NUS Landscape Architecture

Connecting Nature, Space and People

What does the Bachelor of Landscape Architecture degree entail, how long does it last, and who should participate?

The Bachelor of Landscape Architecture (BLA) programme prepares students to respond to the multifaceted issues in the context of Asia. Our core emphasis is design excellence that is grounded in critical thinking, analytical inquiry and creative expression. We imbue our students with a deep understanding of the dual nature of design as both a process and a product. As a process, we inculcate our students with sociocultural sensitivities, ecological knowledge and a grasp of conventional and emergent technologies and techniques. As a product, we encourage our students to produce inspiring and meaningful landscapes capable of making a positive impact on people's lives.

The knowledge and skills acquired through the programme position our graduates for professional practice as landscape architects. Additionally, they are well-equipped to pursue careers in various related fields such as design, environmental planning and advocacy.

Practise landscape architecture in design-related industries: Specialise in designing landscapes to mitigate and adapt to the impacts of climate change, biodiversity loss, natural resource extraction, inequity and food security. Apply state-of-the-art technologies and techniques to integrate nature-based solutions into design practices.

Advocate sustainable development and policy making: Conduct environmental impact assessments and advocate for sustainable policies in the public, private and NGO sectors, both in Singapore and across the Asia Pacific region. This often involves critically evaluating landscapes and providing recommendations for enhancement and preservation.

Landscape management: Contribute to effective and sustainable landscape management to meet the needs and aspirations of stakeholders. In an era of multi-functional landscapes, this involves a multi-disciplinary approach to overseeing the design, creation and maintenance of projects, and collaborating with professionals from various industries.

Our Profiles

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Mariam Yusuf Rajkotwala

Bachelor of Landscape Architecture, Class of 2025

Recipient of the Participate in Design (P!D) Award for Design Studio Project

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Tan Sok Vin

Bachelor of Landscape Architecture, Class of 2023

Landscape Architect, COEN Design International Pte Ltd

- Alumna of Singapore Polytechnic
- First batch of BLA graduates

Impacting Lives with Healthcare Technology

Why Choose NUS Biomedical Engineering?

NUS Biomedical Engineering is tailored for individuals passionate about leveraging their fascination with the human body and healthcare technology to make a meaningful impact on patient care.

This programme combines the rigour of engineering with medical science, facilitating the design and development of innovative medical technologies aimed at disease prevention, diagnosis, treatment and patient rehabilitation. It offers an unparalleled opportunity for students to apply their skills in real-world contexts, working alongside community organisations to create tangible social impacts.

Positioned in a sector experiencing robust growth both locally and globally, the programme responds to Singapore's strategic vision of becoming a biomedical hub, addressing the demands of an ageing population. Graduates will find themselves well-equipped for a diverse range of career paths, from roles in medical device companies and technopreneurial ventures, to advanced research and further studies in professional health degrees or graduate studies.

Programme Overview

The Bachelor of Engineering (Biomedical Engineering) is a comprehensive four-year programme accredited by the Engineering Accreditation Board of Singapore. It encompasses a broad spectrum of engineering disciplines — Electrical, Chemical, Mechanical and Materials Engineering — all within the context of addressing biomedical challenges. This approach ensures our graduates are well-equipped with the foundational knowledge and flexibility required to develop practical, effective solutions for human health.

Integral to the curriculum are design and research-based projects, along with industry internships, all designed to foster critical thinking and real-world, problem-solving skills. The programme encourages students to customise their education, offering a wide range of courses that allow for a personalised learning journey to suit individual interests and career aspirations.

↑ NUS BME students fixing medical equipment and providing training for healthcare workers in Timor Leste as part of BME for Good (bGood) initiative.

Profile of Current Student and Alumnus

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Agatha Faye Cruz Niegos

Bachelor of Engineering (Biomedical Engineering), Class of 2026
President, NUS BME Club

"Apart from the rigorous but fulfilling curriculum, NUS Biomedical Engineering (BME) has given me an opportunity to step out of my comfort zone and make connections beyond the field of Biomedical Engineering. I am also able to choose from a wide range of specialisations that BME offers, allowing me to choose a path that I am truly interested in and passionate about!"

