393R  
Information is correct as at July 2010.

**FOR INTERNATIONAL STUDENTS**

Tel: (65) 6790 5806/5807 | Fax: (65) 6794 6510  
Email: [adm\\_intnl@ntu.edu.sg](mailto:adm_intnl@ntu.edu.sg)