# Student Testimonials

# IET Prize 2024 – Mr ONGGOWARSITO Raymonk Surya (CDE, Year 3 student)

Raymonk: My time in the Department of Electrical Engineering at CityUHK has been both rewarding and transformative. The department is incredibly accommodating and has created a supportive environment where students can grow academically and personally. The professors have been very approachable and always willing to help clarify course materials and provide guidance. The department has also exposed me to internships and numerous opportunities to participate in competitions, where I have not only achieved some successes, such as attained the Global Second Prize in the Huawei ICT Competition 2023-2024, achieved the Top Hedge Fund Award on the AIBC X BNP Paribas Sales and Trading Competition, but also gained valuable learning experiences and personal growth. These opportunities, combined with the department's encouragement, have helped me develop the skills and confidence to face future challenges. My journey has been truly transformative, shaping both my academic and personal growth.



Graduate Reflection – Mr YUEN Chun Pong (ELEL, 2024 Graduate) Manny: City University of Hong Kong's Electrical Engineering Department has profoundly impacted my growth, both academically and personally. Their rigorous curriculum and industry-focused projects honed my technical expertise. Completing my Final Year Project (FYP) at CityUHK earned me the IET Outstanding Power and Energy Engineering Graduate Award and the HKEIA Innovation & Technology Project Competition Bronze Award. These awards validate the efforts I put into my FYP and will greatly benefit my career path. While the accessible faculty nurtured my essential mindset and attitude. I am truly grateful for the transformative experience the CityUHK has provided.

# **ROV Competition – Miss SIT Yan Tung** (ELEL, Year 3 student)

Melody: During my studies in Electrical Engineering at CityUHK, I gained a solid foundation in both theoretical concepts and practical applications. The coursework was rigorous but rewarding, pushing me to think critically and solve complex problems. Participating in the 2024 MATE ROV World Championship was a highlight; it allowed me to apply my skills in a real-world setting, collaborate with talented peers, and enhance my leadership abilities. I learned the importance of teamwork and innovation as we designed and built an ROV to tackle challenging underwater tasks. Overall, my experiences at CityUHK have shaped my passion for engineering and prepared me for future challenges in the field.



# **ROBOCON Competition – WONG Ling Chi** (ELEL, Year 3 student)

Hermione: My journey in the Electrical Engineering program at CityUHK has been incredibly enriching. The curriculum has deepened my understanding of core concepts while providing numerous hands-on opportunities. Since joining the Robocon Team in 2023, I have engaged in mechanical design, hardware circuit design, and software programming, allowing me to apply my knowledge in practical settings. Robocon, an annual robotic competition with diverse themes, continually challenges us to learn and innovate. As a team leader in 2025, I developed essential skills in team management, problem-solving, and collaboration, which have significantly enriched my university experience. These experiences have greatly enhanced my skill set and prepared me for my future career.





# Student Activities

The department encourages students to participant in co-curricular activities such as Study Tours, Student Exchange, Professional Internship, Competitions, Career Advisory Workshops to enrich students' college life and experiential learning.

# Internship Opportunities with Industrial Partners

The Department is committed to offering various programme-specific internship opportunities for students in different companies and institutions. These arrangements allow students to put knowledge into practice, gain first-hand knowledge of the industry, enhance their communication skills, and improve their personal profiles. We send out 70-80 students yearly for different internship schemes with duration from 4 months to 12 months.

# **Experiential Learning Activities**



al Year Project Competitio













# Department's Highlights

- Large department with 46 professors
- Ranked 24th worldwide and 1st in Hong Kong in Electrical and Electronic Engineering (U.S. News Best Global Universities Rankings 2025); 12th worldwide and 1st in Hong Kong in Electronics and Electrical Engineering (Research.com 2024)
- The department boasts 2 Fellows of the Royal Academy of Engineering (UK), 1 Fellow of the World Academy of Sciences, 37 faculty listed as top 2% of world's most highly cited scientists, 19 IEEE Fellows, 6 IEEE Society Award Winners, and 2 Croucher Foundation Senior Research Fellows
- Six EE professors have been awarded the Teaching Excellence Award by the University









- A caring department emphasizing students' well roundedness apart from their technical know-how through ample co-curricular activities - Student Tutoring Scheme, Honor Society, Student Exchange, Internships, Study Tours, Softskill and Career Advising Workshops
- Offering four undergraduate major programmes, two taught master programmes, and two research degree programmes (approx. 1,400 students)
- With the support from the Ministry of Science and Technology, State Key Laboratory of Terahertz and Millimeter Waves established in 2008 is the first such laboratory in engineering discipline in Hong Kong
- Laboratory space about 5,048 sq. meters and access to industry standard EDA software for IC design

