



香港城市大學
City University of Hong Kong

專業 創新 胸懷全球
Professional · Creative
For The World

College of Science and Engineering



M. Xie, PhD (Quality), Fellow of IEEE

Chair Professor of Industrial Engineering

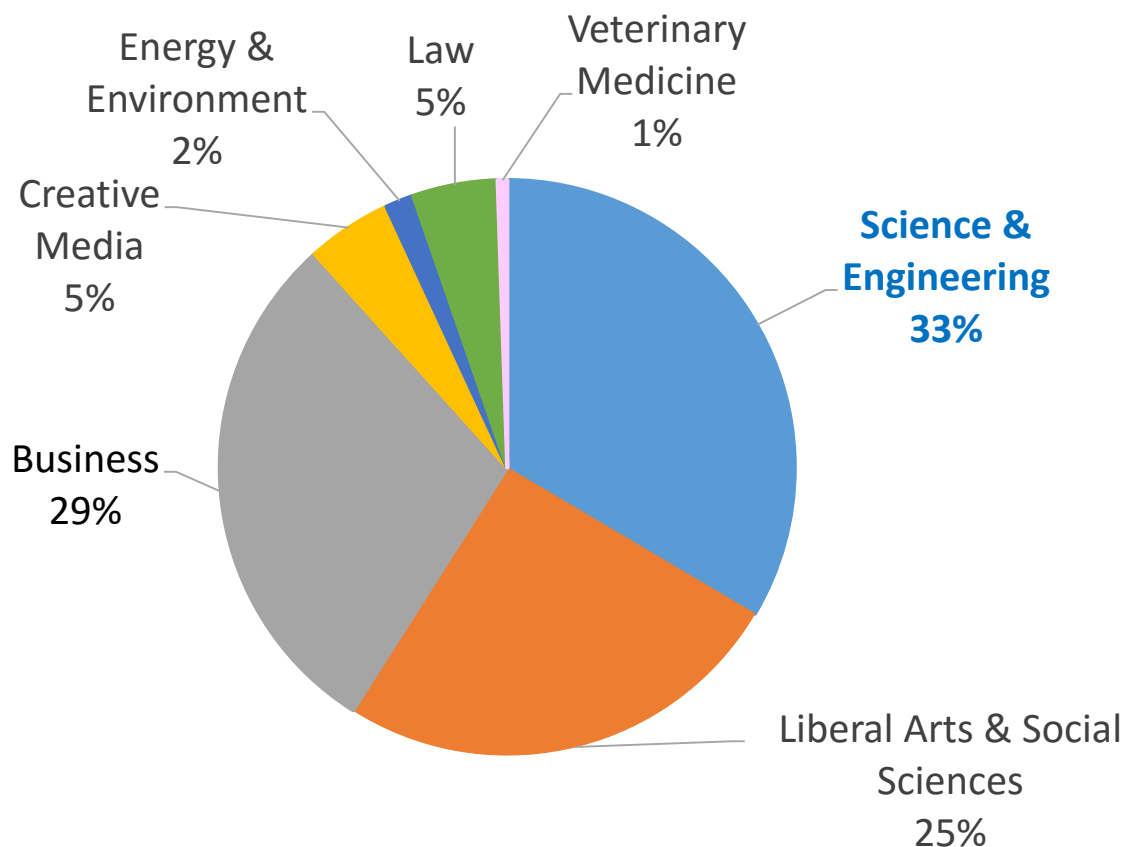
Associate Dean, College of Science and Engineering

The workshop addresses two questions:

1. In what respects do our engineering schools expect their educational programmes to change in the next 10-15 years to optimally prepare the students for their career and exploit innovative pedagogies and emerging technologies in education?
2. What are the commonalities and differences between the regions (Europe, US, Asia/Australia)?

