

Introduction to 3+1+1 programme between NUS and Partner University



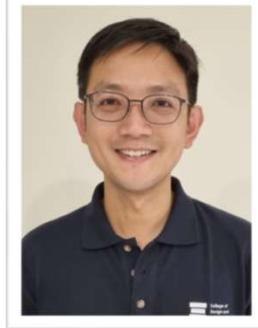
Dr Cui Yue

Lecturer

Manager (Graduate and CET Programmes Outreach)
Department of Civil and Environmental Engineering

Email: cuiyue@nus.edu.sg

Contacts



Associate Professor Poh Leong Hien (傅勇宪)
Deputy Head (Graduate and CET Programmes)
Department of Civil and Environmental Engineering

Email: ceeplh@nus.edu.sg



Ms Sally Ng Xin Hui (黃馨慧)
Executive
Department of Civil and Environmental Engineering

Email: sally.ng@nus.edu.sg

Contents

- **Introduction to NUS CEE Department** NUS CEE 学院简介
- **Overview of 311 programme** 311 项目总览
- **Programme requirements** 项目要求
- **Fees and expenses** 项目花费
- **Timeline** 项目时间线
- **NUS MSc(CE) Programme** NUS 授课型硕士项目介绍



Overview of NUS Civil & Environmental Engineering (CEE)

- Number of faculty members 学院教师情况总览
 - 16 full professors, 13 associate professors, 8 assistant professors, 6 lecturers/senior lecturers and 4 practice-track professors/associate professors.

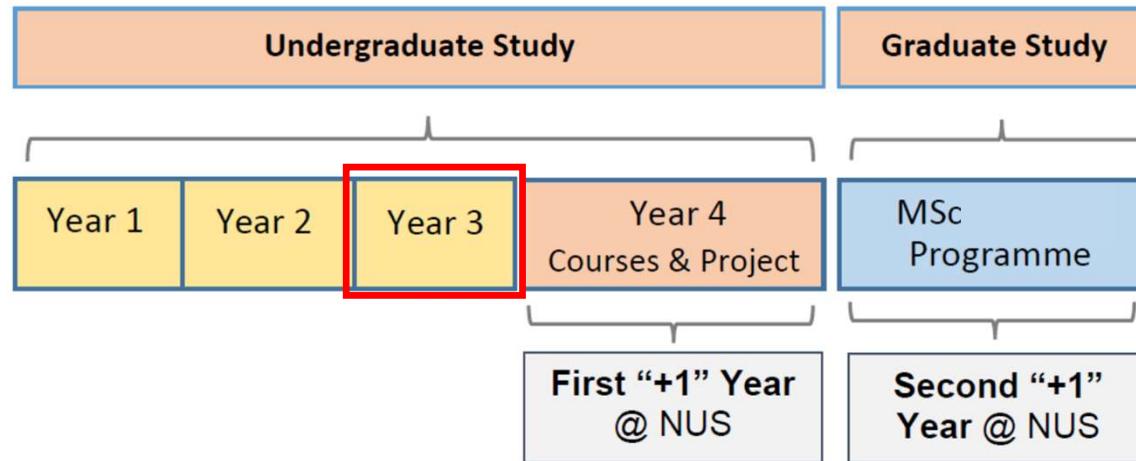
	QS Ranking	QS Ranking	THE World University Ranking
Subject	Civil and Structural Engineering	Environmental Sciences	Engineering
2025	3	10	9
2024	4	9	9
2023	4	10	8
2022	3	10	10



3+1+1 Programme

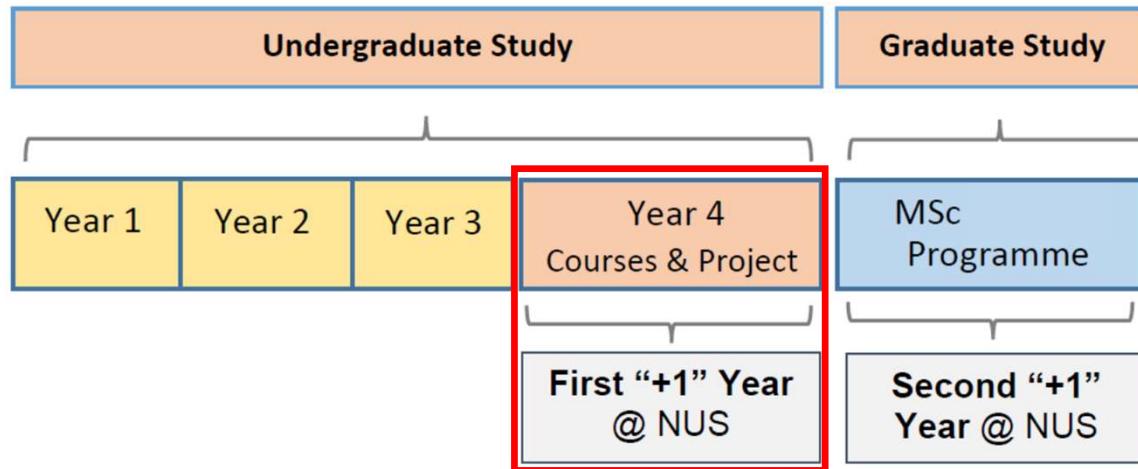
Overseas experience in a familiar environment 在熟悉文化环境下的海外体验