# JUPAS Catalog

# Our Majors

**BEng Computer and** Data Engineering 工學士(電子計算機及數據工程學)

**BEng Information Engineering** 工學士(資訊工程學)

**BEng Electronic and Electrical Engineering** 工學士(電子及電機工程學)

**BEng Microelectronics Engineering** 工學士(微電子工程學)

Website https://www.ee.cityu.edu.hk/ Tel (852) 3442 7740 Email eedept@cityu.edu.hk

Department of Electrical Engineering 香港城市大學 City University of Hong Kong

# Why CityUHK EE

At CityUHK EE, we are committed to delivering excellence in education and research, equipping you with both breadth and depth of knowledge to excel in academia, research, and professional engineering careers. We focus on developing student leadership, communication, creative thinking, and global perspective, while driving impactful research and technology transfer that benefits the manufacturing and service industries in Hong Kong and the Pan-Pearl River Delta region. Additionally, we provide extensive entrepreneurial resources to foster innovation and knowledge transfer, empowering you to turn ideas into impactful technology ventures. Join CityUHK EE and become a leader in shaping the future of technology and making a difference in the world!



創新科技無處不在 以人為本造福社群

又實習又Exchange 忙到氣咳為啲乜?

# **Our Majors and Program Highlights**

# **ELEL – Electronic and Electrical Engineering**

- Wireless Communications and Data Technology 無線通訊及數據技術
- Microwave, Terahertz and Optical Technologies 微波、太赫茲及光學科技
- Photonic, Electronic and Sensor Devices 光電子及電子器件、感應器
- Smart Control and Electrical Power Systems 智能管理及電機能源系統
- Bioelectronics and Bioinformatics 生物電子及生物信息技術

# Job Nature of Graduates

Telecommunication Engineer, Electronic / Electrical Engineer, Product and System Developer / Administrator, Hardware / Software / Network Engineer, IT Service / Developer, Production and Manufacturing, Sales and Marketing, Research and Development, etc.





# MEE – Microelectronics Engineering

- ◆ Application Specific Integrated Circuits (ASIC) 專業集成電路
- ◆ Nanotechnologies and Microsystems 納米技術及微型系統
- ◆ New Materials for IC 晶片新材料
- ◆ Digital Processor 數字電路處理器
- ◆ System-on-Chip 單晶片系統

# Job Nature of Graduates

Analog IC Design Engineer, Digital Frontend / Backend IC Design Engineer, Semiconductor Process Engineer, Manufacturing and Automation Engineer, IC Layout Engineer, Al Hardware Developer, Firmware Developer, Electronic / Electrical Engineer, Embedded Systems Engineer, Semiconductor Production and Manufacturing, Research and Development, etc.



讀工程 無U Life 無朋友?



讀電機≠做電工 課程先進出路廣





# **CDE – Computer and Data Engineering**

- ◆ Hardware and Software Design 電腦硬件及軟件設計
- ◆ Machine Learning and Deep Learning 機器學習和深度學習
- ◆ Applications of Artificial Intelligence (AI) 人工智能應用
- ◆ Data Analytics and Security 數據分析及安全
- ◆ Cloud Computing Systems 雲端運算系統

### Job Nature of Graduates

Software Developer, Hardware Design Engineer, Systems Architect, Machine Learning Engineer, Data Scientist, Al Research Engineer, Al Solutions Architect, Al Product Manager, AI Consultant, Data Analyst, Data Engineer, Cybersecurity Analyst, Information Security Specialist, Business Intelligence Developer, Cloud Engineer, Cloud Architect, Cloud Security Specialist, etc.

### Entrance Requirements

# **HKDSE JUPAS Applicants**

Students will apply for admission to Electrical Engineering (JS 1205) and enter a major after one year of study. Entrance Requirements and Levels

Eng. Lang.	Chi. Lang.	Maths.	Citizenship and Social Development	Elective 1
Level 3	Level 3	Level 3	Attained	Level 3 any one of specified subjects (Notes

Notes:

- Specified subjects under Elective 1 include M1-Calculus and Statistics/M2-Algebra and Calculus, Information and Communication Technology, Physics, Chemistry and Biology.
- Entrance requirements details: https://www.cityu.edu.hk/admo/admissions/jupas-admission.

### Other Considerations

Mainly subject results obtained in current and past two years are considered.

