

1.2 School of Civil and Environmental Engineering

Overview

The School of Civil and Environmental Engineering (CEE) is one of the six engineering schools in the College of Engineering. CEE offers degrees in Civil Engineering, Environmental Engineering and Maritime Studies.

Vision

Our vision is to be a recognised leader and the school of choice in the region for planning, design, construction, and management of urban development and civil, infrastructure and maritime systems.

Mission

CEE provides high-quality undergraduate and graduate education, conduct leading-edge basic and applied research, and support and enhance the profession of civil and environmental engineering through its education, research and service activities in Singapore and the region.

The CEE mission balances education and research with parity between the undergraduate programme and the graduate programme. Our students are provided with a comprehensive and broad-based education that emphasises critical thinking and communication skills, and prepares them for successful engineering practice, advanced studies, professional responsibility and life-long learning. The research conducted will contribute to both the civil and environmental engineering profession and the society, in terms of fundamental and applied knowledge and technologies that could help with the advancement of the profession and improve the quality of life.

Faculty members

Chair's Office

Associate Professor

Teh Cee Ing, Ph.D. (Oxford, UK), Chair

Associate Professor

Law Wing Keung Adrian, Ph.D. (California, USA), Associate Chair (Research)

Lim Siow Yong, Ph.D. (University of Liverpool UK), Assistant Chair (Students)

Tan Teng Hooi, Ph.D. (NTU, Singapore.), Associate Chair (Administration)

Tor Yam Khoon, Ph.D. (NTU, Singapore), Assistant Chair (Alumni Relations)

Yip Woon Kwong, Ph.D. (NUS, Singapore), Associate Chair (Academic)

Division of Environmental and Water Resources Engineering

Overview

The Division of Environmental and Water Resources Engineering engages in cutting edge research in a broad spectrum of environment and water-related areas. The focus is on upstream R&D and the development of novel technologies for national and regional needs. Areas of research include water reclamation, water resources management, waste recovery and reuse, environmental biotechnology, environmental remediation, coastal management, environmental hydraulics and sediment transport.

Associate Professor

Lo Yat Man, Edmond, Ph.D. (MIT, USA), Division Head

Professor

Chiew Yee Meng, Ph.D. (University of Auckland, NZ)

Ng Wun Jern, Ph.D. (Birmingham University, UK)

Tay Joo Hwa, Ph.D. (University of Toronto, Canada)

Emeritus Professor

Chen Chang Ning, Ph.D. (Georgia, USA)

Associate Professor

Cheng Nian Sheng, Ph.D. (NTU, Singapore)
Chui Peng Cheong, D.Eng. (Kyoto University, Japan)
Karina Yew-Hoong Gin, Sc.D. (MIT, WHOI)
Law Wing Keung, Adrian, Ph.D. (California, USA)
Lim Siow Yong, Ph.D. (University of Liverpool, UK)
Liu Yu, Ph.D. (INSA-Toulouse, France)
Shuy Eng Ban, Ph.D. (University of Queensland, Australia)
Sun Delai, Darren, Ph.D. (UNSW, Australia)
Tan Soon Keat, Ph.D. (University of Auckland, NZ)
Volodymyr Ivanov, D.Sc. (Ukrainian National Academy of Sciences)
Wang Jing-Yuan, Ph.D. (N. Carolina State)
Wong Sai Wai, Tommy, Ph.D. (NUS, Singapore)

Assistant Professor

Chang Wei-Chung, Victor, Ph.D. (Stanford University, USA)
Chen Chin-Kuang, Jim, Ph.D. (Yale University, USA)
Chua Hock Chye, Lloyd, Ph.D. (NTU, Singapore)
Guieysse, Benoit Jean, Ph.D. (Lund Univ, Sweden)
Huang Zhenhua, Ph.D. (MIT, USA)
Lim Teik Thye, Ph.D. (NTU, Singapore)
Tang Chuyang, Ph.D. (Stanford University, USA)