Our Background and Basic Info

- ❑ CSE share the largest population of students at CityU



College of Science and Engineering

□ CSE has 9 Departments and 1 Division

Department of Architecture and Civil Engineering (ACE)

Department of Biology and Chemistry (BCH)

Department of Biomedical Sciences (BMS)

Department of Computer Science (CS)

Department of Electronic Engineering (EE)

Department of Mathematics (MA)

Department of Mechanical and Biomedical Engineering (MBE)

Department of Physics and Materials Science (AP)

Department of Systems Engineering and Engineering Management (SEEM)

Division of Building Science and Technology (BST)

International Ranking

City University of Hong Kong aspires to become a leading global university, excelling in research and professional education.

We have performed strongly and consistently in global ranking exercises.

CityU is ranked #1 in Hong Kong in terms of citations per faculty

**World
university
rankings**

55th
2016

57th
2015

108th
2014

110th
2011

129th
2010

124th
2009

Asian university rankings

7th **2016**

Top 50 under 50

4th **2016**



Preparing students for their future career

- ❑ Globalization – companies source materials/parts, set up facilities, sell their products, to anywhere in the world
- ❑ Multi-disciplinary knowledge – multiple skills are needed
- ❑ Preparing for rapid changes – what is hot/useful today may not be the same a few years down the road

Globalization – what we are doing

❑ Student Exchange Programme

- ❑ with renowned universities such as University of Toronto, University College London, Ecole polytechnique, National University Singapore

❑ Joint Degree Programme

- ❑ Pilot in the Joint Bachelor's Programme with Columbia University, US
- ❑ Joint PhD Programme with Polytechnique Montréal, Canada

❑ Overseas Internship Programme

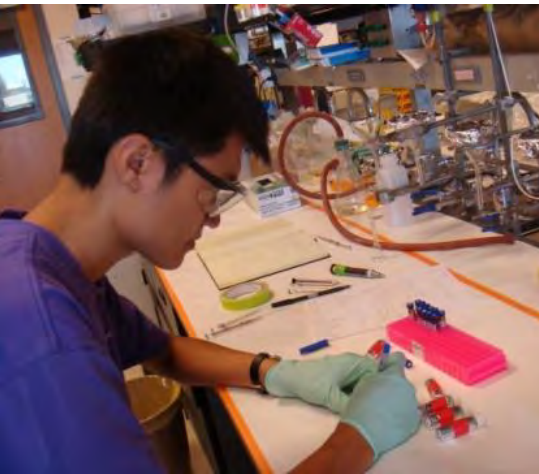
- ❑ at companies and institutions such as Rider Levett Bucknall, Guy Carpenter, GeorgiaTech, King's College London

❑ Academic collaboration links

- ❑ with renowned universities such as University of Cambridge, Tsinghua University, Imperial College London

Internship Programmes

- ❑ Over 4200 students joined the internship schemes in the past decade
 - ❑ Industrial Attachment Scheme (IAS)
 - ❑ Co-operative Education Scheme (CES)
 - ❑ Overseas Internship Scheme (OIS)



The Way Forward

Teaching

- ❑ Provide students with high standard solid training
- ❑ Enhance DEC-related activities
- ❑ Promote discovery, innovation, and entrepreneurship



The Way Forward

Research

- ❑ Produce high-quality research and publications
- ❑ Recruit/retain good faculty members; Enhance Image building
- ❑ Solve significant problems (“high risk” research)



The Way Forward

Connection With Society

- ❑ Establish reputation of significant work and contribute to society
- ❑ Develop strong industrial partners and alumni population



