香港中文大學 The Chinese University of Hong Kong

Master of Science in Electronic Engineering 電子工程學理學碩士

授課式碩士課程

MSC INAUGURATION CEREMONY 2017



leaders, innovators and entrepreneurs in electronic engineering, to pursue knowledge and advance state-of-the-art electronics, including hardware, software and design with electronics as the core, from materials, devices, circuits to systems, and the applications of such technology to meet societal and individual needs. In both teaching, learning and research, the Department is guided by the highest international standards.

Our mission is to educate future

MSc GRADUATION DINNER 20

COURSELIST

ELEG 5752	MOS Devices & Fabrication
ELEG 5753	Flexible Electronics and Solar Cell Technology
ELEG 5754	Solid-state Sensors and Lighting Systems
ELEG 5755	Optical Communication and Interconnects
ELEG 5756	Intellectual Property Management & Technology Commercialization
ELEG 5757	Wearable Bioelectronics
ELEG 5758	VLSI Digital Signal Processing
ELEG 5802	Research and Development Project

		ELEG
ELEG 5723	CMOS Analog IC Design	ELEG
ELEG 5724	VLSI Design Methodology & Testing	ELEG
ELEG 5726	Power Management Technology	ELEG
ELEG 5731	Wireless Communication Systems	ELEG
ELEG 5732	RF Circuits and Systems	ELEG
ELEG 5741	Digital Processing of Speech Signals	
ELEG 5742	Image Processing & Video Technology	
ELEG 5743	Advanced Signal Processing for Commun	nications

- Each year, a balanced set of courses will be offered from the above list. Students will also be able to take courses designed for research postgraduate students and from other programmes, including those offered by other engineering departments and the Business School, subject to prior approval.
- These courses attempt to stimulate students' interest in and equip them with a greater command of emerging technologies such as artificial intelligence, big data analytics, future IOT applications, advancement of renewable energy, smart materials, etc.
- Through interactive teaching and learning we guide our students to get better understanding of the fundamental concepts, to be able to identify and resolve problems, as also to be motived to innovate new applications across different domains.
- We also offer opportunities for students to engage with our research laboratories, working with research postgraduate students on a specific research project under the supervision of a faculty member and a project report is required at the end of the course.
- Industrial lecture series and company visits will also be organized for our MSc students.





THE PROGRAMME

- A student must take and pass 8 courses in this programme with a GPA of 2.0 or above to graduate.
- A student will be discontinued from study if the student has a GPA below 1.0 or fails to have probation lifted after being put on academic probation for two consecutive terms of attendance.
- The length of study is usually 1 academic year in full-time mode and 2 academic years in part-time mode. Each year has 2 terms.
- All the lecturing courses are conducted in English. Each course usually consists of 36 lecture hours and a number of tutorials/hand-on training sessions over a period of 14 weeks.
- Subject to the approval of the Programme Directors concerned, students can take at most two courses from other M.Sc. Programmes within the Faculty of Engineering, or other courses as deemed appropriate.
- Full-time mode students are allowed to take other day time postgraduate courses offered by the Department of Electronic Engineering.

AWARD OF DEGREE

Graduates will receive a Master of Science Degree in Electronic Engineering from The Chinese University of Hong Kong if satisfy the credit unit and GPA requirements.

VENUE & FACILITIES

The classes will be held in weekday evenings in the University campus in Shatin. Through application, students can use various facilities and service in the Department of Electronic Engineering, and the University, e.g. computer laboratory and the University Library services.

ENTRY REQUIREMENTS

- A bachelor degree in Electrical Engineering, Electronic Engineering, Information Engineering and Computer Engineering may be admitted to this Programme.
- Students with a first degree in other fields such as Physics and Mechanical Engineering may also be considered provided that they have some experience and background in electronic engineering.
- The entry requirements of the Graduate School must also be satisfied.
- All students should fulfil the English Language Proficiency Requirement prescribed by Graduate School before they are admitted.

For more information, please visit the following websites: MSc Programme: http://www.ee.cuhk.edu.hk/en-gb/curriculum/msc-programme/admission Graduate School: https://www.gs.cuhk.edu.hk/admissions/admissions/requirements

M.SC. SCHOLARSHIPS

(a) Admission Scholarship A limited number of "Admission Scholarship" will be awarded to newly admitted students with exceptional academic standing.