Visiting Professor

Anthony G Fane, Ph.D. (Imperial College, UK)

Adjunct Associate Professor

Toh Ah Cheong, M.Sc. (Singapore)
Koe Choon Chiaw, Lawrence, Ph.D. (Univ of Queensland, Australia)

Adjunct Assistant Professor

Lim Tuti Mariana, Ph.D. (UNSW, Australia)

Teaching Fellow

Maszenan Bin Abdul Majid, Ph.D. (La Trobe University, Australia)

Research Fellow

Feng Jing, Ph.D. (NTU)
Filicia Wicaksana, Ph.D. (UNSW, Australia)
Hao Zhiyong, Ph.D. (NTU)
Liu Chunrong, Ph.D. (Chinese Academy of Science)
Moy Yan Pui Benjamin, Ph.D. (UNSW, Australia)
Pan Jiahong, Ph.D. (Inha University, South Korea)
Ramaiah Sachidanadham, Ph.D. (Anna University, Madras, India)
Trevor Roger Garrett, Ph.D. (University of Birmingham)
Wang Xikun, Ph.D. (NTU)
Wang Zhiqian, Ph.D. (NTU)
Zhang Xiwang, Ph.D. (Chinese Academy of Science)
Zhou Zexuan, Ph.D. (Zhejiang University)

Division of Infrastructure Systems and Maritime Studies

Overview

The Division of Infrastructure Systems and Maritime Studies was formed on 1 November 2005 in acknowledgement of the integrated system approach to civil engineering. The Division consists of faculty members specialising in Project Finance and Management, Geotechnical Engineering, Transportation Engineering, Spatial Information and Maritime. These areas encompass the development of key infrastructure systems in a global city: land development and improvement,

transport system, logistics system, port and airport. The research focus of the Division is grouped into five main areas:

Project Management and Finance

Risks and Project Financing
Information Technology
Productivity

Geotechnical Engineering

Foundation for Highrise Buildings
Land Reclamation
Tropical Soils
Underground Space

Transportation Engineering

Transport Modelling and Planning
Traffic Management and Control
Application of Advanced Technologies in Transportation Engineering
Pavement Materials and Technology

Spatial Information

Digital Spatial Data Acquisition and Analysis

Maritime

Maritime Economics and Management
Maritime Logistics
Port Economics and Management

Research activities are coordinated through two research centres: Centre for Infrastructure Systems and Maritime Research Centre (MRC). Key facilities of the division include Geotechnics Laboratory, Transportation Laboratory and Spatial Information Laboratory.

Associate Professor

Leong Eng Choon, Ph.D. (The University of Western Australia), Division Head

Professor

Fan Shing Leung, Henry, Ph.D. (University of California, Berkeley)
Harianto Rahardjo, Ph.D. (Sask., Canada)

Associate Professor

Chew Ah Seng, David, D.B.A. (University of Southern Queensland, Australia)
Chu Jian, Ph.D. (UNSW, Australia)
Goh Pong Chai, M.Surv. (UNSW, Australia)
Goh Teck Chee, Anthony, Ph.D. (Monash, Australia)
Low Bak Kong, Ph.D. (University of California, Berkeley, USA)
Lum Kit Meng, Ph.D. (NTU)
Tan Yan Weng, M.Eng.Sc. (Monash, Australia)
Teh Cee Ing, D.Phil. (Oxford, UK)
Ting Seng Kiong, Sc.D. (MIT, USA)
Tiong Lee Kong, Robert, Ph.D. (NTU)
Tor Yam Khoon, Ph.D. (NTU)
Wong Kai Sin, Ph.D. (University of California, Berkeley, USA)
Wong Yiik Diew, Ph.D. (University of Canterbury, NZ)

Assistant Professor

Chen Po-Han, Ph.D. (Purdue University, USA)
Teo Chee Chong, Ph.D. (Singapore MIT Alliance)

Associate Professorial Fellow

Wong Wai Fan, D.B.A. (University of Southern Queensland, Australia)

