WHAT'S NEXT?
DISCOVER SCIENCE @ NTU

School of Biological Sciences
School of Physical & Mathematical Sciences

Biological Sciences | Biomedical Sciences & Chinese Medicine
Chemistry & Biological Chemistry | Mathematical Sciences
Mathematics & Economics | Physics & Applied Physics

Schools of the College of Science
What’s so special about studying science @ NTU?
What undergraduate science degree programmes are offered @ NTU?
What postgraduate science degrees can I aim for?
How will I learn?
Are there any opportunities to do research as an undergraduate?
How will a good student be challenged?
What else will I get out of studying @ NTU?
Who are the international/national award winning faculty members?
Are there any opportunities for global exposure?
On behalf of my colleagues at the College of Science, comprising the School of Biological Sciences and the School of Physical & Mathematical Sciences, I welcome you to Discover Science @ NTU, to learn about our caring and internationally renowned faculty, our enthusiastic students from diverse countries and cultures, our unique direct Honours programmes, our state-of-the-art learning environment, our PhD programmes, and our research strengths.

To our prospective students: an education in science and/or mathematics gives you a solid preparation for self-education and learning beyond graduation which are essential to diverse careers and the many career changes that you will face in your lifetime. This is also a fascinating time to study the physical, chemical, biological or mathematical sciences that provide the strong foundation to impact upon the biomedical sciences, engineering sciences, and business and finance.

The College of Science provides a rigorous education in the basic sciences – mathematical sciences, physics, applied physics, chemistry & biological chemistry, and biological and biomedical sciences – that will prepare you well to take on the challenges in the current and new industries in Singapore, including Biomedical Sciences, Environmental & Water Technologies, and Digital & Interactive Media. You will also be able to contribute to building a strong technological base which will be R&D and knowledge driven to secure our nation’s leadership and competitiveness in the world market. Or perhaps you are inspired by the Nobel Prize Winners or Fields Medallists - the discoverers in science and mathematics - and hope to be one of them. Scientists do not stop at just discovering what is there, they can also go on to create that which never was!

Science and Mathematics have always produced leaders and technology conversant decision makers in all echelons and spheres in society. Our Prime Minister Lee Hsien Loong majored in Mathematics as an undergraduate; our former Deputy Prime Minister Dr Tony Tan majored in Physics; Ms Olivia Lum, our Businessperson of the Year 2005, Chief Executive Officer of Hyflux Limited and one of Forbes Southeast Asia’s 40 Richest People, majored in chemistry; and Prof. Chua Nam Hai, Andrew W. Mellon Professor at Rockefeller University, awarded the 2005 International Prize in Biology, majored in Biological Sciences. These are just some of many examples of eminent and successful people who have taken the Science & Mathematics route. Join them and change the world for the better!

Prof. Lee Soo Ying
Dean, College of Science
**College of Science**

**02. Prof. Law Sai-Kit, Alex**  
**Acting Chair, School of Biological Sciences**

We provide students with high quality university education and training in the life sciences. Graduates from the Bachelor of Science (Honours) and Doctor of Philosophy programme rapidly join the global life sciences industry in many different areas including research, education, management and bioenterprise.

Our double degree programme, combining the Bachelor of Science (Honours) in Biomedical Sciences and the Bachelor of Chinese Medicine (中医学学士学位) is taught in partnership with the Beijing University of Chinese Medicine.

---

**01. Prof. Ling San**  
**Chair, School of Physical & Mathematical Sciences**

Established in 2005, SPMS has achieved excellence through:

- **Innovative curriculum:** four hotly sought-after undergraduate programmes, in Chemistry & Biological Chemistry, Mathematical Sciences, Mathematics & Economics, and Physics & Applied Physics, prepare students for careers in the industry as well as research, while high-quality graduate programmes train students to become future leaders in research;

- **Fine facilities:** our new complex houses state-of-the-art laboratories with high safety standards and purpose-built classrooms and interaction space;

- **Quality faculty and staff:** including 3 NRF Fellows, SPMS faculty have won about S$50 million in research grants, including more than S$35 million in competitive externally-funded ones;

- **Vibrant student body:** our passionate students help to create a student- and faculty-centric culture in the School.

We will strive to bring SPMS to newer and greater heights!

---

**02. Prof. Ling San**  
**Chair, School of Physical & Mathematical Sciences**

The programme provides a unique opportunity for students to gain knowledge and experience in the long-established discipline of Traditional Chinese Medicine as well as receiving exposure to the modern concepts of biomedical sciences.