(b) Academic Scholarship Students of MSc Programme in Electronic Engineering in a year graduated with an accumulated GPA of 3.5 or above will be awarded Academic Scholarships.

TUITION FEE (PROVISIONAL)

Full Time mode: HK\$139,920 for the whole programme (including 8 courses), HK\$5,830 per unit. Part Time mode: HK\$132,000 for the whole programme (including 8 courses), HK\$5,500 per unit.

APPLICATION PROCEDURES

Applications will be processed on a first-come-first-served basis, the majority of offers will be made in early rounds. The number of places is limited, interested applicants should consider early submission of their applications.

Full-time mode admission: September Part-time mode admission: September & January (provisional)

APPLICATION DEADLINE* 1st round admission: 24 November 2017 2nd round admission: 2 January 2018 3rd round admission: 9 February 2018

*For the latest application deadline, please refer to MSc Programme's webpage: http://www.ee.cuhk.edu.hk/en-gb/curriculum/msc-programme/admission



To apply through Internet, please visit the Graduate School's website: https://www.gs.cuhk.edu.hk/admissions/ admissions/how-to-apply



CIRCUITS & SYSTEMS GROUP

- Microwave & Wireless Communications
- VLSI & ASIC
- Energy Conversion

MULTIMEDIA & SIGNAL PROCESSING GROUP

- Image and Video Processing
- Signal and Data Science

ROBOTICS, PERCEPTION & AI GROUP

- Robotics with Medical, Service, and Industrial Applications
- Perception, Sensors and Computer Vision
- AI, Pattern Recognition, and Human Machine Interaction
- Intelligent and Integrated Systems

SOLID STATE ELECTRONICS & PHOTONICS GROUP

CUHK

Photonics & Optical Communications

Solid-State Electronics

STUDENT SHARING



Yang Yuren 楊裕仁

M.Sc. (EE) 2016

Co-founder of the Shadow Express Electronic Commerce (Hong Kong) Co., Ltd Co-founder of the Olympics Technology Ltd

I received bachelor's degree from the School of Electronic and Engineering of Nanjing University, and then went to the Chinese University of Hong Kong to pursue a M.Sc. degree in Electronic Engineering. During the period, I took part in the development of intelligent hardware called Ensa by using the knowledge and teacher's guidance in the classroom. I founded the Olympic Science and Technology Co., Ltd. and obtained the offer of Hong Kong Science Park incubation. After graduation, he founded the Shadow Express Electronic Commerce (Hong Kong) Company Limited and participated in research and development of Shadowbox in order to make Hong Kong's logistics industry more efficient and convenient.

During my master's studies, I not only learned the most professional electronic knowledge of solid-state sensors and lighting systems, wearable bioelectronics, power management ICs, but also I get help from my teachers and classmates. In the Department of Electronic Engineering, the Chinese University of Hong Kong, your friends and teacher will be your life's wealth.



Wang Hongda 王宏達

M.Sc. (EE) 2014

Ph.D. candidate in the Department of Electronic Engineering, CUHK 2014 Academic Scholarship awardee

After achieved my bachelor's degree in NUAA, I applied the M.Sc. programme offered by Department of Electronic Engineering, CUHK. During the study here, students can not only discuss the cutting edge academic topic with professors, but participate into interested research areas as well. The department has offered a large variety of courses, including VLSI design methodology and testing, CMOS analog IC design, RF circuits and systems, image processing and video technology. Broad range in academy background would help students choose the most suited direction, while guidance from the professor will make the in-depth research possible. Since I have been interested in VLSI design, I choose to stay in EE to continue my Ph.D. study.



Marco Ho 何震宇 M.Sc. (EE) 2009, Ph.D. (EE) 2012 Lecturer, Department of Information Engineering, CUHK

After I obtained my undergraduate degree in Canada, I returned to Hong Kong to work. When I decided to shift my focus from software programming to hardware engineering, I chose the M.Sc. programme offered by the Department of Electronic Engineering in the Chinese University of Hong Kong. Its curriculum encompasses the wide variety of advanced technologies, from optical communications to integrated circuit designs, from multimedia signal processing to solid-state fabrications. It provides me with multi-faucet aspects and interdisciplinary exposures. It was during this programme that I found my enthusiasm in power-management integrated circuits, and after I completed the M.Sc. programme, I stayed in the Department to pursue my Ph.D. degree.





