



Shape Your Future Campus Tours @ CDE

⊕ cde.nus.edu.sg✓ askcde@nus.edu.sg

Materials Science and Engineering

Experience the microscopic world of materials

Materials Science & Engineering Teaching Laboratory, with well-equipped scientific equipment for advanced materials characterization and development. Join our tour to learn about scanning electron microscope, X-ray photoelectron spectrometer, X-ray diffractometer and more.

Location: **E3A, Level 5** Maximum Capacity per Tour: **25**

Tour Session 1 10:50am –11:50am Tour Session 2 12:20pm -1:20pm

Session 3 1:50pm -2:50pm

Tour

Session 4 3:20pm

-4.20pm

Tour





Industrial Systems Engineering & Management Tour

Industrial Systems Engineering Simulation Modelling & Analysis Lab

Global 📀

The Simulation Modelling & Analysis Lab hosts 75 computing terminals installed with a variety of software platforms for students and researchers to learn about systems design, modelling, analysis and optimisation techniques. Platforms include state-ofthe-art discrete and dynamic simulation software, data analytics tools and decision theoretic systems. The lab is both a classroom and development studio for many ISEM students working on their Systems Design projects and Final Year projects.

Location: E1A-05-19, NUS SMAL Maximum Capacity per Tour: 75

Tour

Session 1 11:10am -12:10pm

Tour

Session 2 12:40pm -1:40pm

Session 3 2:10pm -3:10pm

Tour

Tour Session 4 3:40pm -4:40pm



Innovation and Design Programme

IDP Professional Prototyping Facility

MAR

The Professional Workshop offers top-notch prototyping services to cater to various types of fabrication jobs from students, researchers, and external parties. Our equipment and technicians are capable of producing parts with high accuracy, precision, and tolerance. In this tour, visitors will get a chance to see demonstrations of numericalcontrolled machining, laser cutting, and 3D printing in the workshop.

Location: **E3-01-06** Maximum Capacity per Tour: **30**

Tour Session 1 11:30am –12:30pm **Tour Session 2** 1:00pm -2:00pm

Session 3 2:30pm -3:30pm

Tour

Tour Session 4 4:00pm -5:00pm



Mechanical Engineering Tour

Industrial Systems Engineering Simulation Modelling & Analysis Lab

Visit the best-equipped and most advanced laboratory for aerospace research in a Singapore university! Listen to our students share about their experiences designing, building and flying an unmanned aerial vehicle (UAV) for competition in the USA, and see what is in store for you when you take up the Aeronautical Specialisation within the Mechanical Engineering major.

Location: **EA-03-11** Maximum Capacity per Tour: **20**

Tour Session 1 11:50am -12:50pm Tour Session 2 1:20pm

-2:20pm

Session 3 2:50pm -3:50pm

Tour

Tour Session 4 4:20pm -5:20pm



Project Showcase: EA



Somewhere in this Fog of Memory

Somewhere In This Fog of Memory is a light-based installation bringing together art and technology. It draws upon the magic of lifelong love and connection, the emotional experience of having and caring for dementia and the assurance that we are more than the memories we've made.

NUS Formula SAE

The NUS Formula SAE race car project was started in 2001, when a group of enterprising third year engineering students dreamed of building a race car for participation after their graduation in the intervarsity FSAE competition, held every May in Michigan, USA. At the FSAE competition in USA, our car and team represent NUS and Singapore, and we are the only participating team from this region.



Industrial Design Tour

Design Discoveries: The genesis of ideas

Check out where our designers work at SDE4. Take a peek at the design studio where we collaborate designing new products, services and communication, the workshop where ideas are made real, our 3D rapid prototyping labs, and more. You might even find yourself feeling inspired to come up with your own ideas at the end of the tour.

Location: SDE4

Maximum Capacity per Tour: 30

Tour
Session 1
10:50am
–11:50am

Tour Session 2 12:20pm -1:20pm Tour Session 3 1:50pm -2:50pm Tour Session 4 3:20pm -4:20pm



CENTRE FOR 5G DIGITAL BUILDING TECHNOLOGY

Infrastructure and Project Management

To Infinity and Beyond: **5G Centre for Digital Building Technology Tour**

Join our highly knowledgeable faculty at our Centre for 5G Digital Building Technology to find out more about how we harness 5G connectivity, cloud-based digital twin and robotics for Smart FM and the Built Environment sector.