Life science is indeed the science of the 21st century. New knowledge and discoveries generated as a result of genome and molecular biology research are having major impacts on the pharmaceutical industry, healthcare, food and nutrition, improving quality of life, longevity and the environment.

It is now your chance to join us and become an integral part of the life sciences revolution.
What’s so special about studying science @ NTU?

Outstanding Faculty Members
Students are taught by a team of top-notch, internationally qualified faculty from over 29 nations; bringing unique perspectives, teaching methods and extensive contact networks from all corners of the globe. The College of Science has renowned Nanyang Professors and National Research Foundation Fellows among its ranks.

World Class Curriculum
The curricula and standards for the various disciplines in the College of Science are modelled after those of the best universities in the world such as Caltech, Yale, UCLA, Cornell.

Direct Honours Programmes
The College of Science offers direct Honours programmes in Biological Sciences, Biomedical Sciences, Chemical & Biological Chemistry, Mathematical Sciences, Mathematics & Economics, and Physics and Applied Physics. This system gives all students, regardless of academic standing, exposure to advanced coursework and project work.

Accelerated Bachelor of Science (Honours) Programmes
Academically outstanding undergraduate students will be invited to join accelerated programmes. Within the accelerated programmes students can complete the Bachelor of Science (Honours) programme in 3.5 years instead of 4 years.

CN Yang Scholars Programme
Outstanding undergraduate students may be selected to join the prestigious CN Yang Scholars Programme. This programme empowers students not only with a core degree in science or mathematics, additionally there are many enrichment opportunities woven into the programme.

Scholarship Awards
NTU offers a variety of scholarships to top students in recognition of their academic excellence and leadership qualities.

Study and Work Overseas
Students have the opportunity to gain cross cultural experience in reputable overseas universities. The NTU Global Immersion Programme (GIP) and International Student Exchange Programme (INSTEP) allow students to study and work abroad.

Excellent Career Prospects
Science and mathematics graduates have a wide range of careers to choose from in a variety of industrial sectors such as the Life Sciences, Healthcare, Finance and Engineering sectors. Career prospects include, but are certainly not limited to: research, research support, business, management, administration, banking, IT and education.
WHAT'S NEXT?
A Gateway to Boundless Possibilities
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 17 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.

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 and genomics. Students will then specialise and focus on current topics such as 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.

Double Degree:
Bachelor of Science (Honours) in Biomedical Sciences
Bachelor of Chinese Medicine (中医学学士学位)
This unique five-year double degree programme elegantly blends the western approach to Biomedical Sciences with Traditional Chinese Medicine. The Bachelor of Science (Honours) in Biomedical Sciences is conferred by NTU and all courses are taught in English. The Bachelor of Chinese Medicine (中医学学士学位) is conferred by the Beijing University of Chinese Medicine (BUCM) and all courses are taught in Mandarin. 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.

Career Prospects
With the eternal quest for understanding the processes of life, development, 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, and marketing to name just a few.
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 disciplines to the interfaces of disciplines. The School offers four rigorous four-year Bachelor of Science (Honours) programmes, where students are taught and mentored by faculty doing cutting-edge research. The state-of-the-art facilities of the School provide a superb environment for teaching and learning.

Bachelor of Science (Honours) in Chemistry & Biological Chemistry
This programme provides our students with a rigorous training as a chemist. Our curriculum is based on the American Chemical Society Curriculum, followed by the major universities in the United States. Besides the core contents covered in our BSc (Hons) degree, we offer optional concentrations in areas of Green Chemistry, Medicinal Chemistry and Food Science and Technology.

Career Prospects
Chemistry graduates can find ready employment in a wide range of chemical related industries in Singapore. These include the biomedical and pharmaceutical industries, the petrochemical industries, Polymer/Paint/Semiconductor industries and the food and beverage industry. A*STAR research institutes and other public sector agencies such as Health Science Authority and DSO National Labs are also eager employers. Being a teacher and shaping the mind of the next generation is also a popular career path with many chemistry graduates.
What undergraduate science degree programmes are offered at NTU?

Bachelor of Science (Honours) in Mathematical Sciences
All students commence with 18 months of common courses, designed to build a strong foundation before specialisation. The students of Statistics will learn a variety of statistical methods, with an emphasis on the tools used by working statisticians. In the Applied Mathematics stream, they will become experts in the use of computation in a great variety of real-world applications. Students fascinated by the logical structures underlying mathematics will have the opportunity to study Pure Mathematics with as much depth as their curiosity demands. The overall emphasis is on breadth, flexibility and relevance.