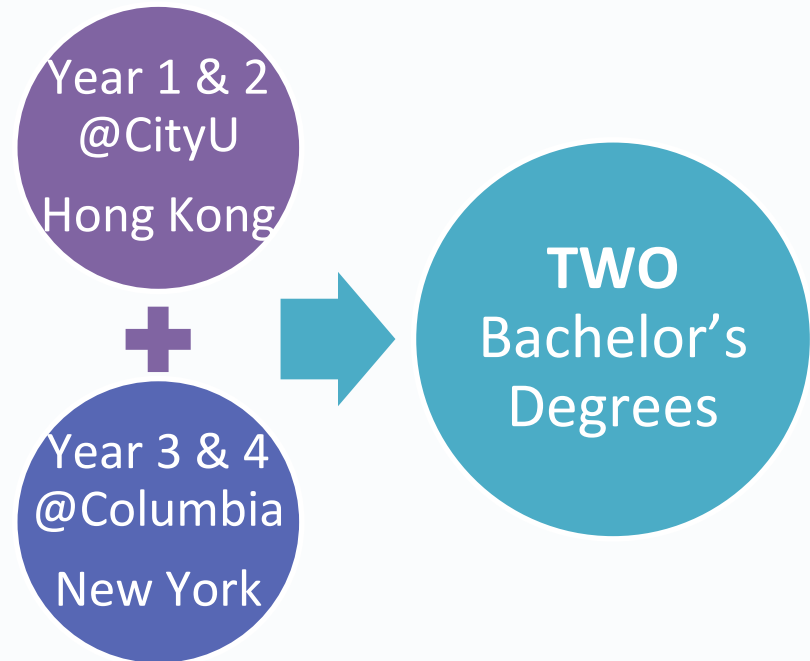
Commonalities/differences between the regions

- ❑ Differences will be smaller although they will never disappear
- ❑ Understanding cultural differences is important
- ❑ Common standards and activities could help with the integration and linkages
- ❑ Engineers need to increase their market value through self-promotion.

CityU is developing a number of double/joint programs.

Joint Bachelor's Degree Program between CityU and Columbia University

- A **global undergraduate educational experience**—a program with an international character not only in its academic coursework but also in its practical application.



- Upon the completion of all academic requirements prescribed by both CityU and Columbia University, students graduate with **two bachelor's degrees**: one degree from CityU and one degree from Columbia University

Joint Postgraduate Programmes

With overseas and Mainland institutions

- Joint MSc Mathematics for Finance and Actuarial Science with **Université Paris-Dauphine, France** (2004)
- Joint Master of Laws and Juris Doctor programme with **University of Paris 1**, Panthéon-Sorbonne, France (2013)
- Joint PhD programme with **University of Sydney, Australia** (2003)
- Joint PhD Programme with **École Normale Supérieure de Lyon, France** (2008)
- Joint PhD programme with **École Polytechnique de Montréal, Canada** (2012)
- Joint PhD programme with **key mainland universities** (2005)
- Executive Master of Business Administration (International) with **Fudan University, China** (2012)
- Doctor of Business Administration (International) with **Fudan University, China** (2009)
- Doctor of Juridical Science (Chinese Judges) in collaboration with the **Supreme People's Court of the PRC and National Judges College** (2010)

Joint Postgraduate Programmes with Overseas and Mainland Institutions Offered by CityU

France

- Joint MSc Mathematics for Finance and Actuarial Science with Université Paris-Dauphine
- Joint Master of Laws and Juris Doctor programme with University of Paris 1, Panthéon-Sorbonne
- Joint PhD Programme with École Normale Supérieure de Lyon, France (2008 – 2012)

Australia

- Joint PhD programme with University of Sydney

Canada

- Joint PhD programme with École Polytechnique de Montréal

China

- Executive Master of Business Administration (International) with Fudan University
- Doctor of Business Administration (International) with Fudan University
- Doctor of Juridical Science (Chinese Judges) in collaboration with the Supreme People's Court of the PRC and National Judges College
- Joint PhD programme with key mainland universities

Mainland Joint PhD Collaboration Schemes

Name of Partner University	Number of students (as at 31 Oct 2016)
University of Science and Technology of China	101
Xian Jiaotong University	76
University of Chinese Academy of Science	23
Huazhong University of Science and Technology	21
Wuhan University	7
Zhongshan University	1
Shanghai Jiaotong University	5
Beihang University	3
Fudan University	1
Harbin Institute of Technology	1
Grand Total	239



CityU Hong Kong Main Campus



USTC-CityU Joint Advanced Research Centre (Suzhou)



CityU Shenzhen Research Institute (CityUSRI)

[Note: Data as of 31 October 2016 (including In-time and Out-time students.)]