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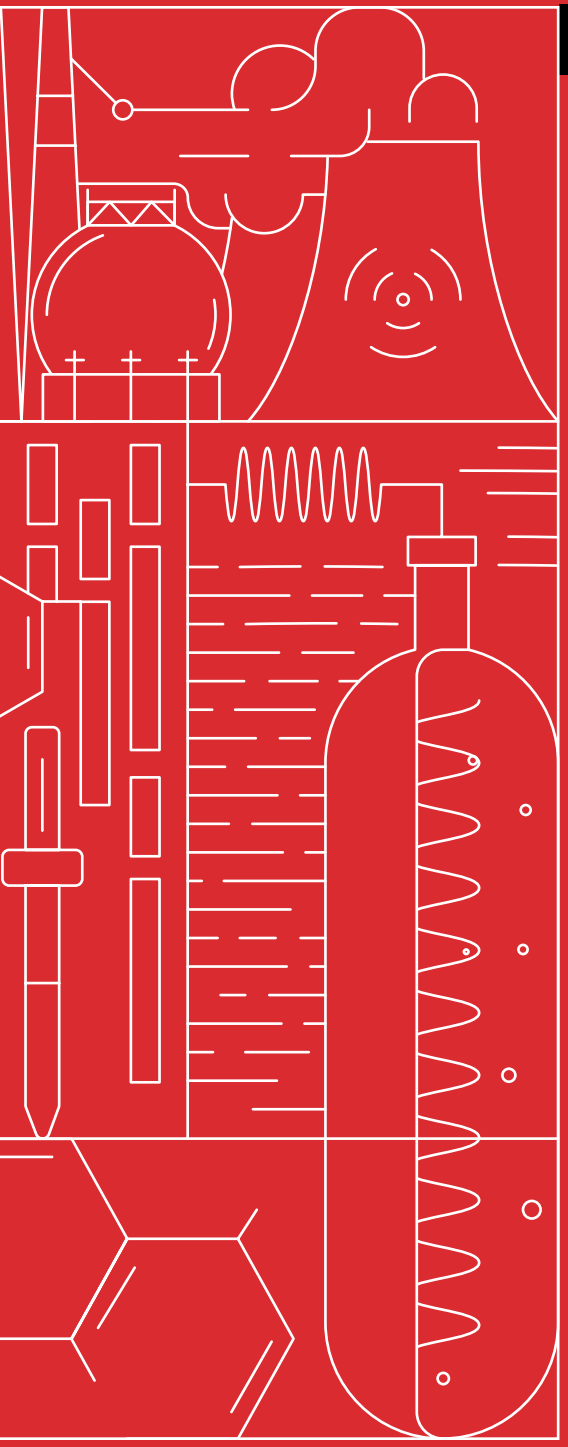
Chen Pengfei

Bachelor of Engineering (Biomedical Engineering), Class of 2006
Acting Vice President, Healthcare and Wellness Strategy Group, EDB

"The analytical, critical thinking and problem-solving skills honed from the BME programme enabled me to better navigate the multifaceted challenges faced at work and allowed me to contribute meaningfully to my organisation."



Profile of Current Student

Theo Rajan Terence

Bachelor of Engineering (Chemical Engineering), Class of 2025
Alumni of NUS High School of Mathematics and Science

"My education with NUS Chemical Engineering has been filled with both local and overseas opportunities to develop myself technically and holistically. For my industrial attachment, I was awarded the A*STAR Research Internship Award (ARIA) which gave me invaluable experience in research and laboratory work. This year, I had the chance to broaden my horizons and go on a full-year student exchange with Imperial College London. Besides academics, I also had the privilege to take up leadership positions in the American Institute of Chemical Engineers (AIChE) NUS Student Chapter – a great opportunity to hone my leadership skills!"

Profile of Alumni

Cheng Woon Jo

Bachelor of Engineering (Chemical Engineering), Class of 2021
Environment, Health and Safety Specialist, Abbott Manufacturing Singapore
Alumni of Hwa Chong Institution

"My Chemical Engineering education at NUS equipped me with valuable technical and transferable skills. I gained a strong foundation in mathematics and physics and observed how chemical engineering principles were applied in different industries.

From living overseas through various university programmes, I learned to adapt quickly and connect with people from different cultures. I am thankful to the professors and department staff who went the extra mile to support me in my academic journey."