Bachelor of Science (Honours) in Mathematics & Economics
This programme gives our students the skills most sought after by the financial services industry. Students will 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, the students will study courses based on quantitative techniques, as well as courses with a more descriptive flavour.

Career Prospects
People who often lead in fields as diverse as finance, I.T., biotechnology, and many others, often started their careers with a degree in mathematics. Mathematicians do not usually work in jobs titled “Mathematician”. More typically, the job titles will be like “Epidemiologist”, “Risk Analyst”, “Actuary”, “Clinical Trials Manager”, and countless others. Mathematics gives you a superb foundation for later specialisation, and a set of analytical skills that would be valued by virtually any employer. Strong mathematicians are highly sought after by industry.
Bachelor of Science (Honours) in Physics
The Physics degree is designed to equip students with solid analytical and computational skills, whilst providing strong experimental training. Students may also opt for a concentration in Nanotechnology, or any of the proposed concentrations in Condensed Matter Physics, Physics of Complex Systems, as well as Mathematical Physics.

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. Students may opt for concentrations in Nanotechnology, Semiconductor Technology, Optical Technology, and Biophysics, or obtain a degree in Applied Physics with Innovation and Technopreneurship (APITech).

For both majors, the emphasis in Year 1 is on conceptual and mathematical foundations. Laying of the common theoretical foundations continues into Year 2, before progressive and flexible specialisation in frontier areas of research from Year 3 onwards. Good students will also be allowed to pursue a second major in Mathematical Sciences.

Career Prospects
Graduates will be rewarded with a wide choice of potential careers. The key objectives of our educational programme, ‘creativity, active collaboration and effective communication’, supplemented by exposure to research and work attachments, ensures employability of our graduates. Critical analysis, quantitative reasoning, and problem solving skills acquired in the programme are coveted by a variety of employers (e.g., research organisations, semiconductor industries, optics and displays, equipment manufacturers and many more).
What postgraduate science degrees can I aim for?

**Doctor of Philosophy (by research)**
**Master of Science (by research)**

Postgraduate research may be undertaken within the following research areas:

**Biological Sciences**
- Structural and Computational Biology
- Chemical Biology and Biotechnology
- Genomics and Genetics
- Molecular and Cell Biology

**Chemistry & Biological Chemistry**
- Synthesis, Methodology & Catalysis
- Inorganic; Organic; Analytical Chemistry
- Bioinorganic; Bioorganic; Biophysical Chemistry
- Physical; Theoretical; Computational Chemistry
- Medicinal Chemistry
- Green Chemistry
- Total Synthesis of Natural Products & Drugs

**Mathematical Sciences**
- Computational Mathematics & Their Applications
- Discrete Mathematics & Their Applications
- Optimisation
- Pure Mathematics
- Statistics & Probability
- Theoretical Computer Science

**Physics & Applied Physics**
- Biophysics; Bioimaging; Soft Condensed Matter
- Nano-Science & Nano-Technology; Surface & Interface Science
- Laser Physics; Quantum Electronics; Photonics
- Semiconductor Physics and Spin Electronics
- Quantum Information Science & Technology
- Theory and Computation – Atmospheric physics, Condensed Matter, Nonlinear & Complex Systems
- Superconductivity and Novel Quantum Phases
WHAT'S NEXT?

Engaging the Finest
Lectures & Tutorials
Initial information is delivered in lectures to large groups of students within lecture theatres. Thereafter, students will break into smaller groups for tutorials to discuss material presented in lectures. During tutorials, which are mediated by faculty or senior postgraduate students, students have an opportunity to expand on concepts and theories introduced in the lecture, discuss the material presented and apply new-found knowledge to current issues. Tutorials act as a participation-based learning environment giving all students the chance to ask questions, express their views and debate over a particular topic.

Laboratory Practicals
To promote a broad-based education, undergraduate students regularly participate in laboratory work which exposes students to cutting edge equipment and techniques. Students are also given opportunities to carry out research under the supervision of staff members during the semester break as well as through a semester-long intensive research project.

Group Discussions
In addition to formal lectures and tutorials, undergraduate students are encouraged to meet with faculty for further discussion and clarification of lecture material. The College of Science prides itself on the dedication and open-door policy of all faculty who are ready to share information and foster learning. It is certainly not unusual to see students having regular meetings with faculty over lunch or coffee.

