Tours
For all tours, sign up and meet at the Tour Registration Counters outside Lecture Theatre 29.

Faculty and Facility Tour
by Science Club
12.00 pm - 12.30 pm
12.30 pm - 1.00 pm
1.00 pm - 1.30 pm
1.30 pm - 2.00 pm
2.00 pm - 2.30 pm
This guided tour will bring students around key facilities at the Faculty of Science, including the Science Library, the Student Hub, Science Club, Student Cluster, canteen and lecture theatres.
Limited to 20 people per tour.

Chemistry Laboratory Tour
1.30pm - 2.00pm
Visit our new General Chemistry Teaching Laboratory! We will showcase the preparation of tetraiodotin and the use of an ultraviolet spectrometer, and determine the melting point of a compound. Our students will also demonstrate how an infrared spectrometer is used.
Required attire for this tour: Closed shoes and long trousers
Limited to 40 people.

Food Science and Technology Laboratory Tour
1.00 pm - 1.30 pm
2.00 pm - 2.30 pm
Visit our teaching and research facilities and gain insights on innovative food processing technologies, fermentation, sensory evaluation, flavour creation, body mass index measurement and health analysis, and much more. Meet our students to learn about life in this unique programme.
Required attire for this tour: Closed shoes and long trousers
Limited to 25 people per tour.

Life Sciences Laboratory Tours
(Select one)
Butterfly Demonstration
2.15 pm - 3.15 pm
Discover the instrumentation and photography techniques that show the unique biological functions of butterfly colours in inter- and intra-species communication.
Required attire for this tour: Closed shoes and long trousers
Limited to 25 people.

Centre for BioImaging Sciences (CBIS) Tour
2.15 pm - 2.45 pm
2.45 pm - 3.15 pm
CBIS’ optical and electron microscopes are used in various applications, from biological samples for the investigation of proteins involved in various diseases to the development of organisms.
Required attire for this tour: Closed shoes and long trousers
Limited to 4 people per tour (2 groups concurrently).

Protein and Proteomics Centre Tour
2.15 pm - 3.15 pm
This new facility houses mass spectrometers for advanced research in proteins. It focuses on identifying the composition of different proteins and quantitate amounts in target biological tissue. Its oncology biomarker research paves the way for rapid cancer detection and screening applications, while its structural mass spectrometry focus enables it to map dynamics of proteins with drug discovery applications.
Required attire for this tour: Closed shoes and long trousers
Limited to 20 people.
Highlights

ACADEMIC TALKS
Find out about the major of your interest

MASTER CLASSES
Be inspired by our award-winning and dedicated professors

SHARING SESSIONS
Gain insights from our students’ learning journeys

CAREER ADVICE
Get career tips from our friendly advisors

TOURS
Discover our facilities and vibrant campus life

STUDENT BOOTHs
Join our exciting activities and games

PERFORMANCES
Catch snippets of our spectacular Science RAG performance
Explore

Level 4 2nd Floor
Take the nearest stairs to go to Room 2

Level 4 3rd Floor
Take the nearest stairs to go to Room 3

Legend
- Information
- Programme Booths
- Student Society Booths
- Demonstration Counters
- Pharmacy
- Programme Talks and Master Classes
- Pharmacy and Pharmaceutical Science Talks

Lecture Theatre 27 Foyer
Master Classes

CHEMISTRY
Prof Fan Wai Yip

Greening the World Through Sustainable Energy Conversion Reactions

Synopsis
Combustion of fossil fuels, currently meeting over 80% of the world’s energy needs, generates carbon dioxide, a suspected accelerant of global warming. In this talk, we will discuss how we could produce and use energy in clean and sustainable ways.

Speaker
Prof Fan Wai Yip received his B.Sc. in Chemistry from the University of London and Ph.D. from the University of Cambridge. His research interests are in organometallic and inorganic chemistry, focusing on transition metal-catalysed processes relevant to clean energy production. He has received several Faculty- and University-level Teaching Excellence Awards. He is Deputy Head (Education) at the Department of Chemistry.

DATA SCIENCE AND ANALYTICS
Prof Carol Hargreaves

Why Make Sense of Customer Data?

Synopsis
Simply storing huge volumes of customer data is a waste of time and money. Research has also proven that 20% of customers usually account for about 80% of sales. This talk uses a data science technique called RFM modelling, which produces actionable insights to identify high-value customers for targeted retention campaigns based on past consumer behaviour. This provides businesses a competitive advantage.

Speaker
Prof Carol Hargreaves is an analytics and business intelligence professional with over 28 years’ analytics experience, spanning the pharmaceutical, healthcare, fast moving consumer goods and education industries. She is Director of the Faculty’s Data Analytics Consulting Centre and Associate Professor at the Department of Statistics and Applied Probability.

FORENSIC SCIENCE
Prof Stella Tan

CSI: NUS – Forensic Science and the Law

Synopsis
Do you aspire to be a modern-day Sherlock Holmes? Join us as we whet your appetite for forensic science and showcase a popular module in NUS.

