Scholarships & Terms

NGS Scholarship (NGSS)
The NGS Ph.D. Scholarship is awarded to talented students with an aptitude for innovative, high-caliber Ph.D. research.
- Cross-disciplinary research at the forefront of science, engineering, computing, biomedical and interactive & digital media
- 4-year direct-Ph.D. award
- Tuition fees waived for 4 years
- Monthly stipend for:
  - Singaporeans: $33,500 (plus CPF contributions)
  - Singapore Permanent Residents: $32,200
  - International students: $31,000
- Annual allowance of up to $14,000 for travel, books and international conferences
- Opportunities for research based both in Singapore, and in USA/Europe/Australia/Japan/South Korea/China/etc.
Open worldwide to Bachelor degree holders (and above), with:
- At least a very good 2nd Upper Honours, or equivalent qualifications
- Excellent research potential, from all branches of life, physical, computer & engineering sciences, medicine, and interactive & digital media

A*STAR Graduate Scholarship (AGS)
AGS offers a “4+2” scholarship – a 4-year Ph.D. at NUS and a 2-year post-doctoral fellowship at a top overseas university/research institute. The Ph.D. degree is awarded by NUS.
- Full Tuition Fees + monthly sustenance allowance for 4 years
- Book, computer, conference and thesis allowances
- Up to 12 months of overseas attachments
Open to:
- Singaporeans, Singapore Permanent Residents, and ASEAN nationals
- Graduates with at least 2nd Upper Honours and good 'A' Level results
- Good GRE scores
All rates/allowances are subject to adjustments by A*STAR from time to time.

Application

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Seize the opportunity. Challenge yourself. Achieve research excellence among the world’s best.

Apply via:
nugs.nus.edu.sg/instruction_on_application_submission_to_NGS.html

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E ngsenquiry@nus.edu.sg
W www.nus.edu.sg/ngs/
NUS Graduate School for Integrative Sciences and Engineering (NGS)  
... the Home of Cutting-edge, Cross-disciplinary Research & Graduate Education

NGS offers generous PhD Scholarships to talented students with strong research potential. All students will have access to ample resources, a world-class infrastructure, and receive supervision from top-flight academics. And, the curriculum is tailor-made to each individual student’s needs and interests, and offers opportunities for integrative learning.

NGS is looking for students who:
• possess a keen interest in integrative approaches to research
• enjoy taking an analytical approach to problems
• seek to deepen their knowledge
• are curious about major issues in related subject areas
• will adhere to the highest ethical standards in research
• appreciate the importance of developing excellent communication skills
• can function well as part of a team
• will serve as role models to future generations of researchers.

Our Programmes

PhD (NGS)
(nns.nus.edu.sg/NGS_programme.html)

Joint NUS-Karolinska Institute PhD
(nns.nus.edu.sg/nns/Karolinska_Institute_programme.html)

NGS encourages research in or at the intersection of any of the areas below.

Research Areas

Bioengineering
• Biomedical
• Biomechanics
• Electrophysiology
• Tissue Engineering

Biological Sciences
• Bioinformatics
• Cell and Molecular Biology
• Cardiovascular Biology
• Developmental Biology
• Lipomics
• Neurobiology
• Structural & Chemical Biology
• Stem Cell Biology
• Systems Biology

Bioprocess & Biochemical Engineering
• Protein Crystallization
• Protein Stabilization

Chemical & Biomolecular Engineering
• Biomolecular Engineering
• Colloid/Physics
• Complex Fluids
• Membrane Science & Engineering
• Nanostructured Catalysts
• Protein Engineering
• Surface and Interface Science

Computer Science
• Data Science/Machine Learning
• Data Storage Technologies
• Embedded Computing Systems
• High Performance Computing

Electrical & Computer Engineering

Environmental & Water Technologies

Infocommunications
• Information Retrieval
• Multimedia Analysis & Retrieval
• Natural Language Processing
• Question-Answering
• Video Retrieval

Physical Sciences
• Complex Fluids
• Graphene
• Nonlinear & Complex Systems
• Quantum Information & Technology
• Soft Condensed Matter
• Synchrotron Radiation Science

