# THE HONG KONG POLYTECHNIC UNIVERSITY

2018/19年度

香港理工大學主要統計數字

# **POLYU** IN FIGURES 2018/19

### CONTACT INFORMATION

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### CAMPUS MAP

校園地圖



PolyU Main Campus 理大主要校園

PolyU Hung Hom Bay Campus and Facilities 理大紅磡灣校園及設施一覽

PolyU West Kowloon Campus and Facilities 理大西九龍校園及設施一覽



Compiled by Institutional Research and Planning Office 大學策劃處編製 December 2019 二零一九年十二月



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### INTRODUCTION 簡介



To learn and to apply, for the benefit of mankind. 開物成務 勵學利民

## Our Vision

### 願景

Be a leading university that advances and transfers knowledge, and provides the best holistic education for the benefit of Hong Kong, the nation and the world.

矢志成為一所在開拓及轉移知識、提供 優質全人教育方面均領先的大學,為香港、國家及世界作出貢獻。

### **Our Mission**

### 使命

- To pursue impactful research that benefits the world.
   致力富有影響、造福世界的研究。
- To nurture critical thinkers, effective communicators, innovative problem solvers and socially responsible global citizens.
   培育敏於思辨、善於溝通、富於創見、精於解難,且勇於承擔社會責任的世界公民。
- To foster a University community in which all members can excel in their aspirations with a strong sense of belonging and pride.
   營造讓員生志存高遠、心有歸屬、樂於以大學為榮的環境。

### MILESTONES 里程碑



Founding of the Government Trade School in Wanchai, the first government funded, post-secondary technical school in Hong Kong.

香港官立高級工業學院正 式成立,校舍位於灣仔, 是全港第一所政府資助的 專上程度工業學院。



Legislation was enacted to change the name of the Institution to "The Hong Kong Polytechnic University". Self-accreditation status was granted by the Government.

有關理工正名大學之修訂 法案正式生效,理工正名 為「香港理工大學」(理 大),並獲政府頒授自我評 審資格。



Inauguration of the Institute for Enterprise (IfE) to provide professional services for business and industry on a self-financed basis.

企業發展院成立,為工商 界提供自負盈虧式的專業 服務。



Hotel ICON, a teaching and research hotel wholly-owned by PolyU, was officially opened.

理大全資擁有的教研酒店 唯港薈正式開幕。



Redevelopment of Block X completed.

X座重建項目竣工。

The School was renamed the Hong Kong Technical College after World War II.

The Hong Kong Technical College moved to its new

工專遷往紅磡的新校舍。

premises in Hung Hom.

第二次世界大戰後學院改 名為香港工業專門學院 (工專) 。



The Hong Kong Polytechnic (the Polytechnic) was formally established, taking over the campus of the Hong Kong Technical College.

香港理工學院 (理工) 正 式成立,並接管工專的校

1972



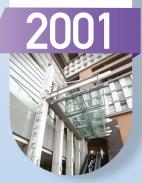
Establishment of the School of Professional Education and Executive Development (SPEED) to foster lifelong education.

成立專業進修學院,致力 促進終身學習。



Set up of Hong Kong Community College (HKCC) to offer an expanded range of Associate Degree programmes.

成立香港專上學院,提供 多個範疇的副學士學位課



Official opening of Jockey Club Innovation Tower.

賽馬會創新樓正式開幕。

2014



## **FACULTIES, SCHOOLS AND DEPARTMENTS**

學院及學系

Faculty of Applied Science & Textiles 應用科學及紡織學院



Department of Applied Biology and Chemical Technology 應用生物及化學科技學系

Department of Applied Mathematics 應用數學系

Department of Applied Physics 應用物理學系

Institute of Textiles and Clothing 紡織及服裝學系 Faculty of Business 工商管理學院



School of Accounting and Finance 會計及金融學院

Department of Logistics and Maritime Studies

物流及航運學系

Department of Management and Marketing 管理及市場學系

### Faculty of Engineering 工程學院



Department of Biomedical Engineering 生物醫學工程學系

Department of Computing 電子計算學系

Department of Electrical Engineering 電機工程學系

Department of Electronic and Information Engineering 電子及資訊工程學系

Department of Industrial and Systems Engineering

工業及系統工程學系

Department of Mechanical Engineering 機械工程學系

Interdisciplinary Division of Aeronautical and Aviation Engineering 航空工程跨領域學部

### **Education**

教 育

- Nurturing future-ready global citizens 培養敢於應對未來的世界公民
- Shaping socially responsible leaders of tomorrow 塑造懷抱社會責任的未來領袖

