JS1205 Department of Electronic Engineering
(options: BEng Computer and Data Engineering, BEng Electronic and Communication Engineering, BEng Information Engineering)

電子工程學系
[ 選項：工學士（電子計算機及數據工程學）、
工學士（電子及通訊工程學）、工學士（資訊工程學）]

Professional Recognition
All major programmes offered by the Department of Electronic Engineering have been accredited by the Hong Kong Institution of Engineers. Based on the Washington Accord, graduates receive reciprocal recognition from the equivalent bodies in Australia, Canada, China, Chinese Taipei, Hong Kong-China, India, Ireland, Japan, Korea, Malaysia, New Zealand, Pakistan, Russia, Singapore, South Africa, Sri Lanka, Turkey, the United Kingdom and the United States.

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CityU
City University of Hong Kong
香港城市大學
City University of Hong Kong
Our Majors
- Common first year
- Students choose a major after one year of study

BEng in Computer and Data Engineering (CDE) 工學士 (電子計算機及數據工程學)
BEng in Electronic and Communication Engineering (ECE) 工學士 (電子及通訊工程學)
BEng in Information Engineering (IE) 工學士 (資訊工程學)

Programme Highlights

CDE  Computer Applications
- Computer and embedded systems 電腦嵌入式系統
- Software design 軟件設計
- Multimedia technologies 多媒體科技
- Data analytics and security 數據分析及保安
- Cloud computing systems 雲端計算系統

ECE  Communication & Engineering
- Wireless communications & digital mobile 無線通訊及流動數據
- Optical communications & optoelectronics 光通信系統及光電子
- Energy saving, control & power systems 節能、系統管理及能源系統
- Electronic devices & circuit design 電子器件及電路設計

Job Opportunities
- Engineering companies, telecommunications, major utilities (CLP, PCCW)
- Engineering Trainee / Graduate Trainee
- Assistant Engineer / Engineer
- Banking & financial institutions, software and IT companies, major utilities (CLP, PCCW)
- Transportation (airlines, shipping), government
- IT Specialist / Network Administrator
- Analyst / Programmer / Software Engineer
- Application Developer / Game Developer

Typical salary for 2016 graduates
HK$16,000 to HK$17,000

Co-curricular Activities & Learning Support

Global Outreach
Uplifting students’ global outreach and international competitiveness through student exchange is one of the Department’s goals. Since 2014/15, over 200 students were sent out to top universities in the USA, Singapore, Finland, Germany, Canada, Czech Republic, Netherlands, Spain, Sweden, the UK, France, Belgium, Korea, Taiwan, and mainland China for semester-long exchange and summer exchange.

Also, there is the Overseas Internship Scheme (OIS) to provide students with internship opportunities abroad. Around 30-40 students from the Department are selected yearly to join the Scheme to France, Korea, Singapore, the USA, the UK, and Canada.

Student Learning Support
The Course Tutoring and Peer Tutoring Schemes aim to nurture good learning skills in our students. Outstanding senior year students are selected to coach students in study through tutorials, regular meetings, and out-of-classroom time. The schemes have successfully created a positive learning ambience among peers and have been well received among students.

Internships
In collaboration with industry, the Department aims to provide students with real work experience during their university years and thus better preparing them for work upon graduation through different internship schemes. Students are connected to prominent industrial and business leaders and 80-100 places are secured yearly. Students are free to choose schemes of duration spanning from 3 months to 1 year.
Entrance Requirements

Students will apply for admission to the Department of Electronic Engineering (JS1205) and enter a major after one year of study.

**Entrance Requirements and Levels**

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<tbody>
<tr>
<td></td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 2</td>
<td>Level 3 any one of specified subjects (max)</td>
<td>Level 3 any one subject (max)</td>
</tr>
</tbody>
</table>

**Notes:**
- Specified subjects under Elective 1 include M1-Calculus and Statistics / M2-Algebra and Calculus, Information and Communication Technology, Physics, Chemistry, Biology, Combined Science and Integrated Science.

**Other Considerations**
- When considering the priority list of applicants, we mainly consider subject results obtained in current and past two years.

**Direct / Non-JUPAS Applicants**
- Other high school qualifications, e.g. GCE, IB, overseas, AD/HD Year 1 students, may apply to enter Year 1.
- Associate Degree (AD) / Higher Diploma (HD) graduates or final year students may apply for admission to major programmes with Advanced Standing (Year 2 or Year 3). Applicants are normally expected to have completed the AD/HD award with a CGPA of ≥3.0, or an equivalent overall mark or a credit award.

Assessment of JUPAS Applications

For HKDSE applicants who have fulfilled the minimum entrance requirements, various types of admission scores are calculated to help the selection of applicants. Presented below is the main admission score used for JS1205.

**Admission Score for Main Consideration**

<table>
<thead>
<tr>
<th>Subjects Included</th>
<th>Subject Weightings</th>
<th>Elective Subjects (including M1/M2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 core + 2 elective subjects</td>
<td>2 for</td>
<td>1.5 for</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Examples**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Student 1</th>
<th>Student 2</th>
<th>Student 3</th>
<th>Student 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>English Language</td>
<td>5 (x 2)</td>
<td>4 (x 2)</td>
<td>3 (x 2)</td>
</tr>
<tr>
<td></td>
<td>Chinese Language</td>
<td>4 (x 1)</td>
<td>4 (x 1)</td>
<td>3 (x 1)</td>
</tr>
<tr>
<td></td>
<td>Liberal Studies</td>
<td>5 (x 1)</td>
<td>4 (x 1)</td>
<td>3 (x 1)</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>4 (x 2)</td>
<td>4 (x 2)</td>
<td>5 (x 2)</td>
</tr>
<tr>
<td>Elective 1</td>
<td>Physics</td>
<td>4 (x 1.5)</td>
<td>4 (x 2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Information and Communication Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 2</td>
<td>Math Extended Module 1 or 2</td>
<td></td>
<td></td>
<td>5 (x 2)</td>
</tr>
<tr>
<td></td>
<td>Information and Communication Technology</td>
<td></td>
<td></td>
<td>4 (x 2)</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
<td>4 (x 1.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td></td>
<td></td>
<td>5 (x 1)</td>
</tr>
<tr>
<td>Unweighted score</td>
<td></td>
<td>26</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Weighted Score of 4 core + 2 elective subjects</td>
<td>39</td>
<td>40</td>
<td>40</td>
<td>37</td>
</tr>
</tbody>
</table>