Location: 5G Centre for DBT (SDE 4, Level 2) Maximum Capacity per Tour: 20

Session 1 11:10am -12:10pm

Tour

Tour Session 2 12:30pm

-1:30pm

Session 3 2:10pm -3:10pm

Tour

Tour Session 4 3:40pm -4:40pm





Civil Engineering Tour

How do we protect our coast under climate change and sea-level rise?

The Hydraulics Lab tour will show innovative experimental research and technology of coastal protection to tackle with climate change and sealevel rise. Experimental tests in the big wave flumes will be demonstrated. You will also gain hands-on experience about fluid dynamics phenomena by playing with our hydraulics teaching equipment.

Location: Hydraulics Lab Maximum Capacity per Tour: 20

Tour Session 1 11:50am –12:50pm Tour Session 2 1:10pm -2:10pm

Session 3 2:30pm -3:30pm

Tour

Tour Session 4 3:50pm -4:50pm



Architecture Tour

Architecture: Open Studio Tours

Join our tours to experience our award-winning learning environments. See and touch the drawings and models made by NUS Architecture and Landscape Architecture students across different years. Learn about the design processes and thinking behind what our students made from the students themselves in their own studios.

Location: SDE3

Maximum Capacity per Tour: 90

Tour Session 1 11:30am –1:00pm Tour Session 2 1:20pm -2:50pm Tour Session 3 3:10pm -4:40pm Tour Session 4 5:00pm -6:30pm



Infrastructure and Project Management

Let there be Light: Net-Zero Energy Building and Solar Roof Tour

Operational since January 2019, SDE4 is Singapore's first net-zero energy building. Join the Department of the Built Environment as we bring you on a tour to explore the sustainable design features that have been integrated into its architecture to deliver user health and comfort, and to make it highly energy efficient.

Location: SDE4

Maximum Capacity per Tour: 15

Tour Tour Tour Tour Session 1 Session 2 Session 3 Session 4 12:10pm 1:30pm 2:50pm 4:10pm -1:10pm -2:30pm -3:50pm -5:10pm



Maria An A.

Project Showcase: SDE1



Aline Chair

The Aline chair is part of the collection initially developed to be the signature outdoor furniture for Singapore's first Net Zero Energy Building, the hosting building of the School of Design and Environment (SDE 4) within NUS. The chair was designed to complement the building's sustainability notions, using sustainable materials such as standard diameter of aluminium tubes which simplifies material sourcing and production.

COLOR

COLOR rethinks the children's pedagogy for learning about colours. It comes in two unique modules: In "Colour Stories", a deck of interactive cards, activable with water, reveals a broader knowledge of the colours around us. While in "Colour Language", a true story of a culture with no words for colours, coupled with playable booklets, teaches an alternative way to describe colour through its context.



Project Showcase: SDE1



Wei – Bak Kut Teh Bowl

Wei is a tableware series that gives shape to the structural flavours of Chinese cuisine using visually engaging medium and context to convey the tradition to younger generations. The tableware's form and texture are algorithmically generated based on the flavour composition of the dish. This first of its series was modelled after the Teochew Bak Kut Teh, paying homage to the diverse use of flavours in soup as remedy to prevent and treat illness in Chinese culture.

Timus

Wei x Moonbow

Wei expanded its series with a unique tableware piece in collaboration with Moonbow. Departing from the china-white of the first tableware launched, this collaboration showcases the expansive possibilities of the project for diverse cuisine contexts. This tableware is generated from the flavour composition of 'Tentacles de Poulpe' – reflecting the stronger hints of sweetness and saltiness in the dish.

Biomedical Engineering Tour

Engineering-in-Medicine BME Tour @ E7

We will bring you on a journey through specific strategic research capabilities of NUS BME, ranging from medical imaging, computational neuroscience to cardiovascular engineering and soft robotics; each of which has pushed the boundaries of healthcare research, and advanced the quality of care though practice-changing innovations.