# Direct / Non-JUPAS Applicants

- Associate Degree (AD) / Higher Diploma (HD) graduates or final year students of programme recognized by the University may apply for admission to major programmes with Advanced Standing (Year 2 or Year 3). Applicants are expected to have completed the AD/HD with a CGPA of  $\geq$  3.0, or an equivalent overall mark or a credit award. More details at: https://www.cityu.edu.hk/admo/admissions/non-jupas-senior-year-admission.
- Other high school qualifications, e.g. GCEAL, IB, overseas, AD/HD Year 1 students, may apply to enter Year 1. More details at: https://www.cityu.edu.hk/admo/admissions/non-jupas-year-1-admission.
- Admission Information for Non-local applicants is available at https://www.cityu.edu.hk/admo/admissions.

# INFE – Information Engineering

- ♦ Networking and Communications 網絡及通訊
- ◆ Algorithms and Optimization 算法與優化
- ◆ Cybersecurity 網絡安全
- ◆ Artificial Intelligence 人工智能
- ◆ Signal Processing 訊號處理

### Job Nature of Graduates

Computer / Design Engineer, Technical Support Engineer / Specialist, Telecommunication Engineer, Software / System Engineer, Programmer, Application / Mobile Apps Developer, System / IT Support Analyst, Cloud Computing / Data Center Engineer, IT Officer, Scientific Consultant / Technologist, Academic Researcher, Solution Developer, Marketing and Sales Executive, etc.



Elective 2

Level 3 any one subject (Notes)





# Graduate Career Outlook

# Salary Trend of EE Graduates



# **News Information**

# **掌固目身優勢 發展多元經濟**

- 加速建立創科生態園
- 成立「新型工業發展辦公室」,支援重點企業發展、推動製 造業利用創科升級轉型、扶植初創企業
- 成立「香港微電子研發院」並啟用「微電子中心」,促進微 電子研發和產業發展
- 加速建設超算中心,推進人工智能發展
- 設立100億元「新型工業加速計劃」,提供配對資金,推動 下游新型工樂發展

Source: 中華人民共和國香港特別行政區行政長官 2023年施政報告

### 招聘博覽助不同教育背景人才投身創科業

數碼港致力搭建橋樑連接創科業界與人才,強化香港創科人才庫。於2024年 初舉辦「數碼港互動招聘博覽」,與超過200家數碼港初創、政府部 門、公營機構及大小企業合作,提供超過1700個職位空缺,當中包括熱門 科技如AI、自然語言處理(NLP)、區塊鏈和STEM教育等。招聘博覽同時 運用人工智能技術,為企業及求職者進行精準配對。另設有實習機會予未 有科技相關教育背景,但有志投身創科界的畢業生,為業界注入新動力, 同時幫助青年人投身職場。

Source: 香港 01 on 2025-01-24 數碼港全方位培育科技人才 推動香港邁向國際創科中心

孫東表示,2022年《香港創新科技發展藍圖》已強調要壯大本地創科人才庫,以InnoHK 為例,各實驗室已與全球超過30間頂尖大學和科研機構建立合作關係,匯聚本地和世界各地約 2,500名優秀科研人員;至於研究人才庫的資助,也讓更多科研機構及企業,能聘請相關人才

他認為,在新的教育、科技和人才委員會架構下,更可將創科局、教育局、勞福局、人才辦 等一起整合,凸顯了特區政府對於建立國際高端人才集聚地的高度重視。

### 微電子研發院生產線正落實

就近期有來港的人才反映,香港欠缺半導體及生物醫療產業,致令部分人才未能對接合適 工作,孫東指,這正說明發展科技產業的重要性,特區政府正全力去解決問題,加緊推進相關 工作,例如微電子研發院生產線正落實,也引進了多所相關領域的重點企業,「雖然(由)政 策到落實需要一定時間,但已走上正確方向,相信未來會是光明的。」

Entrance Scholarships for Local Students

Source: 香港文匯網 on 2024-10-21

# **Outstanding Alumni**



Dr CHEN Jiashu (2007 BEng) Founder, Calterah Semiconductor PhD in University of California, Berkeley, USA

Ms Candy LIU (1999 BScIT) Chief Executive, Shine Technology (Distributor of Carrot Home in UK)



Mr Tobby FU (2006 BEng) Director, Innovation and Entrepreneurship, Hong Kong Baptist University

Mr Marcus OR (2016 BEng) **Global Head of Information Security** Governance and Risk Management, Crypto.com





Mr TING Ka Ki (2020 BEng) Assistant Project Manager (IT&DA), Hong Kong Public Opinion Research Institute

Mr LAW Chun Kit Tommy (2020 BEng) Computer Vision and Al Engineer, HKTV Company Ltd. Founder, Accessible Vision Ltd





Miss NG Chak Lam Rica (2020 BEng) Design Engineer-Communications MTR Corporation