



## Division of Computer Science and Engineering

**MPhil-PhD in Computer Science and Engineering**

**Code: CSE**

### Programme

#### MPhil Stream

- The major graduation requirements for an MPhil student include:
  - Complete at least 12 units of postgraduate level courses
  - Complete at least 4 Seminar courses
  - Submit a term paper followed by an oral presentation at the end of each term.
  - Submit a thesis and pass an oral defence of the thesis.

Students may apply to transfer to the PhD stream if they can satisfy the PhD requirements after completing the first year of study.

#### PhD Stream

All students in the PhD stream will be admitted initially in the 'pre-candidacy' status. Upon satisfying the division's candidacy requirements, a student will be allowed to progress to the 'post-candidacy' status.

#### *Post-candidacy requirements*

The major graduation requirements for a PhD student (post-candidacy) include:

- complete at least 4 Seminar courses
- submit a doctoral thesis which contains a substantial amount of original research work in the related areas, and to pass an oral defence of the thesis.

Please visit the Division's homepage for more information.

#### Fields of Specialization

- Artificial Intelligence
- Chinese Computing Systems
- Computer Engineering
- Computer Networks and Distributed Systems
- Database
- Financial Engineering
- Graphics and Vision
- Intelligent Data Engineering and Automated Learning (IDEAL)
- Software Methodology
- Theory
- WWW Engineering

### Admission Requirements

Applicants must meet the general qualifications required for admission to the Graduate School<sup>1</sup> and they should normally hold an honours degree in Computer Science, Computer Engineering or related fields.

### Additional Application Information

PhD applicants must submit a 'Research Plan' and a resume written in English, and a list of research publications.

Applicants who are non-local university graduates from non-English speaking countries must submit scores in TOEFL, IELTS or CET6.

Admission Advisor : Prof. LEE, Ho Man

Application Deadline : 28 February 2010 (MPhil Stream)  
Throughout the year (PhD Stream)

### Contact Methods

Address : Division of Computer Science and Engineering,  
Room 1028, Ho Sin Hang Engineering Building, The Chinese University of Hong Kong, Shatin, NT, HK