- Exposure to a different study environment 体验不同的学习环境
- Work with quality professors in a top university 与顶尖院校的教授共同工作学习
- Network with future international colleagues 拓宽国际化的人脉
- Get an NUS MSc degree (coursework) 得到NUS授课型硕士学位



Year 3 candidates from Partner University 合作院校第三年本科生

- Good academic standing 良好的学术背景
- Meet NUS English requirement (IELTS \geq 6.0 or TOEFL \geq 85) 达到NUS录取英语要求
- Pass interview by NUS panel 通过NUS委员会的面试



First +1 year at NUS

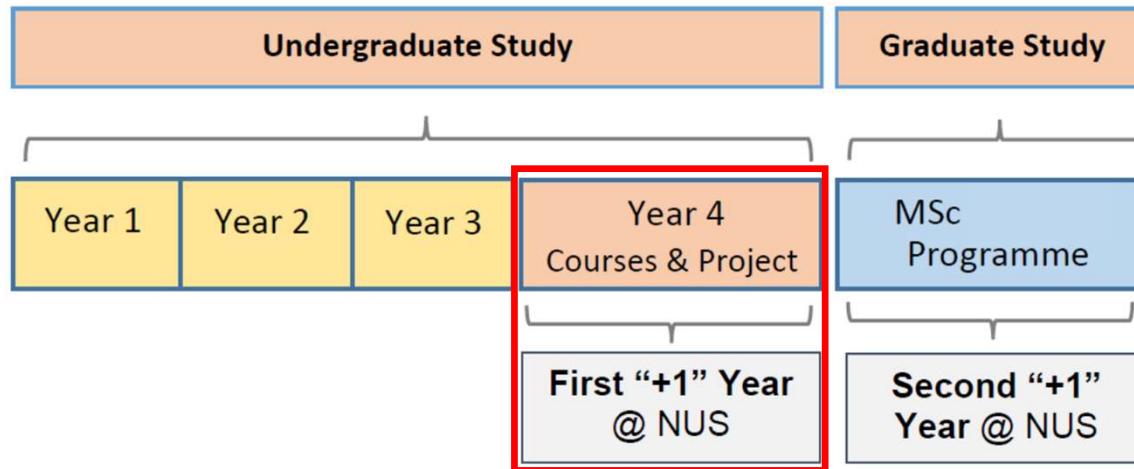
- At least 16 units of graduate courses.
 - A typical course spanning one semester carries 4 units.
- Takes a Final Year Project (FYP).
 - For Civil, if FYP is not required by Partner University, it can be replaced with 8 units of courses.
- Courses & FYP to fulfil the graduation requirements of Partner University
- **No Joint Degree** 无双学位