Adjunct Professor

Choa Choon Eng, Victor, Ph.D. (NUS)

Adjunct Associate Professor

Lam Siew Wah, DIC M.Sc. (London, UK), M.B.A. (Hull, UK)
Gopinath Menon, M.Eng.Sc. (University of New South Wales) <UNSW, Australia?>

Teaching Fellow

Budi Wibawa, Ph.D. (Niigata, Japan)
Lam Siu Lee, Jasmine, M.Sc. (University of Antwerp, Belgium)
Rajesh Kumar Agarwal, M.Sc. (University of Antwerp, Belgium)

Visiting Professor

Edward Cameron Williams, Ph.D. (University of North Carolina, USA)

Division of Structures and Mechanics

Overview

In the Division of Structures and Mechanics, the research focuses are on Structural Dynamics and Seismic Engineering, Structural Connections, Protective Technology, Computational Mechanics, Concrete and Building Technology and Fire Engineering. Our faculty members also participate actively participate at the research programme in Protective Technology Research Centre.

The Division is also involved in teaching the general undergraduate first-year common engineering programme and structures and mechanics courses in the Civil and Environmental Engineering degree programme. In addition, the Division also offers graduate programmes in the Master of Science in Civil Engineering and Master of Science in Offshore Engineering programmes.

Professor

Fung Tat Ching, Ph.D. (The University of Hong Kong), Division Head
Fan Sau Cheong, Ph.D. (The University of Hong Kong)
Pan Tso-Chien, Ph.D. (University of California, Berkeley, USA)
Soh Chee Kiong, Ph.D. (University of Wales, Cardiff, UK)

Associate Professor

Chiew Sing Ping, Ph.D. (NUS)
Chuang Poon Hwei, DIC, Ph.D. (London, UK)
Lee Chi King, DIC, Ph.D. (London, UK)
Lee Sai Cheng, Ph.D. (NTU)
Li Bing, Ph.D. (University of Canterbury, NZ)
Lie Seng Tjhen, Ph.D. (UMIST, UK)
Lok Tat Seng, Ph.D. (Warwick, UK)
Tan Kang Hai, Ph.D. (University of Manchester, UK)
Tan Teng Hooi, Ph.D. (NTU)
Susanto Teng, Ph.D. (Iowa)
Yip Woon Kwong, Ph.D. (NUS)
Zhao Zhiye, Ph.D. (Wessex Institute of Technology, Southampton, UK)

Assistant Professor

Jong Herman Cahyadi, Ph.D. (University of Tokyo, Japan)
Kusnowidjaja Megawati, Ph.D. (University of Tokyo, Japan)
Low Ying Min, Ph.D. (University of Cambridge, UK)
Paulus Irawan, Ph.D. (University of Tokyo, Japan)
Ma Guowei, Ph.D. (NTU)
Yang Yaowen, Ph.D. (NTU)

Adjunct Associate Professor

Lim Chee Hiong, M.Sc. (NU Singapore), M.B.A. (NTU)

Teaching Fellow

Liu Yu, Ph.D. (NTU)

Research Fellow

Annamdas Venu Gopal Madhav Ph.D. (NTU)
Li Jianchun, Ph.D. (Xi'an Jiaotong University, China)
Shao Zhushan, PH.D. (Xi'an Jiaotong University, China)
Sudhakar Apparao Kulkarni, PhD, (Indian Institute of Technology Bombay, India)
Yu Qingjun, Ph.D. (Northwestern Polytechnical University, China)
Yuan Weifeng, Ph.D. (NTU)
Zhang Xiaodong, Ph.D. (Tsinghua University, China)
Zhong Zheng, Ph.D. (Wuhan Technical University of Surveying and Mapping, China)

Visiting Professor

Masoud Ghandehari, Ph.D. (Northwestern University, USA)
Michael Fam Endowed Professor M.J. Nigel Priestley, (European School for Advanced Studies in Reduction of Seismic Risk, Pavia, Italy)