- Accounting / Auditing
- Architecture / Surveying / Construction
- Computer Engineering
- Data Communications & Network/ Internet Engineering
- Electronic Engineering
- Hardware Construction & Installation
- Product Design Engineering
- Scientfic & Research Work
- Telecommunication

CAREER

A degree of Master of Science in Electronic Engineering provides a solid foundation to launch your career locally or globally with excellent prospects in a wide range of technological sectors, which include: Data Communication & Network, Software Design & Development, Product Design, Data Science, Artificial Intelligence, Investment Bank, etc. Some of our graduates join the famous enterprises, like HUAWEI, Alibaba, SUNING, Deloitte, etc. The others pursue further studies in CUHK or other universities.

- Administration/Management
- Banking/ Finance
- Customer Services
- eBusiness
- Financial & Quanttative Analysis / Engineering
- Information Technology Consulting
- Sales & Marketing
- Software Design & Development
- Others
- The Chinese University of Hong Kong

 (a) Ranked 44th among the world's top 200 universities, according to QS World University Rankings 2016
- Department of Electronic Engineering
 - (a) Ranked 20th among the world's top 200 universities, according to QS World University Rankings by Subject 2016
 - (b) Ranked No.1 in Hong Kong, according to QS World University Rankings by Subject 2016
 - (c) 19 professors with 6 IEEE Fellows

UK UGC Results of the Research Assessment Exercise 2014

Leading Research in Electronic Enginerring in Hong Kong

Research Assessment Exercise 2014 Electrical and Electronic Enginerring (World Leading Research)



香港中文大學 The Chinese University of Hong Kong

电子工程学理学硕士 授课式硕士课程

Master of Science in Electronic Engineering

课程主任(程伯中教授)寄语

香港中文大学电子工程学系由「光纤之父」,2009年诺贝尔物理奖获得者高锟教授创办, 并逐步发展成为现在的中文大学工程学院。本系目前有23名教授,其中包括6名IEEE院士, 在多项前沿科研领域中如先进数字信号处理、图像与视频、微波与无线通信、超大规模集成 电路和专用集成电路、能量转换、光电子与光通信技术、固态电子等等,均享有世界顶头 地位及极高的国际声誉。我们以建设世界一流电子工程学科为目标,培养国际优秀电子工程 领袖人才,科研创业者为使命。

课程简介

本课程包括但不限于:人工智能及大数据分析图像处理与视频技术、语音数字信号处理、 光纤通信、无线通信、光电子学与光子器件、固态电子、VLSI集成电路等。全日制学生的 修课期为1年,兼读制为2年,每年有2个学期。整个课程共需修读8门课(共24学分)。

课程理论与实践并重,极具挑战性,提升同学在不同电子工程范畴中解决问题的能力,培养 多角度思维,启发跨领域的创新。



全日制学生:9月入学/兼读制学生:9月及1月入学(暂定) 学费(暂定): 全日制学生:HK\$5,830/学分,整个课程共HK\$139,920。

全日制学生:HK\$ 5,830 /学分,整个课程共HK\$ 139,920。 兼读制学生:HK\$ 5,500 /学分,整个课程共HK\$ 132,000。

申请手续



申请截止日期(暂定):第一阶段为2017年11月24日,第二阶段为2018年1月2日,第三阶段 为2018年2月9日。请留意电子工程学系主页http://www.ee.cuhk.edu.hk公布的最新申请 截止日期,以及其他与申请相关的讯息。

课程奖学金一奖励求知,激发潜能

入学奖学金:本课程将颁发若干「入学奖学金」予本科成绩优异的新生。 杰出学生奖学金:每年成绩卓越,且GPA达到3.5或以上的当届优秀毕业生,将可获得颁发 「杰出学生奖学金」。

科研创新,作肓英才

香港中文大学:QS世界大学排名44(2016-17) 电子工程学系:QS世界大学专业排名20,香港地区排名第1(2016-17)



联系方式





(World Leading Research)