Jax Lee Jia Xing

Bachelor of Engineering (Chemical Engineering), Class of 2010
CEO of Nanolumi
Alumni of Jurong Junior College

"The chemical engineering undergraduate journey isn't confined to mastering formulas in your discipline; it can be an expansive, cross-disciplinary expedition that could also actively incorporate an entrepreneurship mindset. Beyond the acquisition of technical competencies, it serves as a nurturing ground for fostering strong logical thinking and keeping the innovative spark. This holistic fusion of diverse disciplines isn't solely about creating solutions; it cultivates a mindset that not only generates answers but also instills the confidence to lead pioneering innovations heavily reliant on engineering principles, thus shaping meaningful solutions across multifaceted fields that improve lives."

Profile of Current Students

Loh Jiong Rui

Bachelor of Engineering (Materials Science and Engineering), Class of 2025
Published Review Article on Small Methods

"I chose NUS Materials Science and Engineering as I aspire to play a part in researching new materials to solve challenges from a multidisciplinary lens such as those cited in Michio Kaku's Physics of the Future."

Ian Sim Ee En

Bachelor of Engineering (Materials Science and Engineering), Class of 2024
E-Scholar

"The interdisciplinary nature of MSE blends the theoretical aspects of the sciences with the practical principles of engineering, providing a dynamic learning environment for me to better understand how our world works and develop innovations to improve our everyday quality-of-life."

Ian Tay Rongde

Bachelor of Engineering (Materials Science and Engineering), Class of 2025
E-Scholar

"Science and technology have always been essentials in opening up new possibilities for humankind. Through MSE, I hope to be able to develop materials that can expand the frontiers of technology."

Dang Thanh Ly, Althea

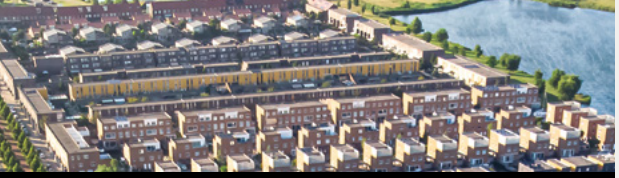
Bachelor of Engineering (Materials Science and Engineering), Class of 2027
National Bowler

A national bowler who represented Singapore to win many international bowling competitions, Althea developed a passion in chemistry at a young age, and a keen interest in how drugs function to help people. She credits her success in balancing both sports and studies to the support of her coaches and her teachers.

Harini Ravichandran

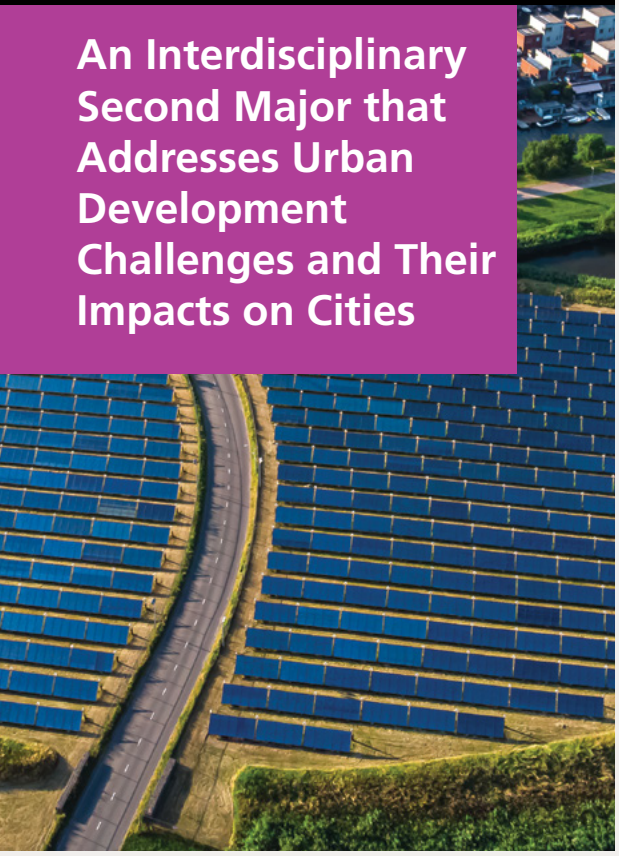
Bachelor of Engineering (Major: Materials Science and Engineering/Second Major: Innovation & Design), Class of 2026