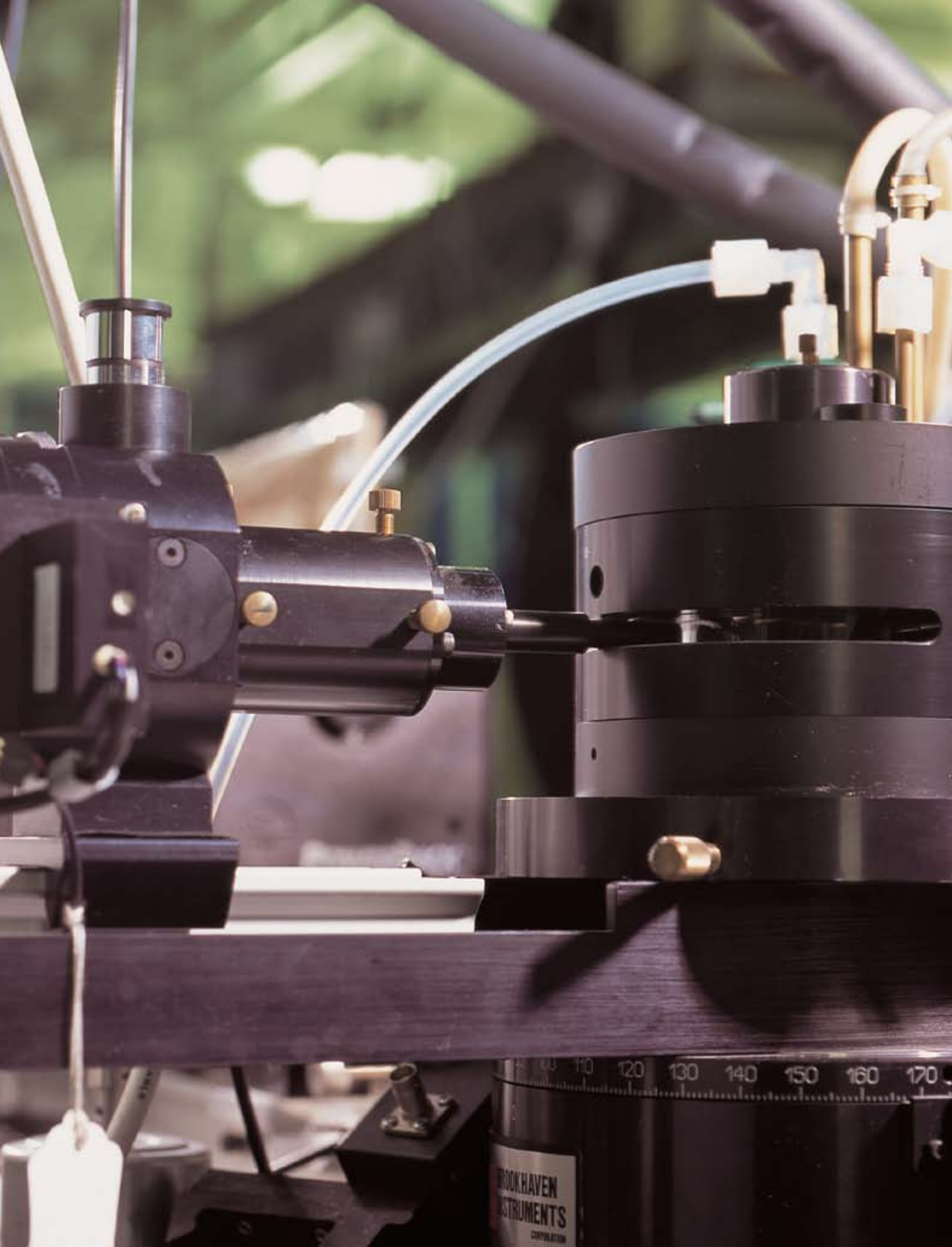
Tel : 2609-8440

Fax : 2603-5302

Website : [www.cse.cuhk.edu.hk](http://www.cse.cuhk.edu.hk)

Email : [dept@cse.cuhk.edu.hk](mailto:dept@cse.cuhk.edu.hk)

1. For the general qualifications required for admission to the Graduate School, please refer to pages 18-19.





## Division of Electronic Engineering

Our articulated MPhil-PhD programme provides students with an opportunity of being involved in in-depth studies and focused research in selected areas of electronic engineering. The programme is intended to foster high-quality and forward-looking research activities, so as to meet the society's demand for high-caliber engineers who are knowledgeable in the latest technologies.

### MPhil-PhD in Electronic Engineering

Code: EEE

### Programme

#### MPhil Stream

An MPhil student is required to complete 4 graduate-level courses. In addition, the student is required to carry out a research project of about 18 months in a duration from which a satisfactory thesis is to be submitted. The student must also attend an oral examination to present his/her work to an appointed thesis committee. Students with good academic performance in their first year of study may be permitted to transfer to the PhD Stream.

#### PhD Stream

The PhD stream provides in-depth training for students who are interested in basic or applied research.

All students in the PhD stream will be admitted initially in the pre-candidacy status. Upon satisfying the division's candidacy requirements, a student will be allowed to progress to the post-candidacy status. These requirements include:

1. 4 graduate-level courses
2. candidacy examination (written)
3. thesis proposal and defence

The candidacy examination is a written examination to ensure that the student has a sufficient set of knowledge in Electronic Engineering.

The major graduation requirement for a PhD student (post-candidacy) is a doctoral thesis that contains a substantial amount of original research work in the selected areas.

Please visit the Division's homepage ([www.ee.cuhk.edu.hk](http://www.ee.cuhk.edu.hk)) for more information.

### Fields of Specialization

Our department has four research groups covering seven research areas:

- Biomedical Engineering Group  
Biomedical Engineering
- Multimedia & Signal Processing Group  
DSP & Speech Technology  
Image and Video Processing (IVP)
- Integrated Circuits & Systems Group  
Microwave & Wireless Communications  
VLSI & ASIC

- Solid State Electronics & Photonics Group  
Photonics & Optical Communications  
Solid-State Electronics

### Admission Requirements

Applicants must meet the general qualifications required for admission to the Graduate School<sup>1</sup> and normally have majored in Electronic Engineering, Computer Engineering or Physics with Electronics, or in related fields.

For non-HK university graduates, Graduate Record Examination (GRE) General Test is highly recommended by the Division Head to ensure that the applicants have the proper preparation.