Industrial Internship
The internship provides an opportunity for students to get a taste of the working environment. Students will have the flexibility to choose to work with any of our industry partners. This is a good training ground for students to apply their knowledge in a real life situation. Working life provides the opportunity of enhancing one’s communication and interpersonal skills. Internship also helps students to make decisions about their career path.

Research Projects
Students usually work independently on a full time research project during their final year of study. Such projects give all students a chance to put theoretical knowledge into practice and gain valuable research experience prior to graduation. Students will get to learn various experimental and problem solving techniques through research projects.
Undergraduate Research

Concepts and techniques in research are evolving everyday and the best way to grasp these advancements is through immersing oneself in research. At the College of Science we provide opportunities for students to explore, discover and understand science. Students are imbued with a scientific mindset to provide a firm foundation for their aspirations to be leaders, managers and advisers. Motivated undergraduate students can choose to take up research-based courses in their area of study which span over the special term and during the vacation period.

It has been an amazing and yet mysterious journey working in a very productive research laboratory. Under the guidance of experts the experience has broadened my perception of the field of genome manipulation. Thanks to the School of Biological Sciences for this phenomenal experience: I have not only gained greater academic satisfaction, but have also embraced the realms of science with a different perspective.

Shermaine Chiu Sheau Ming
Year 3, Biological Sciences
CN Yang Scholar
HELP University College Alumna, Malaysia

Doing research is really fun! Even though there are some procedures to follow, we simply have to be creative and curious! I also like the fact that I am gaining practical skills and knowledge whilst doing research; this is something you won’t find in any formal class. I have learnt many things from my supervisor and he has provided me with constant guidance throughout the project. We often have meals together, discussing things informally. My advice to fellow undergraduates is to not be afraid to take the plunge, just give it a shot!

Jeremy Hadidjojo
Year 2, Physics and Applied Physics
Accelerated Bachelor's Programme
Singapore Scholar
SMA Kolese Kanisius Alumnus, Jakarta, Indonesia
How will a good student be challenged?

CN Yang Scholars Programme
Named after Nobel Laureate, Professor Yang Chen Ning, the CN Yang Scholars Programme is NTU’s premier undergraduate programme for science and engineering students. The programme shares the same philosophy as the Caltech Core Curriculum and the MIT General Institute Requirement in providing a strong and broad foundation in the basics of science and mathematics to empower the student to delve deeper into any discipline in science, technology, engineering and mathematics, and to develop an interest in forefront research. Students enrolled under the programme will receive a full scholarship and allowance. CN Yang Scholars will also receive invitations to advanced study events, such as meetings with Nobel Prize laureates, and ample opportunities to study overseas.

It has been nothing short of an enriching and exciting journey in my past year of study under the CN Yang Scholars Programme. I have had the honour of working with great minds, including my peers and mentors, and forged close relationships with them. The invaluable experience of doing research as a first year student has given me a glimpse of the research world and I’m greatly privileged to learn from experienced, dedicated and accommodating professors.

Chiang Qi Ming Aaron
Year 2, Mathematical Sciences
Hwa Chong JC Alumnus, Singapore

The CN Yang Scholars Programme has given me many opportunities and exposure to areas I had never thought possible. I’ve gained additional knowledge in physics, maths and chemistry complementing my major - biology. I’ve learnt to comprehend science in a more sophisticated way. The programme has certainly broadened my view of science.

Prayudi Utomo
Year 2, Biological Sciences
2007 Silver Medalist in International Biology Olympiad
SMAK I BPK Penabur Alumnus, Jakarta, Indonesia
Undergraduate Research Experience on CAmpus (URECA)

URECA is an invitational university-wide programme offering research experiences to 2nd and 3rd year undergraduates who have excelled academically. Students who are selected to participate in the programme are eligible for a stipend and are given the title “NTU President Research Scholar” (PRS) or “DSO-URECA Research Scholar”. Students can choose to undertake research projects ranging from engineering, biosciences, communications, business management, accountancy to humanities. For more details, please refer to http://www.ntu.edu.sg/ureca.

URECA is an excellent program for honing experimental skills which will definitely come in handy in future research. My mentor was very understanding and allowed me to create a flexible working schedule so I could fit in research with my academic workload. I was very appreciative of this!