Entering the Materials Science and Engineering (MSE) programme has been transformative for me from the very beginning. The warm reception and unwavering support from our professors and department have made me feel truly valued and encouraged to pursue my research interests. MSE's diverse applications across industries such as semiconductors, biomedical engineering, and robotics, as well as its presence in leading companies like Apple, Dyson and 3M, highlight the breadth of opportunities available in this field. The tight-knit community within MSE has not only equipped me with valuable knowledge but also fostered a network of peers and professionals that I believe will be instrumental in shaping my future endeavors, whether in the working world or further academic pursuits.



NUS Sustainable Urban Development

An Interdisciplinary Second Major that Addresses Urban Development Challenges and Their Impacts on Cities



Addressing Urban Development Challenges

Explore the multifaceted dimensions of urban sustainability, including cultural, socio-economic, political and social aspects and their complex interactions. This programme offers a comprehensive approach to understanding and addressing sustainability issues at both local and global levels, employing a solutions-based approach.

Career Prospects

Graduates can pursue various roles, such as:

- Sustainability Director
- Sustainability and Resilience Manager
- Environmental, Social and Governance (ESG) Specialist
- Carbon Footprint Manager
- Sustainable City Planner
- Renewable Energy Manager
- Climate Adaptation Specialist
- Green Process Design Consultant

Student Learning Outcomes

Students will:

- Apply a cross-disciplinary framework to analyse urban environments, whether natural or built.
- Integrate economic, environmental, energy and social theories and principles to tackle urban sustainability challenges.
- Utilise strategies, at multiple scales, for urban sustainability planning, policy, and regulation.
- Develop critical thinking, effective networking and perspective-sharing skills.
- Engage in collaboration, advocacy and leadership to drive sustainable transformations in cities.

Our Profiles

Lin Ting Wei

Bachelor of Social Science (Major: Geography/Second Major: Sustainable Urban Development), Class of 2025

"Humans not only deplete limited natural resources at an alarming rate but also generate waste at a supersonic pace. As a result of human impact, our planetary health is at an elevated risk. Hence, we need to take individual as well as collective actions to achieve a sustainable future. Sustainable development is therefore crucial for us and our future generations. NUS' Second Major in Sustainable Urban Development (SUD) plays a pivotal role in equipping students with professional knowledge and critical thinking skills to study and solve urban/regional/global problems of the 21st century, among which climate change is a top priority. For this reason, I chose SUD."

Wang Haoheng

Bachelor of Engineering (Major: Civil Engineering/ Second Major: Sustainable Urban Development), Class of 2026

"Sustainability has become one of the biggest concerns of today's society. I feel that it will be the upcoming trend in the development of Singapore and all other countries for the next few decades. I also observe that many global companies and institutions have shifted their focus toward developing sustainable solutions. Hence, I believe that the Sustainable Urban Development (SUD) second major equips us with the latest knowledge and concepts to help us tackle future challenges. Other than providing broad exposure to the field of urban sustainability, SUD also provides great job opportunities in every sector as what we learn from the programme will be highly valuable in the near future."

Gerald Ho Jie Xiang

Bachelor of Engineering (Major: Civil Engineering/ Second Major: Sustainable Urban Development), Class of 2025

"I took the second major in Sustainable Urban Development because I was interested in how we can create a more sustainable and liveable city. With more people living in cities, I want to learn how we can ensure their infrastructure can support the city and make them more sustainable. The courses under the second major come from different departments. This yields a more holistic view of tackling urban problems. My second major also complements my primary major in Geography, providing me with hard skills such as Life Cycle Assessment. This has prepared me to identify problems and provide solutions for our cities today and for the future."

NUS Infrastructure and Project Management

Leading the Way in Interdisciplinary Settings

Why Choose NUS Infrastructure and Project Management?

The BEng Infrastructure and Project Management undergraduate programme is the only Engineering programme in NUS with a strong emphasis on project management. The IPM programme integrates Engineering, Management and Law in order to develop built environment professionals with T-shaped skills who are in high demand in the industry.