至少完成16学分研究生课程
一门正常研究生课程是4学分

参与毕业设计

如果毕业设计并不是合作院校的必须要求，可替换为8个学分的课程

课程和毕业设计需要满足合作院校的毕业要求



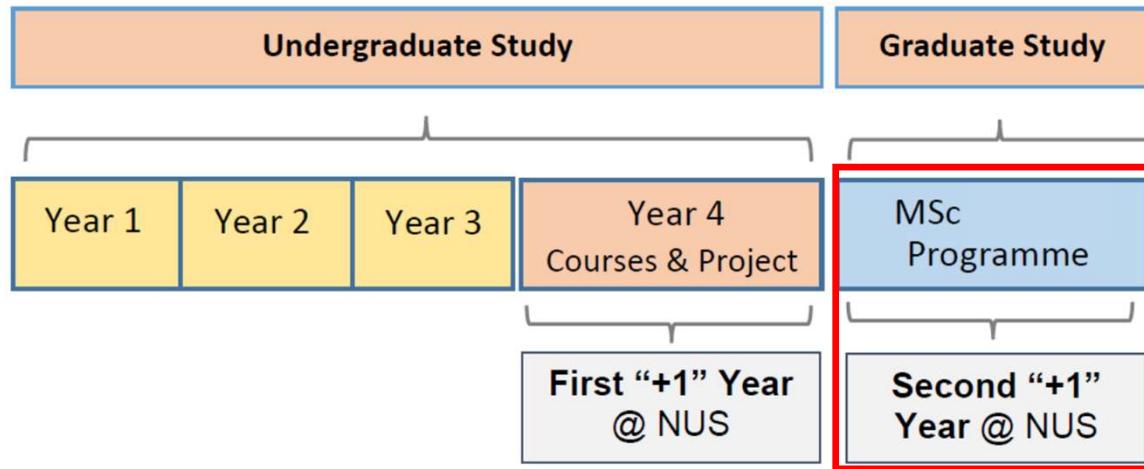
First +1 year at NUS

- Apply for admission to MSc in Dec (Semester I)
- Provisional admission, pending
 - Graduation from Partner University with good standing
 - Complete Final Year Project
 - Completion of at least 16 units of courses in NUS with a minimum GPA of 3.50/5.00

第一学期结束（12月）申请MSc

NUS录取需要满足以下条件:

- 满足合作院校毕业要求
- 完成毕业设计
- 至少完成16个学分的课程并取得3.5以上的绩点



Second +1 year at NUS (MSc coursework)

- Standard graduation requirements: 40 units of courses
- 311 programme: Transfer up to 10 units of courses to MSc
- Complete remaining units of courses to graduate with a NUS MSc degree

MSc毕业要求:

- 完成40个学分
- 311项目: 可以转入10个学分进入MSc阶段
- 完成剩下的30学分即可获得NUS MSc学位

Benefits

- Working towards a NUS MSc degree starting from first +1 year
- MSc programme fee rebate (see later slides)

项目优势:

- 第一年（大四）即可参与MSc课程学习
- NUS学费政策

NUS curriculum and details

MSc(CE)

- <https://cde.nus.edu.sg/cee/graduate/coursework-based-programmes/msc-ce/>

Fees (first +1 year)

Item	Fees (S\$)	Comments
Courses (16 units)	21,241.48	<ul style="list-style-type: none">• 4 courses of 4 units each• S\$5,310.37 per course
Final Year Project (8 units)	3,920.00	<ul style="list-style-type: none">• 2 semesters of FYP
Miscellaneous fees	456.12	
Total	25,617.60	

Correct as of Jan 2026. Please refer to the NUS CEE website for the most updated fee.

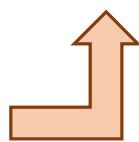
Fees (second +1 year)

Item	Fees (S\$)	Comments
MSc (Civil) Programme Fee	53,103.71	<ul style="list-style-type: none">• Full programme fee based on 40 units

Fees (second +1 year)

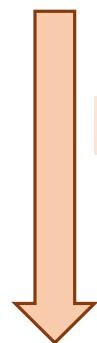
Item	Fees (S\$)	Comments
MSc (Civil) Programme Fee	53,103.71	<ul style="list-style-type: none">Full programme fee based on 40 units

Credit transfer from 1st year



Rebate

学费减免换算政策



Item	Fees (S\$)	Comments
MSc (Civil) Programme Fee	39,827.78	<ul style="list-style-type: none">Assume 10 units credit transfer

Expenses

Estimated Costs (Monthly)

Estimated Cost (Per Month)	On-Campus	Off-Campus
Accommodation	S\$500 – S\$900*	S\$650 – S\$1800*
Food (3 meals a day)	S\$300 – S\$500	S\$400 – S\$800
Public Transport	S\$100 – S\$200	S\$200 – S\$300
Personal expenses (Telecommunication, toiletries, clothing etc.)	S\$300 – S\$500	S\$300 – S\$500
Total:	S\$1,200 – S\$2,100[^]	S\$1,550 – S\$3,400[^]

Accommodation + Food + Transportation = **S\$1,550 – S\$3,400 per month**

<https://nusgs.nus.edu.sg/cost-of-living/>



Halloween Outing Along Sentosa Boardwalk (2022 Oct)

FIRST “+1” YEAR ACTIVITIES

Outdoor Escape Race (2023 Nov)