Location:

Prof Huang Zhiwei (Optical Bio-imaging Laboratory, E7-05-06) Prof Qiu Anqi (Medical Image Data Sciences Laboratory, E7-04-05) Prof Leo Hwa Liang (Biofluids Mechanics Research Laboratory, E7-06-02) Prof Raye Yeow (Soft Robotics, E7-06-05)

Maximum Capacity per Tour: 15

Tour Session 1 10:50am -11:50am Tour Session 2 12:20pm -1:20pm

Session 3 1:50pm -2:50pm

Tour

Tour Session 4 3:20pm -4:20pm





A Peek into our Chemical and Biomolecular Engineering Laboratories

E8 04-01A is a teaching lab for Chemical Engineering students. In this lab, chemical plant components are scaled down to allow students to learn fluid mechanics, heat and mass transfer, reaction engineering, separations, process control and various other Chemical Engineering principles through experiential learning.

Location: **E8-04-01A** Maximum Capacity per Tour: **40**

Tour Session 1 11:00am –12:00pm Tour Session 2 12:30pm -1:30pm

Session 3 2:00pm -3:00pm

Tour

Tour Session 4 3:30pm -4:30pm



ART

TT

Advanced Robotics Centre Tour

Rise of the Robots

Come to see the cool robots and meet the talented people behind them! Take a ride on our autonomous wheelchair, learn about our Autonomous Underwater Vehicle that was crowned Champions at the Robosub 2022 and the Unmanned Surface Vehicle that won Second place at the Maritime RobotX Challenge 2022.

Location: **E6-07-03 and E8-01-03** Maximum Capacity per Tour: **20**

Tour Session 1 11:15am -12:50pm Tour Session 2 12:45pm –1:45pm

Session 3 2:15pm -3:15pm

Tour

Tour Session 4 3:45pm -4:45pm





Exploring innovative idea and solution in Environmental engineering

Environmental Engineering Lab Tour will give inside look at innovative and sustainable technology of Environmental Engineering Programme. The exclusive tour will include an educational visit to Environmental laboratories, demonstration of new idea of (micro) plastics management, algae blooms, and hand-on experiences of a 3D-printed water filter.

Location: **E8 (Centre for Water Research)** Maximum Capacity per Tour: **20**

Tour Session 1 11:30am –12:30pm Tour Session 2 1:00pm -2:00pm

Session 3 2:30pm -3:30pm

Tour

Tour Session 4 4:00pm -5:00pm



to have the drone collect pool rather than carry a

Campus Tour: E7

Unmanned Aerial Vehicle

Electrical and Computer Engineering Tour

Electrical and Computer Engineering Gallery

Electrical and Computer Engineering encompasses a range of fields that form the backbone of our modern digital economy. From the processors that power our mobile phones, to autonomous vehicles and augmented reality; Electrical and Computer Engineers are behind the most transformative innovations. On this visit, you will get to see student projects covering themes from the Internet of Things and autonomous systems, to energy sustainability and smart healthcare. You will also have the opportunities to interact with our professors and current students.

Location: **E4-03-07** Maximum Capacity per Tour: **20**

Tour Session 1 11:45am –12:45pm Tour Session 2 1:15pm

-2:15pm

Session 3 2:45pm -3:45pm

Tour

Tour Session 4 4:15pm -5:15pm



Engineering Science Programme Tour

Design Projects @ Engineering Science Programme

In this tour, we will visit one of the teaching laboratories of the Engineering Science Programme in the College of Design and Engineering. Engineering Science Students will showcase their projects that they have worked on for several of the core engineering science and design modules

Location: **Faraday's Laboratory (E4-02-01)** Maximum Capacity per Tour: **30**

Tour Session 1 12:00pm -1:00pm Tour Session 2 1:30pm -2:30pm

Session 3 3:00pm -4:00pm

Tour

Tour Session 4 4:30pm -5:30pm







College of Design and Engineering

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