## Faculty of Construction & Environment 建設及環境學院



Department of Building and Real Estate 建築及房地產學系

Department of Building Services Engineering

屋宇設備工程學系

Department of Civil and Environmental Engineering

土木及環境工程學系

Department of Land Surveying and Geo-Informatics

土地測量及地理資訊學系

### Faculty of Humanities 人文學院



Department of Chinese and Bilingual Studies 中文及雙語學系

Department of Chinese Culture 中國文化學系

Department of English 英文系

Chinese Language Centre 中國語文教學中心

Confucius Institute of Hong Kong 香港孔子學院

English Language Centre 英語教學中心

General Education Centre 通識教育中心

### Faculty of Health & Social Sciences 醫療及补會科學院



西原及江首竹子机

Department of Applied Social Sciences 應用社會科學系

Department of Health Technology and Informatics

醫療科技及資訊學系

Department of Rehabilitation Sciences 康復治療科學系

School of Nursing 護理學院

School of Optometry 眼科視光學院 School of Design 設計學院



School of Hotel & Tourism Management 酒店及旅遊業管理學院



### Opening Minds • Shaping the Future 啟 迪 思 維 • 成 就 未 來

STUDENTS 學生

Total Student **Enrolment** 總學生人數

**25,827** 

Student Enrolment by Level of Study and Place of Origin 以課程類別及學生出生地區分類之學生人數



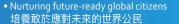
Student Enrolment by Mode of Programme 以修讀模式分類之學生人數

Full-time **20,462 20,462** 

Part-time 兼讀制 **章** 5,365

**Education** 教 育

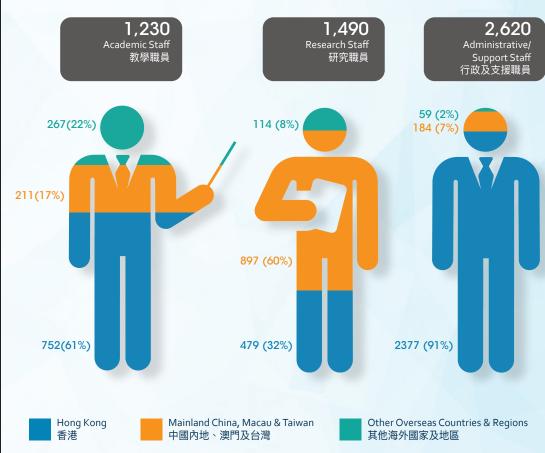
STAFF 職員



• Shaping socially responsible leaders of tomorrow 塑造懷抱社會責任的未來領袖

> **Full-time Staff** 全職制職員





Part-time Staff 兼職制職員



## POLYU SERVICE-LEARNING 理大服務學習

PolyU has been dedicated to cultivating responsible global citizens. Since the 2012/13 academic year, PolyU has incorporated service-learning into its new curriculum as a mandatory subject.

Within seven years, service-learning (SL) has developed rapidly in PolyU, yielding remarkable and encouraging achievements. By the end of the 2018/19 academic year, over 20,000 students have attended SL courses, serving over 822,000 hours.