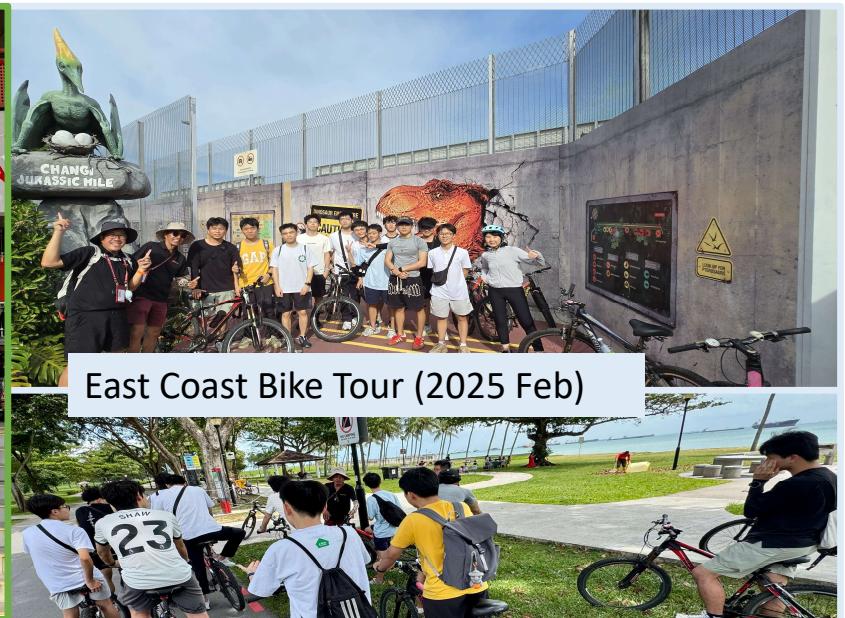


Guided Bike Tour (2023 Mar)



Mystery Relay Race @ NUS (2023 Oct)





Lunar New Year Gathering (2024 Feb)

Typical Timeline

申请时间线

Jan – Feb	• Year 3 students to apply to home university coordinator for 311 programme	国内院校校内申请311
Mar	• NUS-CEE process application results and inform partner university	NUS通知录取结果
21 Mar – 10 Apr	• Online application in NUS portal by selected students	NUS网上申请
May - Jun	• Students receive official NUS offer, onboarding processes	学生取得正式录取

Get the following documents ready for submission (by end Feb) 所需材料

- Valid passport (minimum validity until end of May in the following year). 护照
- English test results (IELTS \geq 6.0 or TOEFL \geq 85). Results have 2-years validity period. 英语成绩证明
- Latest transcript (typically 5th semester/mid of 3rd year), English version 最新成绩单英文版 (5学期)

MSc (Civil) Programme



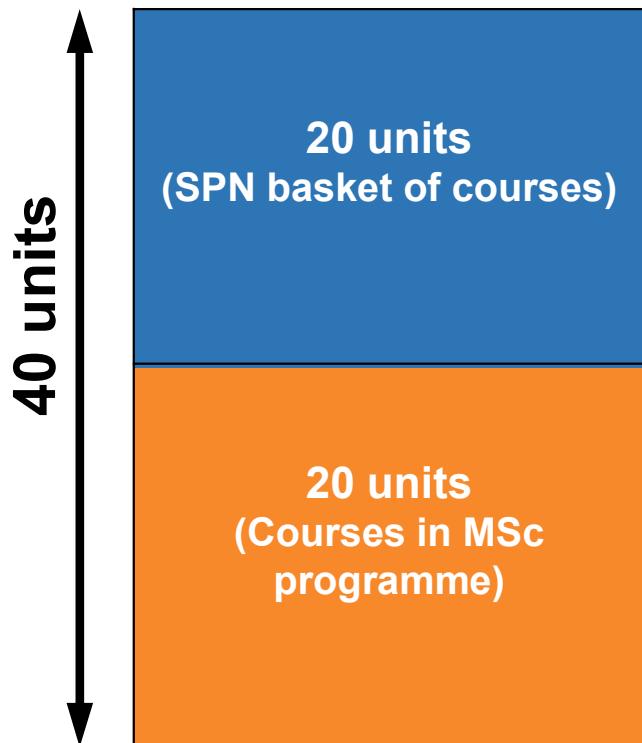
- Many established professional engineers as co-lecturers, together with award winning NUS professors

知名的专业工程师与新加坡国立大学教授共同授课

- Rigorous training and hands-on experience to establish connections between theory and practice