Our graduates are highly agile due to their varied knowledge and skillset and are pursuing career pathways not only in the built environment industry but also in business, data analytics, and consultancy. Some of the possible employers of IPM graduates include Changi Airport Group, City Developments Limited, Jones Lang Laselle (JLL), Knight Frank Property Asset Management, Land Transport Authority (LTA), McKinsey & Company, Surbana Jurong Private Limited, Turner & Townsend, Urban Development Authority (URA), Visa Inc., etc.

Programme Overview

This four-year direct honours (IPM) programme encompasses core areas of study in Project Management, Sustainable and Digital Technologies, Cost and Contract Management, and Facilities Management. Students with Polytechnic diplomas may finish in 3.5 years or less through Advanced Placement Credits (APCs).

Upcoming specialisations include Sustainable Green Buildings, which prepare students for diverse roles in both public and private sectors.

Career Opportunities Include:

- Project Manager
- Facility Manager
- Infrastructure Asset Manager
- Contract Manager/Quantity Surveyor
- Delay Analyst/Quantum Analyst
- Building Information Modelling (BIM) Manager
- Smart Sustainability Manager
- Energy Manager

Profile of Current Students and Alumnus

Haizul Ali Seron

Bachelor of Engineering (Infrastructure and Project Management), Class of 2026

Haizul is a diligent and resourceful Year 2 Infrastructure and Project Management student who embodies the entrepreneurial spirit. An alumnus of Temasek Junior College, he has an active student life outside of his studies. He holds the post of Welfare Director of the Building and Estate Management Society (BEMS) and takes charge of organising events such as BEMS Movie Night and BEMS Bonding Day to strengthen the connections between the committee and student body. In addition, he keeps healthy as part of the NUS Muay Thai Fight Team. Apart from juggling his degree and co-curricular activities in NUS, Haizul pursues his interest in event management by working part-time at a photobooth company. This ambitious young man is also the proud owner of his own personal small business in Smart Home Engineering. His business focuses on providing customised packages in the latest technology in smart home systems to create creative and efficient environments for his customers.

Rica Teo

Bachelor of Engineering (Infrastructure and Project Management), Valedictorian of Class of 2023
Executive, Management Trainee with City Development Pte Ltd.

Rica specialises in green building development and decarbonisation of CDL's real estate asset portfolio where she engages in developing policies and best practices on green and healthy buildings, energy reduction, renewable energy, and biodiversity. She also actively drives energy-efficiency and zero-carbon buildings through research, identification, and recommendations of cost-effective innovations, digital solutions, circular and low-carbon materials, and sustainable construction methods to reduce operational and embodied carbon emissions and achieve energy savings for CDL's assets. Rica's time as an undergraduate has equipped her with the skills and knowledge for her current role.

Programme Overview

Build Your Own Degree

The NUS CEG programme offers an innovative curriculum allowing students flexibility to tailor their education. Students will complete a total of 160 units (or the equivalent of 40 courses), consisting of 60 units of Common Curriculum courses, 60 units of major requirements and 40 units of Unrestricted Electives (UE), all designed with input from industry partners.

Unrestricted Electives (UE): Within and Beyond Computer Engineering

The 40 units of UE enable students to deepen their knowledge within CEG or explore new areas, with options to pursue a second major, minor, specialisation or a combination thereof, fitting seamlessly into their degree without extending graduation time.

Specialisations within CEG include:

- Advanced Electronics
- Industry 4.0
- Internet of Things (IoT)
- Robotics
- Space Technology

Alternatively, students can broaden their horizons with over 40 majors and 70 minors available at NUS:

Second major in:

- Innovation & Design (*i*DP)
- Management
- Public Health
- Systems Engineering
- Sustainable Urban Development

Minor in:

- Data Engineering
- Entrepreneurship
- Management
- Public Health

Additional learning opportunities:

- **Enhancement Courses:** Experiential learning opportunities for innovation, teaching and research within CDE
- **Design Your Own Course (DYOC):** Offers students the freedom to decide their learning content, method and mentors for up to eight units
- **Career Catalyst:** A foundational course preparing students for internships and careers