理大一直致力培育學生成為負責任的世界公民,自2012/13學年起,理大將服務學習 納入新本科課程,成為必修科目。短短七年間,理大服務學習發展迅速,成績顯著, 成果令人鼓舞。截至2018/19學年,已累積超過20,000名四年制本科生修讀服務學習 課程,服務時數超過822,000小時。









## Education

教 育

- Nurturing future-ready global citizens 培養敢於應對未來的世界公民
- Shaping socially responsible leaders of tomorrow 塑造懷抱社會責任的未來領袖

INTERNATIONAL **SERVICE-LEARNING** 

海外的服務學習 Cambodia 柬埔寨 Vietnam Indonesia 越南 印尼 Rwanda Japan 盧旺達 日本 Kazakhstan Myanmar 哈薩克斯坦 緬甸 Kyrgyzstan 吉爾吉斯坦



## Opening Minds • Shaping the Future

啟 迪 思 維 ● 成 就 未 來

### GRADUATES 畢業生

Graduate Number by Faculty and Level of Study 以學院及課程類別分類之畢業生人數

§9,261



### **Education** 教 育

- Nurturing future-ready global citizens 培養敢於應對未來的世界公民
- Shaping socially responsible leaders of tomorrow 塑造懷抱社會責任的未來領袖

As of % of full-time graduates responded to Graduate Employment Survey in 2018 以佔回覆2018年度全日制課程畢業生就業概況調查人數比率計



### Alumni 校友

**Cumulated Number** of Alumni 累積校友人數

**1**364,000

Number of Alumni Associations. including Overseas Associations 校友會數目,包括海外校友會



### RESEARCH AND INNOVATION 科研及創新

PolyU's Strategic Research Domains



Research Funding 科研撥款

大學教育資助委員會

整筆撥款

\$316.2

**HKD Million** 百萬港元 \$846.0

Council General Research Funds 研究資助局優配 University Grants 研究金 Committee Block Grants

Life Sciences

& Biotech

\$90.0

Research Grants

Other External Competitive Research Grants 其他對外角逐撥款

其他撥款 \$95.5

Other Funds

\$344.3

Research 科研

- 應對社會所需
- 造福世界

#### Research Facilities 研究設施

Chinese Academy of Sciences -**PolyU Joint Laboratories** 中國科學院與香港理工大學聯合實驗室

- Joint Laboratory for Aerosol and Environment 氣溶膠與環境聯合實驗室
- CAS AMSS-PolyU Joint Laboratory of Applied Mathematics 應用數學聯合實驗室
- GIG-PolyU Hong Kong Joint Laboratory on Environmental Pollution Process and Control 粵港澳大灣區環境污染過程與控制聯合實驗室



Hong Kong Branches of Chinese **National Engineering Research** Centres

國家工程技術研究中心香港分中心

- Hong Kong Branch of National Engineering Research Centre for Steel Construction 國家鋼結構工程技術研究中心香港分中心
- Hong Kong Branch of National Rail Transit **Electrification and Automation Engineering** Technology Research Centre 國家軌道交通電氣化與自動化工程技術研究 中心香港分中心

### **State Key Laboratories** 國家重點實驗室

- State Key Laboratory of Chemical Biology and Drug Discovery (The Hong Kong Polytechnic University) 化學生物學及藥物研發國家重點實驗室 (香港理工大學)
- State Key Laboratory of Ultra-precision Machining Technology (The Hong Kong Polytechnic University) 超精密加工技術國家重點實驗室 (香港理工大學)



Research Institute 研究所

Research Institute for Sustainable Urban Development 可持續城市發展研究院







University

Research

**Facilities** 

研究中心實驗室

For more information on our research facilities, please scan this QR Code.

如欲了解本校所有研究設施, 請掃描此二維碼。



研究中心

### Research 科 研

#### Addressing societal needs 應對社會所需

 Making positive impact on the world 造福世界

# SUREFIRE: SMART URBAN RESILIENCE AND FIREFIGHTING

智慧城市災害防控和火災應急研究

### Abstract 摘要

The Guangdong-Hong Kong-Macao Greater Bay area has an urban environment of the high-density population that is inherently more sustainable and ideally suits smart city technologies. Increasing numbers of fires in tall buildings around the world have shown that the evolution of the built environment has changed the nature of the threat from fire. Urban environments are exposed to greater risk as prescriptive fire safety strategies are no longer fit for purpose. Firefighters are left facing an unpredictable hazard, that they are neither trained nor equipped to deal with, as the London Grenfell Tower fire in 2017 tragically demonstrated. On top of the human cost, costs due to losses from fire are estimated at approximately 1 per cent of global GDP per year. Therefore, while sustainability is paramount, a society's resilience to disasters should also be a critical consideration in sustainable urban development.