### Additional Application Information

Applicants must also submit the followings:

1. curriculum vitae;
2. list of research publications or related materials, e.g. patent applications;
3. research plan (in English, for PhD applicants only);
4. awards and other certificates

Admission Advisor : Prof. MENG, Max Qinghu /  
Prof. XU, Jianbin

Application Deadline : 28 February 2010 (MPhil Stream)  
Throughout the year (PhD Stream)

### Contact Methods

Address : Division of Electronic Engineering,  
Room 404, Ho Sin Hang Engineering  
Building, The Chinese University of  
Hong Kong, Shatin, NT, HK

Tel : 2609-8270 / 2609-8274

Fax : 2603-5558

Website : [www.ee.cuhk.edu.hk](http://www.ee.cuhk.edu.hk)

Email : [gradinfo@ee.cuhk.edu.hk](mailto:gradinfo@ee.cuhk.edu.hk)

1. For the general qualifications required for admission to the Graduate School, please refer to pages 18-19.



## Division of Information Engineering

The Division of Information Engineering seeks outstanding research students who are aspired to make high impact innovations and fundamental discoveries to start their challenging career here. Our professors are world-class researchers. Our laboratories are well-equipped. Our courses cover the fore-front of current research in information engineering. Students can explore different topics in the areas of communications, networking and information processing, and are encouraged to perform original theoretical, experimental and / or application research, leading to the advancement of information engineering.

### MPhil-PhD in Information Engineering

Code: IEN

#### Programme

##### MPhil Stream

Students are required to complete four graduate courses approved by the Division. In addition, a research project is required for which a thesis is to be submitted upon graduation. The residence requirement for part-time students is one day per week.

##### PhD Stream

Students are required to complete four graduate courses approved by the Division. Students must pass a qualifying examination, and carry out a substantial amount of research work resulting in a thesis with original findings. The admission of part-time students is based on their academic records and the condition that they can devote adequate amount of time for the completion of the study. The residence requirement for part-time students is one day per week.

Please visit the webpage: [www.ie.cuhk.edu.hk](http://www.ie.cuhk.edu.hk) for more information.

#### Fields of Specialization

- Communications: Broadband Access Technology, Wireless Communications, Multimedia Communications, Optical Communication and Lightwave Networks.
- Networking : Internetworking and Network Management, Switching and Routing, E-commerce, Web Engineering and Applications.
- Information Processing: Information and Coding Theory, Security Technology, Data Compression, Visual Information Processing, Pattern Recognition and Computer Vision.

#### Admission Requirements

Please refer to the general qualification required for admission to the Graduate School<sup>1</sup>.

#### Additional Application Information

All applicants should submit a research proposal, a resume with publication list & research projects, and CET-6 of PRC or TOEFL (for non-local university graduates from non-English speaking countries). In addition, applicants may be required to attend an interview.

Admission Advisor : Prof. CHEUNG, Kwok Wai

Application Deadline : 28 February 2010 (MPhil Stream)  
Throughout the year (PhD Stream)

#### Contact Methods

Address : Division of Information Engineering,  
Room 834, Ho Sin Hang Engineering  
Building, The Chinese University of  
Hong Kong, Shatin, Hong Kong, China

Tel : 2609-8381

Fax : 2603-5032

Website : [www.ie.cuhk.edu.hk](http://www.ie.cuhk.edu.hk)

Email : [gradinfo@ie.cuhk.edu.hk](mailto:gradinfo@ie.cuhk.edu.hk)

1. For the general qualifications required for admission to the Graduate School, please refer to pages 18-19.



## Division of Mechanical and Automation Engineering

The Division of Mechanical and Automation Engineering specializes on the impact of modern automation technologies to the current and future development of mechanical engineering.

### MPhil-PhD in Mechanical and Automation Engineering

Code: MAE

#### Programme

##### MPhil Stream

Students are required to complete at least 4 graduate courses with a total of 12 units as approved by the Division and register for the relevant thesis research course every term throughout their studies. In addition, a research project is required for which a thesis is to be submitted with pass an oral defence for graduation.

##### PhD Stream

All students in the PhD stream will be admitted initially in the "pre-candidacy" status. Upon satisfying the Division's candidacy requirements, the student will be allowed to progress to the "post-candidacy" status. As a requirement for graduation, students must carry out a substantial amount of research which will lead to original results worthy of publication in scholarly journals.

##### *Pre-candidacy:*

*Students are required to complete*

1. at least 4 graduate courses with a total of 12 units as approved by the Division;
2. register for the relevant thesis research course every term throughout his/her studies;
3. pass the candidacy examination, submit a thesis proposal and pass an oral examination of the thesis proposal.

##### *Post-candidacy:*

*Students are required to complete*

1. at least 1 graduate course with a total of 3 units as approved by the Division;
2. register for the relevant thesis research course every term throughout his/her studies;
3. submit a thesis and pass an oral defence of the thesis for graduation.

