

Graduate Certificate in Structural Engineering

Future engineering structures require professionals equipped with skills and knowledge adaptable to a spectrum of new challenges to create sustainable, resilient and liveable future cities and communities.

The programme equips students with the essentials beyond what is required in creating engineering wonders. It offers a unique and holistic training experience for our future ready engineers, covering topics in state-of-the-art developments in structural materials, advanced design and analyses of engineering structures, modern construction technologies, as well as retrofitting and assessment solution to optimise the life-cycle cost of structures.



Eligibility

Applications are open to individuals with a Bachelor's degree with relevant professional experience

Application Period

For August intake, application starts in April.
For January intake, application starts in October.

Candidature Period

Maximum 2 years

Award of Certificate

Upon completion of 12 units with a Grade Point Average (GPA) of at least 2.50 out of 5.00.

Pathway to MSc

Upon completion of Graduate Certificate programme, graduates with GPA ≥ 3.00 may apply for a relevant MSc programme, subject to approval by host Department. Courses are transferable to MSc, subject to terms and conditions.

COURSES

Each course carries 2 units.
To complete 12 units.

- CE5010A Finite Element Concepts & Applications
- CE5010B Finite Element Analysis for Civil Engineering
- CE5509A Advanced Structural Steel Design
- CE5509B Design of Composite Steel and Concrete Structures
- CE5510A Advanced Structural Concrete Design
- CE5510B Rational Design of Structural Concrete Systems
- CE5516A Structural Stability Concepts & Applications
- CE5516B Structural Dynamics Concepts & Applications
- CE5610A Special Types of Concrete and Cementitious Material
- CE5610B Concrete Repair and Retrofitting of Structural Concrete
- CE5611A Advanced Prestressed Concrete Design
- CE5611B Precast Structural Concrete Design
- CE6077A Numerical Methods in Civil Engineering

For more details, visit:

<https://cde.nus.edu.sg/cee/graduate/graduate-certificate-programmes/gc-structural/>