Chia Weisheng
Year 4, Biological Sciences
Accelerated Bachelor’s Program
National JC Alumnus, Singapore

URECA gave me a chance to try out research projects from other schools and it was indeed an invaluable experience. I worked on a project in the School of Mechanical and Aerospace Engineering (Mathematical Strategame Theory) for a year and this allowed me to see the different applications of the subject I love (Mathematics). For the first time, I also got to try making my own poster and writing my own research paper which I personally felt was really fulfilling too.

Chong Jia Ling
Year 4, Mathematical Sciences
Accelerated Bachelor’s Program
MOE Scholar under the Education Merit Scholarship (EMS)
Hwa Chong Institution Alumna, Singapore
"Like no other"

Caring lecturers and mentors spur me on, their passion for science motivates me. My experience in the School of Physical & Mathematical Sciences has so far been very fulfilling, making lifelong friends, gaining knowledge everyday, interacting with helpful and approachable professors, the list goes on…Life is certainly not a bed of roses, but I know this is where I learn and grow.

Kuek Shi Qi
Year 3, Mathematical Sciences
Anderson JC Alumna, Singapore

"More than just Science"

The School of Biological Sciences is not just a place where we gain knowledge. I was given the chance to apply what I have learnt by doing full time research with programs such as URECA. In addition, we are encouraged to present our findings in scientific conferences, both locally and abroad. Apart from science, we are encouraged to sharpen up our creativity and entrepreneurial skills. I was part of the organising committee for the Harvard Project for Asian and International Relations 2006, which was a really fun and enriching experience. In all, the School of Biological Sciences offers an intellectually challenging environment which facilitates learning and maximises the potential of every student.

Ku Chee Wai
Year 4, Biological Sciences
Accelerated Bachelor’s Program
President Research Scholar (URECA)
Max Lewis Scholar
Victoria JC Alumnus, Singapore
Who are the international/national award winning faculty members?

**Dr HONG Soon Hyeok**  
Chemistry & Biological Chemistry  
2008 - National Research Foundation Research Fellowship,  
Nanyang Assistant Professor, Singapore

**Professor LEE Soo Ying**  
Chemistry & Biological Chemistry  
2003 - National Science Award

**Professor LING San**  
Mathematical Sciences  
2003 - National Science Award

**Dr Eugene MAKEYEV**  
Biological Sciences  
2008 - National Research Foundation Research Fellowship,  
Nanyang Assistant Professor, Singapore

**Professor François MATHEY**  
Chemistry & Biological Chemistry  
2001 - Arbuzov Prize, Russia  
1999 - Main Group Chemistry Award (ICMGC)  
1997 - Grignard-Wittig Award, Franco-German

**Professor Koichi NARASAKA**  
Chemistry & Biological Chemistry  
2005 - Toray Science and Technology Prize, Japan  
2000 - The Chemical Society of Japan Award
Who are the international/national award winning faculty members?

Assoc Professor Christos PANAGOPoulos
Physics & Applied Physics
2008 - National Research Foundation Research Fellowship, Nanyang Associate Professor, Singapore

Assoc Professor Bernhard SCHMIDT
Mathematical Sciences
1997 - Kirkman Medal, Institute of Combinatorics and its Applications

Professor James P. TAM
Biological Sciences
2004 - Ralph Hirschman award, by American Chemical Society, USA
2003 - Rao Makineni Award, American Peptide Society, USA

Assoc Professor WANG Huaxiong
Mathematical Sciences
2004 - Best Research Contribution Award, Computing Research and Education Association of Australasia

Dr Steve ZHOU
Chemistry & Biological Chemistry
2008 - National Research Foundation Research Fellowship, Nanyang Assistant Professor, Singapore
2001 - SYNLETT-Journals Award, USA

Dr WU Guohua
Mathematical Sciences
2003 - Hatherton Award, Royal Society of New Zealand

Professor XING Chaoping
Mathematical Sciences
2003 - National Science Award
WHAT’S NEXT?
Seizing Global Opportunities
Are there any opportunities for global exposure?

International Student Exchange Programme (INSTEP)
INSTEP allows students to explore foreign culture, broaden their learning experience and develop global perspectives. Students have the flexibility of choosing from some 200 partner universities in more than 30 global cities. Take up the INSTEP challenge to enrich your study experience in NTU.

What our students have to share...

I could not have imagined how challenging it would be to study in a foreign language and to live in a completely different culture. Yet overcoming all of these perceived difficulties has become the most valuable experience and the sweetest memory.