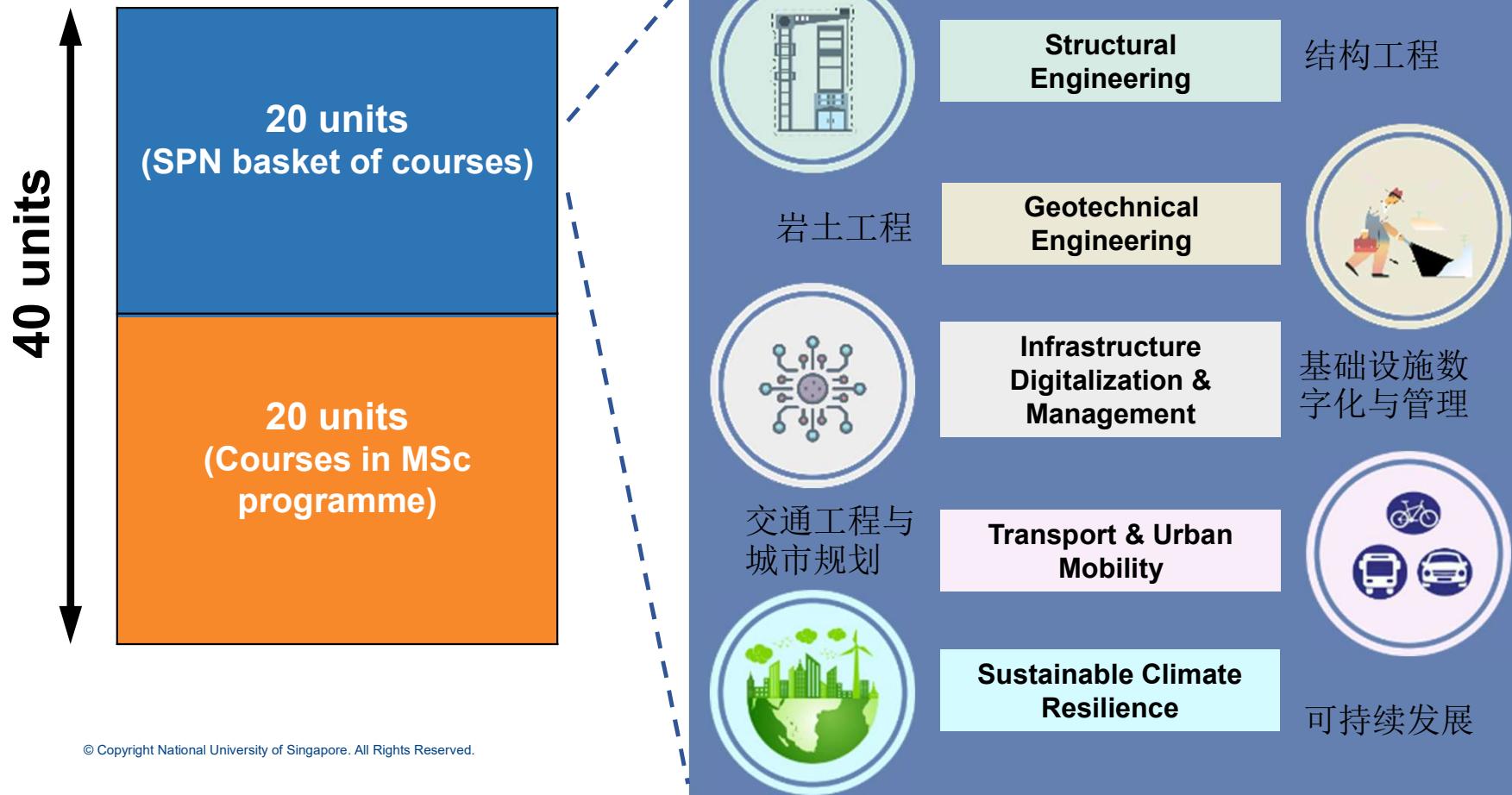
严格的训练和实践经验，建立理论与实践之间的联系

MSc(Civil) – Overview



- Complete 40 units of courses
总共完成40学分课程
- Customization based on personal interests and professional needs
根据个人兴趣及专业需求个性化定制
- Graduate with a MSc(Civil) degree with specialization
获取授课型硕士专业学位