Speaker
Prof Stella Tan has postgraduate qualifications in law, forensic science and science. She has won consecutive Dean’s Meritorious Teaching Awards. Prof Tan is the Faculty’s Assistant Dean (Student Life) and Director of NUS’ Forensic Science Programme.

LIFE SCIENCES
Dr Lam Siew Hong

Equipping Life Sciences Graduates with Disciplinary Knowledge and Essential Skills for Employability and Lifelong Learning

Synopsis
This class will highlight some of our efforts and plans in equipping Life Sciences students with disciplinary knowledge, and skills and attributes for employability and lifelong learning. These are important in preparing graduates for the changing employment landscape.

Speaker
Dr Lam Siew Hong graduated with a Ph.D. from NUS. He is a Senior Lecturer at the Department of Biological Sciences, teaching thinking skills, research and communication skills. He has received several Faculty- and University-level Teaching Excellence Awards.

MATHMATICS
Dr Li Wei

From Greatest Common Divisor to Cryptosystem

Synopsis
This class will demonstrate how integers can be used in coding information. Some interesting results in algebra will be illustrated, from elementary mathematics to advanced techniques of algebra.

Speaker
Dr Li Wei obtained her Ph.D. from NUS in 2013. Her research interest is in discrete mathematics and mathematical logic. Dr Li won the Faculty Teaching Excellence Award (2018). She is a Lecturer at the Department of Mathematics.

PHYSICS
Prof Sow Chorng Haur

The Professor’s Travelling Suitcase of Science Wonders!

Synopsis
We will share our experience in developing strategies to teach physics using science demonstrations. Demonstrations provide visually appealing and thought-provoking stimuli which aid concept formation, and show the application of a principle.

Speaker
Prof Sow Chorng Haur obtained his B.Sc. and M.Sc. in Physics from NUS and his Ph.D. from the University of Chicago. His research interests include nanostructured functional materials and their unique physical properties. He has received 11 teaching awards. Prof Sow is Head of the Department of Physics.
Programme Talks

**CHEMISTRY**

Prof Fan Wai Yip

**The Central Science**

Synopsis

NUS’ Chemistry curriculum will be presented in terms of its continual specialisations, centrality to other sciences and diverse career options. Students can also enrich their learning experiences by studying abroad, undertaking internships or research projects, amongst many other learning opportunities.

**Speaker**

Prof Fan Wai Yip received his B.Sc. in Chemistry from the University of London and Ph.D. from the University of Cambridge. His research interests are in organometallic and inorganic chemistry, focusing on transition metal-catalysed processes relevant to clean energy production. He has received several Faculty- and University-level Teaching Excellence Awards. He is Deputy Head (Education) at the Department of Chemistry.

**COMPUTATIONAL BIOLOGY**

Prof Greg Tucker-Kellogg

**Be Where the Life Sciences Are Going**

Synopsis

The computational biology field is of immense and growing importance in all areas of the life sciences. This four-year direct admissions programme is ideal for students interested in life sciences, computer science or data science. The talk will discuss the programme structure and career opportunities for graduates.

**Speaker**

Prof Greg Tucker-Kellogg received his Bachelor of Chemistry and Biological Sciences from Carnegie-Mellon University and his M.Phil. and Ph.D. in Molecular Biophysics and Biochemistry from Yale University. He is a Professor in Practice at the Department of Biological Sciences and Director of the Faculty’s Computational Biology Programme.

**DATA SCIENCE AND ANALYTICS**

Prof Lim Tiong Wee

**Helping People Make Better Decisions**

Synopsis

There is a substantial shortfall worldwide in data scientists - individuals with expertise in data analytics. The NUS degree programme in Data Science and Analytics equips students with analytical and communication skills to extract insights from data for business competitiveness.

**Speaker**

Prof Lim Tiong Wee received his undergraduate education in mathematics and graduate education in statistics at Imperial College London and Stanford University, respectively. Prof Lim is Deputy Head (Academic) at the Department of Statistics and Applied Probability and Director of the Centre for Statistical Science.

**FOOD SCIENCE AND TECHNOLOGY**

Dr Liu Mei Hui

**Preparing Professionals for the Future of Food and Health**

Synopsis

The multidisciplinary Food Science and Technology Programme applies principles from chemistry, biology, engineering and nutrition to find solutions to global issues related to food safety, security, sustainability, health and more. Discover how this discipline opens doors in different industries.

**Speaker**

Dr Liu Mei Hui graduated from the pioneering batch of NUS’ Food Science and Technology Programme. Her research work at the Genome Institute of Singapore and Cornell University brought her on many scientific journeys in the fields of molecular biology, nutrition and genomics. Dr Liu is the Faculty’s Assistant Dean overseeing student counselling, student groups and societies.