Solar Energy

Structural & Chemical Sciences
• Catalysis & Bio catalysis
• Molecular & Nanoscale
• Analytical Chemistry

Interactive & Digital Media
• Ambient Intelligence
• Arts and Creativity
• Games Laboratory
• Mixed Reality
• Multimedia Sensing
• Multi-Modal Analysis
• Social and Cognitive Laboratory
• Social Robotics

Manufacturing Technology

Mechanical Engineering

Materials Science & Engineering
• Functionality & Multifunctional Materials
• Membranes/BioMEMS
• Molecular Electronics
• Polymer Science & Engineering
• Stimuli Response Materials
• Thin Films & Devices

Medical Sciences
• Cancer Research
• Drug Development
• Immunology
• Infectious/Inflammatory Diseases
• Molecular Endocrinology
• Molecular Medicine
• Molecular Toxicology & Toxicology
• Nutrition/Diet and Health
• Population/Evolutionary Genetics
• Stem Cell Biology & Regenerative Medicine
• Ophthalmology & Visual Science

Nanoscience & Nanotechnology
• Nano- & Nanomaterials
• Micro & Nanoelectronics
• Micro & Nanofluidics
• Nanobiotechnology
• Nanomaterials
• Nanoscale Materials
• Self-assembled Nanostructures

Cross-disciplinary Research

Networked Groups

For those particularly interested to pursue these specialized fields.

Neuroscience
• the scientific study of the nervous system
• research that coalesce biomedical, physical and computer sciences, robotics, nanotechnology, interactive & digital media, and emerging basic disciplines in social sciences
• open to outstanding students from backgrounds such as biomedical sciences, engineering, physics, computer science and psychology

Computational & Systems Biology
• an interdisciplinary field that applies the techniques of computer science, applied mathematics and statistics, to address biological problems
• research in specific genomic sequence analysis, proteomic data analysis, phylogenetic analysis, imaging data analysis, population genetics, etc.
• research projects cover virus transmission, vaccine development, cancer treatment and prevention, stem cell research, aging problems, etc.
• open to outstanding students with majors in life sciences, mathematics, or computer science

Interactive & Digital Media
• the media of combining digital and interaction technologies; the exploration of commercially creative interactive media research, to translate the vision and future of new media into reality
• interdisciplinary research that integrates social sciences, natural sciences & engineering, and computing
• examples of fields of research: Arts & Creativity, Ambient Intelligence, Games, Mixed Reality, Multimedia Sensing, Social Robotics, Language Mediation, etc.

Carbon Science & Technology
• Pure carbon systems can be found in many different structures (or allotropic forms) with a huge variety of structural and electronic properties that have to be understood theoretically and experimentally.
• Graphene, the two dimensional allotrope, is the “mother” of fullerenes (wrapp graphyne), carbon nanotubes (rolled graphene), graphene (stacked graphene), and diamond (distorted graphene), and is the basis for the understanding of all these allotrope forms.
• Research covers the detailed theoretical and experimental study of graphene-based materials, and their potential impact in science and technology, and applications in modern devices.

Bioimaging Training Program
• investigates the mechanisms of biological processes at the molecular, cellular and tissue levels, using light and electron microscopy, and the development of computational and microscopy-based methods and technologies
• for students with an interest in the application of state-of-the-art imaging techniques to tackle biologically relevant questions
• suitable for students with a background in natural sciences or engineering

Environmental Life Sciences Engineering
• sits at the interface between engineering and life sciences, and seeks to merge cutting-edge life sciences with world-class environmental engineering
• engages in research into microbial biofilm in the fields of water and environmental sustainability, and human health. Research will be conducted at molecular, cellular, community and process levels to explore, understand and manage biofilm-driven process. Advances in the microbial ecology of biofilm communities will help deliver novel solutions applicable in a range of industrial, environmental and medical settings.

Visit www.nus.edu.sg/ngs/research.html for research supervisors & projects.

Please refer to www.nus.edu.sg/NGS_Networked_Grps.html for details.