Profile of Current Students

Isabella Lu

Bachelor of Engineering (Computer Engineering), Class of 2024

"I started without any background in coding or electrical work. From my first coding assignment to building advanced robots, every project was a step towards gaining knowledge and technical skills. A standout experience was with the Bumblebee Team. It was both an educational and thrilling adventure to Sydney and San Diego to deploy and compete with our self-developed robots. My role as the president of the 8th Undergraduate Student Council has sharpened my leadership skills and deepened my connection with the student community. Throughout this journey, I collaborated with peers who shared my enthusiasm for robotics, in a vibrant, collaborative atmosphere. NUS Computer Engineering has provided me with supportive professors who enriched my experience, guiding and inspiring me every step of the way. This experience transcended technical learning, immersing me in a community passionate about innovation and personal growth."

Cheah Hao Yi

Bachelor of Engineering (Computer Engineering), Class of 2024

"Studying at NUS Computer Engineering provided theoretical knowledge and practical exposure to technical topics such as digital circuits and programming methodologies. This was complemented by soft skills learned through various CDE core courses such as design thinking and project management. Moreover, the resources offered by NUS Computer Engineering were instrumental in securing engineering internships, enabling me to hone my engineering skills and contribute back to the NUS CEG community via hackathon workshops. NUS Computer Engineering cultivates holistic development, encouraging me to become a leader, a team player and an aspiring engineer ready to make an impact in the future."

Azfarul Matin Bin Mohamad Afandi

Bachelor of Engineering (Computer Engineering), Class of 2025

"My NUS Computer Engineering journey has been incredibly rewarding. Courses like CG1111A and CG2111A have allowed me to delve into the practical aspects of the field, including collaborative projects where we built robots to navigate mazes. This hands-on experience seamlessly blends the realms of software and hardware, aligning perfectly with my passion for both disciplines. As a CEG major, I seized the opportunity to participate in the renowned CP2106: Independent Software Development Project, commonly known as Orbital. For our project, we created a 2D platformer game using Unity and C#, achieving the level of Apollo."

Alumni Success Stories

Rishab Patwari

Bachelor of Engineering (Computer Engineering), Class of 2023
Chief Executive Officer, HiveBotics

"NUS ECE was instrumental in the existence and progress of HiveBotics so far. The confidence to build my own startup came from the inspiration gained from student projects such as Bumblebee, FSAE and Rovers. As I took on the *i*DP programme as my second major, I was able to tap into the EG4301A course to recruit and build my initial multidisciplinary team. This was essential to my startup idea of creating a toilet cleaning robot, which required skills from multiple disciplines. One of the team members eventually became the co-founder of HiveBotics as well. We also underwent the NUS GRIP accelerator programme and raised our first pre-seed investment of SGD 100,000 from them."

Ramon Bespinyowong (Jae)

Bachelor of Engineering (Computer Engineering), Class of 2014
Backend Software Engineer, ByteDance

"Choosing NUS Computer Engineering was a game-changer. Its top-notch faculty and research facilities sparked my love for computing, turning every challenge into an exciting journey. The UROP programme and CG3002 Embedded Systems Design project were eye-openers, showing me how software and hardware seamlessly work together. The student exchange programme and a variety of informative talks broadened my perspective, teaching me cultural adaptability and valuable networking skills. NUS did not just boost my technical skills; it also shaped me into a great team player and enhanced my people skills in its diverse, energetic environment. Joining NUS Computer Engineering is more than an education — it is a journey towards becoming both a well-rounded individual and a proficient engineer."

Michelle Tee

Bachelor of Engineering (Computer Engineering), Class of 2016
FX Risk Tech Senior Vice President, Citi

"After my journey with NUS Computer Engineering, I started my dream job at Citi as part of the Technology Analyst programme, during which I learnt that my NUS CEG experience had equipped me with skills that worked to my advantage in my career. For example, one of the key skills I learnt during my academic years was the ability to learn quickly and apply effectively. This gave me the confidence I needed to pursue different technologies and business spaces within the organisation.

The monumental experience gained from the Student Exchange Programme to Korea Advanced Institute of Science and Technology (KAIST) enabled me to respect and appreciate diversity. In my current role, I manage a team of 18 people spanning different geographies like Singapore, Poland, India and the UK. Navigating a global team is not easy and I am extremely grateful that NUS CEG gave me the solid footing I needed to achieve anything I aspire to."