

Department of Advanced Design
and Systems Engineering
先進設計及系統工程學系

Engineering Doctorate (Engineering Management)

工程學博士(工程管理)

Our Graduates



Dr Sunny Chai Ngai-chiu, BBS, JP
Chairman of Board of Directors
Hong Kong Science and Technology
Parks Corporation



Dr Raymond Leung Siu-hong
Founder, Chairman & CEO
Altai Technologies Limited



Dr Peter Ho Ka-nam
Managing Director
Techworld Industries Limited

Ir Dr Hon Lo Wai-kwok
GBS, MH, JP
Industrial Advisor of
EngD(EM)



Dr Amie Lai Gor
General Manager, Sustainability
Great Eagle Holdings Limited



Dr David Chung Wai-keung, JP
Former Under Secretary
Innovation and Technology Bureau
HKSAR Government



香港城市大學
City University of Hong Kong

A Platform for Innovation Leaders

Nothing breeds success like
success.

**Already a CEO, MD, GM, VP or
a high flying senior manager
with shining track records?
Looking for a programme of
study that builds on your
success to attain new heights
in your career?**

This EngD programme is for you. The EngD(EM) programme aims to extend your creative thinking and discerning capability to apply innovative technologies and advanced processes and methods to meet the new challenges of your positions of responsibility. Over 100 senior executives and engineering managers from a multitude of enterprises and governmental organisations, have graduated from this EngD programme, creating an ever-widening network for engineering management, technological innovation, entrepreneurship and industry-university collaboration.

Programme Director
Dr Alan Chan Hoi-shou, JP
Tel: 3442 8439 / 3442 9535
Email: alan.chan@cityu.edu.hk
Website: www.cityu.edu.hk/adse/engd/

DEPARTMENT OF ADVANCED DESIGN AND SYSTEMS ENGINEERING (ADSE)

The Department aims to support Hong Kong's industries in meeting the technological and managerial challenges of the twenty-first century by engaging extensively in industrially relevant research and development activities, and by committing to closer research collaboration, executive development and consultancy activities with Hong Kong and mainland China's industrial sectors.

PROGRAMME AIMS

This programme aims to develop students' creative thinking through tackling important strategic industrial projects and meeting the specific needs of industry. Students will pursue the study of engineering management and industrial research of a high order while carrying on with their professional duties. The originality and value of the students' research will be assessed within their specific professional and industrial contexts. As professional activity is usually multi-disciplinary and business- and management-driven, the programme will include a wide variety of coursework on Engineering Management. The programme provides an integrated curriculum of theory, practice and research to develop professionals' creative thinking and capabilities in the application of knowledge to solve important strategic problems in industry.

The Engineering Doctorate is an advanced professional doctorate degree. EngD graduates can use the title 'Dr' before their names.

WHAT YOU WILL BE STUDYING

The programme comprises a taught component and a research component.

Taught component

The taught component comprises 9 credit units of core courses and 12 credit units of elective courses. The taught courses available to EngD students comprehensively cover a mixture of technology, innovation management and experience to provide industry with competent and knowledgeable managers in the fields of technology and innovation.

Core courses

Industry is in great need of people who can implement new technologies and knowledge in business. The core courses are designed to equip students to meet the immediate needs of industry for the innovative application and implementation of state-of-the-art knowledge and technology.

- Integrative Engineering Management
- Research Methods in Engineering Management
- EngD Seminar
- Doctoral Thesis

Electives

- Advanced Design of Experiments and Taguchi Method
- Asset and Maintenance Management
- Business Process Improvement and Innovation
- China Engineering Enterprise Management
- Data Mining and Statistical Modeling
- Engineering Economic Analysis
- Estimation and Control of Random Dynamic Systems
- Financial Engineering for Engineering Managers

- Forecasting and Control Using Regression, Time Series, and Dynamic Models
- Industrial Case Study
- Industrial Marketing Management for Engineers
- Managerial Decision-making Systems with Artificial Intelligence
- Managing Strategic Quality
- Operations Management
- Project Management
- Quality and Reliability Engineering
- Quality Improvement: Systems and Methodologies
- Risk and Decision Analysis
- Statistical Modelling and Design of Experiments
- Supply Chain Management
- Technological Innovation and Entrepreneurship
- Theoretical Underpinnings of Decision Making Under Uncertainty

Remarks: As the class sizes are relatively small, not all of the electives are available every year.

Research component

The research component comprises a thesis with a normal duration of three years.

HOW DO YOU GET IN?

Under normal circumstances, applicants should:

- hold a Master's degree in a related engineering discipline/ profession (or equivalent qualification)[▲] from a recognised university; and
- have at least five years' recent work experience at a senior level.

[▲] *Equivalent qualifications mentioned above include relevant professional qualifications or other scholarly achievements recognised by the University.*

English proficiency requirement

Applicants from a university where the language of teaching is not English should satisfy the following minimum English proficiency requirement:

- a TOEFL score of 550 (paper-based test) or 213 (computer-based test) or 79 (internet-based); or
- an overall band score of 6.5 on International English Language Testing System (IELTS); or
- band 6 in mainland China's College English Test; or
- other equivalent qualifications.

GENERAL INFORMATION

Mode of study : Combined mode

Duration of study : 4-6 years (part-time)

Credit required : 57

Tuition fee : HK\$8,900 per credit

APPLICATION

Applications for admission should be made online at:

www.cityu.edu.hk/pg/programme/engdem

ENQUIRIES

Dr. Alan Chan (Programme Leader)

Tel : 3442 8439 / 3442 9535

Fax : 3442 0173

Email : meachan@cityu.edu.hk

Website : www.cityu.edu.hk/adse/engd



Some Courses Approved by
CEF Up to HK\$20,000
CEF Reimbursement