( ) denotes the subject weighting
Graduate Career Outlook

According to the latest 5 years' graduate engagement survey, over 95% of our graduates were engaged in either employment or postgraduate studies soon after the final exam. The average salary of fresh graduate 2016 was about $16,500. They are engaged in different sectors including IT & engineering, finance and banking, business management, real estate, law, civil services and education.

High demand for EE graduates

It has been consistently revealed in different manpower projection surveys and career-related news that engineers and IT professionals are highly sought-after in different business sectors.

Hong Kong’s world-class ICT infrastructure and open environment are conducive to the development of a digital economy. As of 2013, the ICT sector, with some 17,000 business establishments, generated business receipts and income amounting to HK$1.694 billion, representing 6.6% of our GDP. Hong Kong has consistently performed well in ICT internationally. We continue to rank first globally in 2015 on technological infrastructure. The Government will continue its efforts in facilitating the development of the local digital economy. We will focus on promoting the on-going development of a start-up ecosystem; creating a favourable environment to stimulate innovations in technology and application; and encouraging students and the young generation to pursue study in ICT and arousing their interest in ICT so that they will join the ICT profession in future.

Source: 9 May 2016 (Legislative Council Panel on Information Technology and Broadcasting)

Mr. Tim Ip
(2008 BEng), Security Specialist, University of San Francisco, U.S.

Miss Hui Mei Suet
(2014 BEng), Support Engineer, MTR

Mr. Peter Yu
(2010 BEng), Service Engineer, Rutledge AV Melbourne

Mr. Vincent Hu
(2011 BEng), Software Engineer, Google, U.S.

Ms. Candy Liu
(1999 BSc), Vice President of Sales Director, NEA, SevOne Inc.

Ms. Yaley Zhang
(2005 BEng), Senior Distribution Strategy Manager, Retail Banking and Wealth Management, HSBC

Mr. Wyan Wong
(2005 BEng), Development Specialist, Traded Credit Risk Calibration and Backtesting, HSBC

Mr. Frank Wang
(2010 BEng), Security Engineer, Google, U.S.

Mr. Jimmy Lam & Mr. Jimmy Mui
(2014 & 2015 BEng), Engineers, GP Electronics (HK) Limited

Dr. Wu Boping
(2005 BEng), Principal Architect, HuaWei Central Research Institute

Mr. Oswis Wong
(2012 BEng), CEO & Co-founder, Air Button

Source: 7 April 2016《香港經濟日報》

職場轉變之快令人難以觸摸。近年IT大熱門，不少企業渴求懂得大量數據人才；但早前人工智能（AI）與人類大戰圍棋，又令人擔心AI會取代人類工作，令人類飯碗不保。《工作的未來樣貌》一書作者摩根（Jacob Morgan）於5月27日將於香港公開演講，預計未來有以下3大HR趨勢：

1. 團隊文化：未來企業將會大力發展內部文化，鼓勵員工參與企業發展，更會設立企業文化護航小組，確保企業文化得以維持。

2. 生命週期：未來企業將會働き続ける人のための教育制度，確保員工的生命週期，更會設立生命週期管理小組，確保員工的生命週期。

3. 團隊精神：未來企業將會大力發展團隊精神，鼓勵員工參與企業發展，更會設立團隊精神護航小組，確保團隊精神得以維持。
Student Achievements

- Champion, 1st & 2nd Runner-up in HKIE Project Competition 2016 - “IoT Development for Smart Cities”
- Second Prize in the 10th International Underwater Robot Competition
- Second Prize in the 2016 Intel Cup Undergraduate Electronic Design Contest
- Best Presentation Award in Inter-University Algo Trading Contest 2016/17
- 1st & 2nd Runner-up in the HKIE Electronics Project Competition 2017
- IEEE MTT-S Undergraduate/Pre-graduate Scholarship for Spring 2017
- Fulbright Science and Technology Fellowship from US Department of State
- Winning Three Prizes in Robocon Hong Kong Contest 2017
- Champion of Disney ImaginNations Hong Kong Design Competition 2016
- 1st & 2nd Prize 2016 & 2017

Department’s Highlights

1. Largest EE department among local universities currently with 53 professors
2. Ranked 11th in Engineering worldwide (US News 2017); 1st in Hong Kong and 24th worldwide in Engineering / Technology and Computer Sciences in 2016 (Academic Ranking of World Universities by Shanghai Jiao Tong University)
3. The department boasts 15 IEEE Fellows, one Fellow of the Optical Society of America, one Fellow of the International Federation of Automatic Control, and three Croucher Foundation Senior Research Fellows
4. Five EE professors have been awarded the Teaching Excellence Award by the University
5. A Caring Department emphasizing students’ well-roundedness apart from their technical know-how through ample co-curricular activities
6. Offering three undergraduate major programmes, two taught master programmes, and two research degree programmes (currently around 1,200 students in total)
7. With the support from the Ministry of Science and Technology, State Key Laboratory of Millimeter Waves established in 2008 is the first such laboratory in engineering discipline in Hong Kong
8. Laboratory space about 5,000 sq. meters