Existing Mainland Partners Prior to 2015

Name of Partner University		Year of Commencement
1.	University of Science and Technology of China 中國科學技術大學	2005
2.	Wuhan University 武漢大學	2008
3.	Shanghai Jiaotong University 上海交通大学	2009
4.	Huazhong University of Science and Technology 華中科技大學	2010
5.	Xian Jiaotong University 西安交通大學	2011
6.	University of Chinese Academy of Sciences 中國科學院大學	2013

New Mainland Partner Universities Since 2015

Name of Partner University	Latest Status
1. Beihang University 北京航空航天大學	Approved by Senate and agreement signed in 2015
2. Fudan University 復旦大學	Approved by Senate and agreement signed in 2016
3. Central South University 中南大學	Approved by Senate and agreement signed in 2016
4. Dalian University of Technology 大連理工大學	Approved by Senate and agreement signed in 2016
5. Harbin Institute of Technology 哈爾濱工業大學	Approved by Senate and agreement signed in 2016
6. Nanjing University 南京大學	Approved by Senate and agreement signed in 2016
7. Nankai University 南開大學	Approved by Senate and agreement signed in 2016
8. Renmin University of China 中國人民大學	Approved by Senate and agreement signed in 2016
9. South China University of Technology 華南理工大學	Approved by Senate and agreement signed in 2016
10. Southeast University 東南大學	Approved by Senate and agreement signed in 2016
11. Zhejiang University 浙江大學	Approved by Senate and agreement signed in 2016

Questions? Contact me:
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Further Studies Opportunities

Hong Kong PhD Fellowship Scheme 2017/18



The poster for the Hong Kong PhD Fellowship Scheme 2017/18 features a vibrant, multi-colored geometric design on the right side. The text "HONG KONG" is written in a stylized font across the top of these shapes. The main title "HONG KONG PhD FELLOWSHIP SCHEME" is prominently displayed in bold, black and white letters. Below the title, a tagline reads "Experience world-class academic programmes and research opportunities in Asia's World City". A photograph of the Hong Kong skyline, including the Victoria Harbour and the Hong Kong Convention and Exhibition Centre, is shown. Text on the poster provides details about the scheme's establishment in 2009 by the Research Grants Council (RGC), its aim to attract the best and brightest students, and the benefits provided, including a monthly stipend of HK\$20,000, a conference and research-related travel allowance of HK\$10,000 per year, and the "Chow Yei Ching School of Graduate Studies Entrance Scholarships" (~HK\$71,500) in the first year. It also mentions that initial applications are accepted from September to December. Logos of participating universities, including CityU, are visible at the bottom. A QR code and the website "www.rgc.edu.hk/hkphd" are provided for more details.

HONG KONG
PhD FELLOWSHIP SCHEME
Experience world-class academic programmes
and research opportunities in Asia's World City

Established in 2009 by the Research Grants Council (RGC), the Hong Kong PhD Fellowship Scheme (HKPFS) aims at attracting the best and brightest students in the world to pursue their PhD programmes in Hong Kong's universities.

The Fellowship Scheme will provide an annual stipend of HK\$20,000 (approximately US\$2,564) and a conference and research-related travel allowance of HK\$10,000 (approximately US\$1,282) per year up to three years.

Initial application is accepted from September to December

For details, please visit
www.rgc.edu.hk/hkphd

Background

- Established by the Research Grants Council (RGC) of the HKSAR Government.
- Attract the best and brightest students in the world to pursue their research degree programs in Hong Kong's institutions.

Funding and Scholarship

- Monthly stipend of HK\$20,000 (~US\$2,564)
- conference and research related travel; allowance of HK\$10,000 (~US\$1,282) per year;
- receive the "Chow Yei Ching School of Graduate Studies Entrance Scholarships" (~HK\$71,500) in the first year.

Deadline

- 1 December 2016, 12 noon

<http://www.sgs.cityu.edu.hk/prospective/RPgg/HKPhD>



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