**CURRICULUM OVERVIEW FOR SCIENCE PROGRAMMES**

**1. Year, Sem 1**
- School Core
- Research

**2. Year, Sem 1**
- School Core
- Research

**3. Year, Sem 1**
- Final Year Project 1 at NTU / Overseas

**4. Year, Sem 1**
- Research

**5. Year, Sem 1**
- Research

**6. Year, Sem 1**
- Final Year Project 2 at NTU / Overseas

**7. Special Term**
- Final Year Project 1 at NTU / Overseas

**CURRICULUM OVERVIEW FOR ENGINEERING PROGRAMMES**

**1. Year, Sem 1**
- School Core
- Research

**2. Year, Sem 1**
- School Core
- Research

**3. Year, Sem 1**
- Final Year Project 1 at NTU / Overseas

**4. Year, Sem 1**
- Research

**5. Year, Sem 1**
- Research

**6. Year, Sem 1**
- Final Year Project 2 at NTU / Overseas

**7. Special Term**
- Final Year Project 1 at NTU / Overseas

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**SCHOLARSHIP AWARD**

- Computer allowance of S$1,500 (one-off)
- Living allowance (S$6,000 per annum)
- Global Exchange Experience
- Academic Guidance by CNYSP Alumni
- Settling-in allowance of S$250 (one-off)
- Multi-Disciplinary Curriculum
- Overseas Learning Trip

**PROGRAMME OFFERINGS**

- Physics & Applied Physics
- Computer Engineering
- Civil Engineering
- Aerospace Engineering
- Electrical & Electronic Engineering
- Materials Engineering
- Mathematical Sciences

**INTRODUCTION**

CN Yang Scholars Programme (CNYSP) is named after Professor CN Yang (Nobel Laureate in Physics 1957). As a premier undergraduate programme in NTU, CNYSP is specially designed for exceptional students from science and engineering, with a deep passion in research.

CNYSP provides a strong and broad foundation that encompasses all branches of science, with several research opportunities in NTU and overseas. CN Yang Scholars are fully funded to undertake 5 to 8 months of Overseas Final Year Project at reputable universities. At the end of the undergraduate study, CNYSP graduates are given an option to pursue postgraduate study (PhD) with a scholarship in NTU or Joint PhD overseas.

**WHY CHOOSE CNYSP?**

1. Scholarship Award
2. Multi-Disciplinary Curriculum
3. Overseas Final Year Project
4. Overseas Learning Trip
5. Global Exchange Experience
6. Residential Experience with Garage Project
7. Guaranteed Full Stay
8. Academic Guidance by CNYSP Alumni
9. Meeting World Class Leaders in Science and Engineering
10. Joint PhD at NTU/University (optional)

**SCHOLARSHIP ELIGIBILITY**

- Biological Sciences
- Chemistry & Biological Chemistry
- Environmental Earth Sciences
- Mathematical Sciences
- Physics & Applied Physics

**ENGINEERING**

- Aerospace Engineering
- Bioengineering
- Chemical & Biomolecular Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical & Electronic Engineering
- Environmental Engineering
- Materials Engineering
- Mechanical Engineering

**SCHOLARSHIP AWARD**

- Subsidized tuition fees (after tuition grant)
- Living allowance (S$2,000 per annum)
- Travel grant of S$2,000 for overseas study or exchange programme (one-off)
- Accommodation allowance up to S$2,000 per annum (in NTU dorms only)
- Computer allowance of S$150 (one-off)
- Block allowance (S$300 per annum)
- Setting in allowance of S$50 (one-off)

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**SCHOLARSHIP ELIGIBILITY**

- Biological Sciences
- Chemistry & Biological Chemistry
- Environmental Earth Sciences
- Mathematical Sciences
- Physics & Applied Physics

**ENGINEERING**

- Aerospace Engineering
- Bioengineering
- Chemical & Biomolecular Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
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OPPORTUNITIES FOR RESEARCH

Overseas Research Internship

The overseas internship was an experience of a lifetime. The wide-ranging space projects ongoing in the laboratory allowed me to learn about various aspects of satellite engineering as well as atmospheric science. The highly international population there also provided me with a chance to work in a diverse team.

Yap Jian Beng
Electrical and Electronic Engineering
Joint-Collaboration NTU-Kyushu Institute of Technology, Japan

Designed a distributed system capable of synchronized recording of AV4’s downlink signals at different ground stations across Asia, and the algorithm necessary to process the recorded data.

OVERSEAS LEARNING TRIPS

CALIFORNIA INSTITUTE OF TECHNOLOGY (CALTECH) AND FIELD TRIPS

The 5-day field trip was led by Professor Kerry Sieh, Assistant Professor Wang Xianfeng and Dr. Aron Meltzner. It consisted of exploration to several geological sites, such as Hot Creek, Mammoth Mountain and the Mono Lake Basin.

Along the way, each scholar presented on topics pertaining to geological site, encouraging peer teaching and learning. This field trip concluded with challenging treks at Inyo National Forest and Yosemite National Park.

AOBA-VELOX IV
Nanosatellite

CNYSP has given me the opportunity to visit University of Waterloo to pursue my interest in gravitational physics, where I work directly with experts in the field. Having people with the right expertise really makes learning the subject a lot easier and pushing boundaries become possible.

Erickson Tjoa @ University of Waterloo
Physics with 2nd major in Mathematical Sciences

It is a privilege for me to join Professor Tom Brown’s research group, experience rigorous interdisciplinary research and gain from the expertise of the researchers. I have personally experienced that research has no boundaries, both conceptually and physically.

Chia Wen Ni Geraldine @ University of Oxford
Chemistry and Biological Chemistry

The CNYang Scholars, together with Dr Lu Yaping, visited the SCCS over the summer. SCCS is the largest Carbon Capture and Storage (CCS) research group in the UK. It specializes in capturing carbon dioxide emitted from industries and storing them underground in the North Sea. SCCS research ranges from capture engineering, geosciences, social perceptions, environmental impacts, and tax and petroleum economics.

Scottish Carbon Capture & Storage (SCCS)

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