**LIFE SCIENCES**

Prof Chew Fook Tim

**A Versatile Major for Experiential Learning**

Synopsis

Life Sciences is not just a major with three specialisations in Biomedical Sciences, Molecular and Cell Biology; and Environmental Biology. Through double majors, minors, and study roadmaps, students can experience other disciplines or dwell deep into multiple areas within the life sciences. The talk will show the programme’s versatility, where students can broaden learning experiences through overseas exchanges, overseas concurrent/joint degree programmes, undergraduate research and internships.

**Speaker**

Prof Chew Fook Tim is the lead consultant and scientific advisor to several agribusinesses and biomedical/pharmaceutical companies. He works in the field of genetics, on the development of treatments for allergic diseases and in plant breeding. He is Associate Professor at the Department of Biological Sciences and the Faculty's Vice Dean overseeing the undergraduate science curriculum and student life.

**MATHMATICS**

Prof Victor Tan

**Taking Math in NUS: A Door That Opens to Many Possibilities**

Synopsis

The talk will cover programmes offered by NUS’ Department of Mathematics, including the Quantitative Finance programme, Special Programme in Mathematics, and double major/double degree combinations. It will also touch on real-world applications and career prospects for graduates.

**Speaker**

Prof Victor Tan received his B.Sc. from NUS and Ph.D. from the University of California. His research interests are in algebra and number theory. He has received multiple Faculty- and University-level awards for teaching excellence. He is also a Fellow of the NUS Teaching Academy, President of the Singapore Mathematical Society and Deputy Head (Teaching) at the Department of Mathematics.

**PHYSICS**

Prof Valerio Scarani

**Physics: Solve Complex Problems**

Synopsis

Physics training equips students with problem-solving skills to address a wide range of problems, including interesting natural phenomena and problems unrelated to physics. This talk will present the diverse career opportunities for physicists and the latest developments in areas like medical physics.

**Speaker**

Prof Valerio Scarani is Principal Investigator at the Centre for Quantum Technologies, and Professor at the Department of Physics, where he serves as Deputy Head (Undergraduate Education). His research in theoretical quantum physics touch both fundamental and applied aspects: for instance, he studies how to make sure that there is randomness in nature, and how to put this randomness into practical use in devices.
Programme Talks

Statistics
Prof Yu Tao

Statistics is ... in Demand

Synopsis
From the dawn of civilisation to 2003, the human race created five exabytes ($5 \times 10^{18}$ bytes) of data. Now we are creating that amount every two days. Extracting useful information from this much data is a challenging task, giving rise to modern statistics. In this talk, we will reveal how statistics is central to the intellectual core of many businesses and industries, and showcase the breadth of career opportunities open to statisticians in a changing future economy.

Speaker
Prof Yu Tao received his B.Sc. in Mathematics from Nankai University and his Ph.D. from the University of Wisconsin-Madison. His research interests are in biostatistics, statistical inference for complex data, and non- and semi-parametric methods. Prof Yu Tao is Associate Professor at the Department of Statistics and Applied Probability.

Statistics is ... in Demand

Synopsis
From the dawn of civilisation to 2003, the human race created five exabytes ($5 \times 10^{18}$ bytes) of data. Now we are creating that amount every two days. Extracting useful information from this much data is a challenging task, giving rise to modern statistics. In this talk, we will reveal how statistics is central to the intellectual core of many businesses and industries, and showcase the breadth of career opportunities open to statisticians in a changing future economy.

Speaker
Prof Yu Tao received his B.Sc. in Mathematics from Nankai University and his Ph.D. from the University of Wisconsin-Madison. His research interests are in biostatistics, statistical inference for complex data, and non- and semi-parametric methods. Prof Yu Tao is Associate Professor at the Department of Statistics and Applied Probability.

Special Programme in Science (SPS)
Prof Liou Yih-Cherng

What Makes the Special Programme in Science (SPS) ‘Special’?

Synopsis
The SPS provides a conducive environment for students to pursue their passion for science and learning. This talk will highlight the features that make SPS ‘special’ and what it offers students.

Speaker
Prof Liou Yih-Cherng received his Ph.D. from Queen's University, Canada. He is currently Director of the Faculty's Special Programme in Science, the Joint M.Sc. in Science Communication programme, and Deputy Head (Graduate Studies and Research) at the Department of Biological Sciences.

Study Abroad Programmes
Prof Lai Yee Hing

Enriching Your Learning

Synopsis
Our diverse Study Abroad Programmes open the door to a global learning experience. Students can broaden their academic and cultural outlook by combining study at NUS and our overseas partner universities. This talk will cover our Summer Programmes, Student Exchange Programmes and structured study abroad programmes.

Speaker
Prof Lai Yee Hing obtained his Ph.D. in organic chemistry from the University of Victoria. He was the pioneer Principal of the NUS High School of Mathematics and Science. Prof Lai has won numerous Faculty- and University-level teaching excellence awards. He is the Faculty's Associate Dean overseeing education matters and international programmes.