CHANGE THE WORLD
BUILD YOUR DREAM

CIVIL & ENVIRONMENTAL ENGINEERING
CEE PROGRAMMES OFFERED

UNDERGRADUATE PROGRAMMES

• B. Eng. (Civil)
• B. Eng. (Environmental)
• B. Eng. (Civil), specialisation in Offshore Engineering
• B. Eng. (Environmental), minor in Civil Infrastructure
• Double Degree Programmes
• Concurrent Degree Programmes

GRADUATE PROGRAMMES

• M.Sc. (Civil)
• M.Sc. (Environmental)
• M.Sc. (Geotechnical)
• M.Sc. (Offshore Technology)
• M.Sc. (Transportation Systems & Mgt)
• M.Sc. (Hydraulic & Water Resources)
• Master of Engineering
• Doctor of Philosophy

01 Students site visit to MRT tunnel
02 Student Project on Sentosa Island Transport Master Plan
03 Students site visit to JTC Jurong Rock Caverns
CEE PROGRAMMES OFFERED

- SYSTEM
- SUSTAINABILITY
- MANAGEMENT
- DEVELOPMENT
- TRANSPORTATION
- WATER
- DESIGN
- UNDERGROUND
- INFRASTRUCTURE
- BUILDING
- WATER
- MANAGEMENT
- SYSTEM
- DEVELOPMENT
- TRANSPORTATION
ENRICHING LIVES ABROAD

PROJECT ORION
Initiated by our Civil Engineering Club in 2000, Operation Orion provides students with the unique opportunity to engineer and build structures for host villages on top of usual service learning exchanges. Operation Orion was started with a conviction to apply engineering knowledge into benefitting communities, and the Orion team has not disappointed thus far. Orion has been to more than 10 locations in Asia and has built structures ranging from playgrounds to irrigation systems.

PROJECT OCEANUS
Initiated by our Environmental Engineering Student Club, Project OceaNUS was established in 2012 to improve the living conditions of communities through environmentally sustainable technology and education.
LEARNING & GROWING TOGETHER

CIVIL AND ENVIRONMENTAL ENGINEERING DAY

Learning about safety through fun and games

Welcoming freshmen into the CEE family with fun and laughter!

SAFETY AND HEALTH DAY

Bonding

FRESHMEN ORIENTATION CAMP
During the 4 years of courses, various activities arranged by Civil Engineering Club bond me strongly with my course mates and we continue to help each other in our working life. All that I learned and took away from NUS continues to benefit me in my career and life for now and I believe also for future.

MS LIU LIHUI
CVE 2011 Graduate
Senior Project Engineer (Civil & Structural), Project Development, Sentosa Development Corporation

Two years ago I was posted to Qatar as a Process Engineer to assist with the testing, commissioning and operation of the Doha North Sewage Treatment Works – the largest wastewater facility in the Middle East. It was a unique experience. In the desert, we worked through temperatures that vary from 10 °C in winter to 55 °C in summer with a very large team with people from 4 continents with 12 different nationalities, using and mastering many different processes and equipment.

MR SOORYA PRAKASH
CVE 2014 Graduate
Engineer, KTC Group

B. Eng. (Civil) has given me with an excellent grounding for pursuing a career as a Civil Engineer. You leave armed with a well-rounded knowledge of the field along with a degree from one of the top universities in the world.
I recall fondly my days in NUS, where I studied Environmental Engineering. There was a freedom to explore geographically through exchange programs, socially through the vibrant student activities and mentally through the variety of modules offered.

Now, at PUB, my training in engineering gives me a robust foundation to apply a wide range of analytic skills bolstered by technical knowledge. At work, I apply hydraulics to simulate water flow and pressure; I apply project management to organize tasks; and I apply professional engineering ethics to guide my decisions.

MR TONG YIU YAN  
EVE 2011 Graduate  
Engineer, Water Supply (Network) Department, PUB

I have gained experience in numerous environmental practices and risk management, including the implementation of environmental management systems, environmental impact assessment, environmental baseline study, implementation and compliance.

MR YEO WENWEI  
EVE 2011 Graduate  
Consultant, Environmental Resources Management (ERM) Sustainability Information Solutions (SIS) practice.

Since my graduation, I have a fulfilling career in developing low carbon strategy guide for companies, revising assessment criteria to determine green products and conduct product carbon footprint assessment.

MR ERIK CHRISTIANTO  
EVE 2014 Graduate  
Consultant, Ernst & Young Climate Change and Sustainability Department
WHAT IS CIVIL ENGINEERING?
Civil engineering is a professional engineering discipline that deals with the conception, design, construction and maintenance of the physical and naturally built environment, including works such as roads, subways, bridges, airports, ports, dams, drainage systems, reclaimed land, underground caverns, offshore platforms, oil refineries, power stations, stadiums, amusement parks and desalination plants.