Cheng Tianyin
Year 4, Mathematical Sciences
Accelerated Bachelor’s Program
President Research Scholar (URECA)
AY 05/06 & 06/07 Dean’s List
Nanjing Foreign Languages School Alumna, China

Living and studying overseas through INSTEP was surely an unforgettable experience which broadened my vision and helps me to appreciate the multi-cultured world. Communicating with people in foreign countries made me realise that no matter how different people look, often we share similar thoughts. With a heart at ease, everywhere can be home.

Hou Qian
Year 4, Biological Sciences
AY07/08 Dean’s List
Chongqing Nankai High School Alumna, China
Global Immersion Programme (GIP)

GIP allows students to gain multi-country exposure and develop their personal competitive advantage. It includes Study / Work & Study / Research Programmes. Students will have the opportunity to nurture their capabilities and to build a global network. Join the programme to gain prestige recognition and stand out from the crowd.

What our students have to share...

GIP was a wonderful opportunity to challenge ourselves and at the same time, learn and live independently. The academic environment was both stimulating and nurturing. It was a very enjoyable learning journey. Seattle is a beautiful city and the people there are friendly and approachable. My 6 months in the States were definitely time well spent and an experience I’ll hold on to dearly.

Ong Ziying Eugenia
Year 3, Biological Sciences
CN Yang Scholar
Victoria JC Alumna, Singapore

Venturing to the United States for half a year was a great change of surrounding and also a rewarding experience. I chose to live in the dorms where I made some awesome friends and shared some amazing experiences. As a cultural ambassador, it was nothing short of a pleasure to be able to talk about Singapore and our own unique culture. Taking part in the GIP provides the chance to expand ideas, enrich life, gain new friends and examine new perspectives.

Nur Filza Binte Mohamed Aslam
Year 4, Chemistry & Biological Chemistry
Raffles JC Alumna, Singapore
## Admission Requirements for Bachelor of Science Programmes

### School of Biological Sciences

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Minimum Subject Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>At least H1/SL/equivalent passes in Mathematics and a good H2/HL/A level/equivalent passes in one of the subjects - Physics or Chemistry or Biology.</td>
</tr>
<tr>
<td>Biomedical Sciences &amp; Chinese Medicine</td>
<td>At least H1/SL/equivalent passes in Mathematics and a good H2/HL/A level or equivalent passes in one of the subjects - Physics or Chemistry or Biology. PLUS at least an O level/SL/equivalent pass in Chinese Language</td>
</tr>
</tbody>
</table>

### School of Physical & Mathematical Sciences

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Minimum Subject Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry &amp; Biological Chemistry</td>
<td>Good H2/HL/A level/equivalent passes in Chemistry and Mathematics or Physics</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td>Good H2/HL/A level/equivalent passes in Mathematics</td>
</tr>
<tr>
<td>Mathematics &amp; Economics</td>
<td>Good H2/HL/A level/equivalent passes in Mathematics</td>
</tr>
<tr>
<td>Physics &amp; Applied Physics</td>
<td>Good H2/HL/A level/equivalent passes in Physics and Mathematics</td>
</tr>
</tbody>
</table>

NTU Admission, Tuition Fees, Financial Assistance, visit: http://admissions.ntu.edu.sg

NTU administered scholarships, visit: http://admissions.ntu.edu.sg/undergraduate/scholarships/newundergrad

**Office of Admissions and Financial Aid**
Nanyang Technological University  
Student Services Centre, Level 2  
42 Nanyang Avenue, Singapore 639815

**For Local Students**
Tel: (65) 6790 5972/5055 | Fax: (65) 6794 6510  
Email: adm_local@ntu.edu.sg

**For International Students**
Tel: (65) 6790 5806/5807 | Fax: (65) 6794 6510  
Email: adm_intnl@ntu.edu.sg
College of Science

School of Biological Sciences
Nanyang Technological University
60 Nanyang Avenue
Singapore 637551

Tel: (65) 6316 2800 | Fax: (65) 6791 3856
Email: sbs-undergrad@ntu.edu.sg (undergraduate)
       sbs-grad@ntu.edu.sg (graduate)
Website: www.sbs.ntu.edu.sg

School of Physical & Mathematical Sciences
Nanyang Technological University
SPMS-04-01, 21 Nanyang Link
Singapore 637371

Tel: (65) 6513 8459 | Fax: (65) 6515 9663
Email: spmsundgrad@ntu.edu.sg (undergraduate)
       spms-grad@ntu.edu.sg (graduate)
Website: www.spms.ntu.edu.sg

Reg. No. 20060 4393R