MSc(Civil) – Overview



MSc(Civil) – SPN basket of courses



Structural Engineering

CE5010QA	Finite Element Concepts & Applications
CE5010QB	Finite Element Analysis for Civil Engineering
CE5509QA	Advanced Structural Steel Design
CE5509QB	Design of Composite Steel and Concrete Structures
CE5510QA	Advanced Structural Concrete Design
CE5510QB	Rational Design of Structural Concrete Systems
CE5513	Plastic Analysis of Structures
CE5515	Structural Health Monitoring
CE5516QA	Structural Stability Concepts & Applications
CE5516QB	Structural Dynamics Concepts & Applications
CE5604	Advanced Concrete Technology
CE5610QA	Concrete and Cementitious Composites
CE5610QB	Concrete Repair and Retrofit of Concrete Structures
CE5611QA	Advanced Prestressed Concrete Design
CE5611QB	Precast Structural Concrete Design
CE6077QA	Numerical Methods in Civil Engineering
CE6601	Characterization of Sustainable Building Materials
CE5002A	Capstone for Structural Engineering



Geotechnical Engineering

CE5104QA	Tunneling in Soils
CE5104QB	Tunneling in Rocks
CE5106QA	Ground Improvement – Hydraulic, Vibratory & Chemical
CE5106QB	Ground Improvement – Dynamic, Geosynthetic & Inclusions
CE5107QA	Pile Foundation Design
CE5107QB	Advanced Topics in Pile Foundation Design
CE5108QA	Key Principles and Concepts of Earth Retention Systems
CE5108QB	Deep Excavations Analysis and Modelling
CE5101	Seepage and Consolidation of Soils
CE5112	Excavation Support System
CE5113QA	Geotechnical Site Investigation
CE5113QB	Geophysical Methods & Geotechnical Monitoring
CE5881	Topics in Geotechnical Engineering: Soil Dynamics
CE6101	Geotechnical Constitutive Modelling
CE6102	Geotechnical Analysis
CE5002B	Capstone Project for Geotechnical Engineering

MSc(Civil) – SPN basket of courses



Infrastructure Digitalization & Management

CE5805QA	Construction Productivity Analytics
CE5805QB	Design for Manufacture and Assembly
CE5806QA	Advanced Construction Planning & Control
CE5806QB	Lean Construction
CE5807QA	Digital Technologies for Construction
CE5807QB	Digital Construction Management
CE5808QA	Virtual Design in BIM
CE5808QB	Advanced Digital Construction
CE5809	Management and Economics of International Construction
CE5002E	Capstone Project for Infrastructure Digitalization & Management



Transport & Urban Mobility

CE5203	Traffic Flow and Control
CE5204	Pavement Design and Rehabilitation
CE5205	Transportation Planning
CE5206	Urban Public Transportation Systems
CE5208	Transport Infrastructure Asset Management
CE5209	Transportation Data Analytics and Modeling
CE5210	Intelligent Transportation Systems and Simulation
CE5211	Transportation Management and Policy
CE5212	Intermodal Transport Operations
CE5214QA	Energy Demand Analysis for the Built Environment
CE5214QB	Mobility, Climate Change, and Energy Market
CE5002D	Capstone Project for Transportation Engineering

MSc(Civil) – SPN basket of courses



Sustainable Climate Resilience

CE5308QA	Coastal Processes and Protection
CE5308QB	Sediment Transport and Coastal Protection
CE5310	Hydroinformatics
CE5312	Open Channel and Coastal Hydraulics
CE5315	Climate Science for Engineers
CE5316QA	Water Resources for Smart and Liveable Cities: Intro
CE5316QB	Water Resources Modeling for Urban Catchments
CE6077QA	Numerical Methods in Civil Engineering
CE6077QB	Numerical Methods for Environmental Flows
CE5317QA	Eco-hydrology
CE5317QB	Nature Based Solutions for Coastal Protection
CE5318	Decision-making for Climate Adaptation
CE5721QA	Coastal Waves and Wind
CE5721QB	Coastal Environmental Loads

Global recognition of NUS degrees by employers

Times Higher Education

Global Employment University and Survey (GEURS) 2025

Emphasis on practical training and industry relevance in our programs

University	Country/region	Rank 2025	Rank last year
Massachusetts Institute of Technology	US	1	2
California Institute of Technology	US	2	1
Stanford University	US	3	3
Harvard University	US	4	5
University of Cambridge	UK	5	4
Princeton University	US	6	6
University of Oxford	UK	7	8
The University of Tokyo	Japan	8	7
National University of Singapore	Singapore	9	9
Imperial College London	US	10	11

<https://www.timeshighereducation.com/press-releases/global-employability-university-rankings-2025>



Thank you