Please visit the Division's homepage for more information.

#### Fields of Specialization

- CAD/CAM
- Virtual Reality
- Computer Vision and Image Processing
- Computational Intelligence and Intelligent Systems
- Micro and Nano Systems
- Innovation and Design
- Manufacturing
- Robotics
- Sensors and Actuators
- Smart Materials and Structures
- Structural and Material Optimization
- Systems and Control

#### Admission Requirements

Applicants must meet the general qualifications required for admission to Graduate School<sup>1</sup> and they should have majored in discipline that is related to their intended field of MPhil or PhD studies. All applicants are required to submit a list of research publications, if any.

#### Additional Application Information

The Division will consider admission of part-time PhD students with Master's degree and strong academic records. Part-time students will be required to take regular graduate courses offered in the day time.

Application Deadline : 28 February 2010 (MPhil Stream)  
Throughout the year (PhD Stream)

#### Contact Methods

Address : Division of Mechanical and Automation Engineering, Room 213, William M.W. Mong Engineering Building, The Chinese University of Hong Kong, Shatin, NT, HK

Tel : 2609-8345

Fax : 2603-6002

Website : [www.mae.cuhk.edu.hk](http://www.mae.cuhk.edu.hk)

Email : [dept@mae.cuhk.edu.hk](mailto:dept@mae.cuhk.edu.hk)

1. For the general qualifications required for admission to the Graduate School, please refer to pages 18-19.



## Division of Systems Engineering and Engineering Management

The Division of Systems Engineering & Engineering Management offers a suit of research and taught programmes within Faculty of Engineering at The Chinese University of Hong Kong. Our emphasis is placed on the integration of identifying issues in the business practices, mathematical modeling skills, and solutions with the help of information technologies. Students will be trained in these aspects and are expected to master the theory and practice of a research topic arising from the area.

### MPhil-PhD in Systems Engineering and Engineering Management

Code: SEM

#### MPhil Stream

Each MPhil student is required to complete at least 4 graduate courses with a total of 12 units, with at least 3 courses being SEG coded courses for graduation, and must register for the relevant Thesis Research Course in every term throughout his/her study period.

Each MPhil student is required to submit a thesis and pass the oral defence of the thesis for graduation.

#### PhD Stream Pre-candidacy

Each PhD student is required to complete at least 4 graduate courses with a total 12 units during the pre-candidacy stage, and must register for the relevant Thesis Research Course in every term throughout his/her study period.

Each PhD student is required to pass a written candidacy examination within the maximum period of his/her pre-candidacy stage for the advancement to his/her post-candidacy stage. The purpose of this examination is to test the student's basic knowledge and understanding in the SEEM discipline.

Each PhD student is required to submit a written thesis proposal and pass the oral defence of the proposal within the maximum period of his/her pre-candidacy stage.

#### PhD Stream Post-candidacy

Each student is required to complete at least 1 graduate course with a total 3 units during the post-candidacy stage, and must register for a Thesis Research Course every term throughout his/her study period.

Each student is required to submit a thesis and pass the oral defence of the thesis for graduation.

Please visit the Division's homepage for more information.

#### Fields of Specialization

- Information Systems / Database Systems
- Logistics and Supply Chain Management
- Operations Research / Management Science
- Financial Engineering

#### Admission Requirements

Applicants must meet the general qualification required for admission to the Graduate School<sup>1</sup> and they should normally hold an honours bachelor degree in engineering, applied mathematics, computer science, or related area.

Graduate Record Examination (GRE) Test may be required by the Division Head to ensure that the applicants have the proper preparation.

#### Additional Application Information

Admission Advisor : Prof. ZHANG, Shuzhong

Application Deadline : 28 February 2010 (MPhil Stream)  
Throughout the year (PhD Stream)

#### Contact Methods

Address : Division of Systems Engineering & Engineering Management,  
Room 609, William M.W. Mong  
Engineering Building,  
The Chinese University of Hong Kong,  
Shatin, NT, HK

Tel : 2609-8313 / 2609-8470

Fax : 2603-5505

Website : [www.se.cuhk.edu.hk](http://www.se.cuhk.edu.hk)

Email : [gradinfo@se.cuhk.edu.hk](mailto:gradinfo@se.cuhk.edu.hk)

1. For the general qualifications required for admission to the Graduate School, please refer to pages 18-19.