It is all about creating, improving and protecting the environment in which we live. It provides the facilities for day-to-day life and for transport and industry to function. Without civil engineers we wouldn’t have a constant supply of clean water, roads or trains to move around, or sustainable energy to help us save our planet.

WHAT IS ENVIRONMENTAL ENGINEERING?
Environmental engineering is a rapidly growing branch of engineering which is concerned with devising, implementing and managing solutions to protect and restore the environment, within an overall framework of sustainable development.

ENVIRONMENTAL ENGINEERS INVOLVED THEMSELVES IN SOIL, AIR, WATER AND GROUNDWATER CONTAMINATION AND POLLUTION, MANAGE LIQUID AND SOLID WASTE SYSTEMS, ALTERNATIVE ENERGY RESOURCES, HUMAN & ENVIRONMENTAL HEALTH CONCERNS ETC.

As environmental problems are complex and multifaceted, environmental engineering is a highly interdisciplinary endeavour.

The roles of both Civil Engineers and Environmental Engineers are to work alongside with each other to sustain and improve the quality of modern living in this scarce resources driven society.

WHAT CAN I EXPECT TO LEARN?
Civil Engineering Programme modules/subjects cover these areas:

<table>
<thead>
<tr>
<th>Civil Engineering Materials</th>
<th>Infrastructure Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Management</td>
<td>Offshore &amp; Marine Engineering</td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>Structural Engineering</td>
</tr>
<tr>
<td>Hydraulic &amp; Water Resources</td>
<td>Transportation Engineering</td>
</tr>
</tbody>
</table>

Environmental Engineering Programme modules/subjects cover these areas:

<table>
<thead>
<tr>
<th>Air Pollution Assessment &amp; Control</th>
<th>Hazardous and Solid Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Energy Resources</td>
<td>Human &amp; Environmental Health</td>
</tr>
<tr>
<td>Climate Change</td>
<td>Water Quality and Treatment</td>
</tr>
<tr>
<td>Environmental Microbiology &amp; Biotechnology</td>
<td>Water Reclamation and Reuse</td>
</tr>
</tbody>
</table>

For the complete list of modules, please visit the following link at CEE website: [http://www.eng.nus.edu.sg/cee/programmes/BEng.html](http://www.eng.nus.edu.sg/cee/programmes/BEng.html)
WHAT ARE THE MODES OF LEARNING IN NUS?
To cater to the different aspirations of our students, we offer three differentiated pathways, namely, (a) Research-focused, (b) Innovation & Design-Centric, and (c) Professional Practice. Each pathway is specially designed with a flexible, innovative and enriching curricula to build up students’ knowledge and experience which will better prepare them for a career in a globalised technology-based economy.

Education in NUS is not limited to formal class learning. There are experiential learning opportunities such as overseas exchanges, participation in local and overseas exchanges, participation in local and overseas competitions, industrial attachment and field trips with our very own student clubs, all of which ensure a well-rounded and holistic education when you are with us.

WHAT ARE MY CAREER OPPORTUNITIES?
Our graduates are trained with solid foundation to become high-level specialists working in various sectors of civil engineering and environmental engineering. Imbued with a globalised outlook, our graduates can also opt for careers in multidisciplinary fields to become policy makers, entrepreneurs in engineering as well as leaders of established multinational companies and various government authorities.

Singapore’s many planned large-scale infrastructure projects (e.g. Changi Airport’s Project Jewel, Tuas Mega Port) and increasing interest in climate change and sustainable development will continue to shape the demands for our graduates.

WHY NUS?
Besides the rich opportunities offered to students for international exposure, NUS was placed among the world’s 10 best universities for 11 subjects across disciplines which included Civil & Structural Engineering and Environmental Sciences according to the 2015 Quacquarelli Symonds (QS) World University Rankings by Subject. Employers often comment favourably on NUS engineering graduates’ strong technical backgrounds, interdisciplinary approaches to solving problems and their wide range of non-technical skills.
According to the 2015 Quacquarelli Symonds (QS) World University Rankings by Subject,

<table>
<thead>
<tr>
<th>Engineering – NUS Civil &amp; Structural ranked</th>
<th>NUS Environmental Sciences rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>10th</td>
</tr>
</tbody>
</table>

NUS is currently ranked 12th in the 2015 QS World University Ranking

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING

Block E1A #07-03
1 Engineering Drive 2
Singapore 117576
Telephone: 6516 4270
Email: ceelccc@nus.edu.sg

Website: [http://www.eng.nus.edu.sg/cee/](http://www.eng.nus.edu.sg/cee/)
Facebook: NUS CEE – Civil & Environmental Engineering