粵港澳大灣區是全球人口密度最高的城市群,非常適合採用智慧城市技術來促進其可持續發展。然而,全球高層建築物的火災頻頻發生,使這類高密度城市在居住環境的安全性、可持續發展和應對災害的彈性方面面臨全新的挑戰。2017年倫敦格倫費爾塔大火揭示了市民和消防員正在面對前所未有的重大火災和無法預測的風險。與此同時,全球每年因火災造成的經濟損失高達生產總值的1%。因此,有效的災害防控和應急管理與城市的可持續發展息息相關。



### Impact to the research field, society and economy 對研究領域、社會和經濟的影響

This project will develop the first smart firefighting system in the world that has the capability of fire evolution forecasting for buildings and urban infrastructure and provide vital information to support fire incident commanders in directing emergency crews. As a critical component of smart city, SureFire-based firefighting system may significantly reduce injury in fire accidents and save billions in costs and economic losses owing to fire in Hong Kong. Adoption of SureFire technology in a follow-up implementation project can substantially diminish the current cost of fire at 1% of global GDP. Upon deployment of the SureFire system, Hong Kong will demonstrate sustainable urban development and resilience in practice and will pioneer the guiding standards for smart megacities of the Guangdong-Hong Kong-Macao Greater Bay area and the other parts of the world.

本項目將開發全球首個可實時預測城市建築和基礎設施火災演變的智慧消防系統,為消防行動和應急人員提供重要資訊。該智慧消防系統是智慧城市的重要組成部分,將大大減少火災中的人員傷亡,並將為香港每年節省數十億美元因火災造成的經濟損失。未來該智慧消防技術也可以明顯降低目前佔全球本地生產總值1%的火災損失。隨著該智慧消防系統的部署,香港將實現城市的可持續發展和應對災害的彈性,並將引領粵港澳大灣區和全球智慧超大城市的發展和標準的制定。



Knowledge Transfer and Wider Engagement 知 識 轉 移 及 廣 泛 參 與

- Transforming research excellence into impactful applications 轉化卓越科研為具影響力的應用方案
- Nurturing entrepreneurs to do well and do good
   培育「創富創善」企業家

# SPECTACLE LENS RETARDS MYOPIA PROGRESSION IN CHILDREN

特製鏡片延緩兒童近視加深



Myopia is the major cause of ocular morbidity and becomes increasingly prevalent globally. To address this global public health issue, Prof. Chi-ho To and Prof. Carly Lam of The Centre for Myopia Research, School of Optometry, co-developed the **Defocus Incorporated Multiple Segments (DIMS) Spectacle Lens,** with Hoya Corporation, for retarding myopic progression in children.

近視是導致視覺功能下降的主因之一,此情況在全球愈趨普遍。針對此全球公共衞生問題, 眼科視光學院近視研究中心的杜嗣河教授和林小燕教授率領研究小組,與豪雅光學共同研發 「多區正向光學離焦」(DIMS)眼鏡片,透過控制兒童眼球過度生長,改善近視。

The DIMS lens comprises of a central optical zone for correcting refractive error and multi-segments of constant myopic defocus micro lenses surrounding the central zone extending to the mid-periphery of the lens. It provides clear vision and myopic defocus for vision correction simultaneously for the wearer at all viewing distances. In doing so, the lens makes use of the natural homeostatic mechanism known as 'emmetropization', whereby the eyeball adapts and shapes to receive focused images as it does for normal vision.

DIMS 眼鏡片由一個用來矯正屈光不正的中心光學區,以及圍繞中心區伸延至鏡片周邊的「多區持續近視離焦」微形鏡片組成。佩戴者觀看不同距離的景物時,DIMS眼鏡片可同時提供清晰的視力及近視離焦,以矯正視力。過程中鏡片利用眼睛的自然回饋機制 ——「正視化現象」,使眼球適應和生長成以最接近正常視力聚焦影像的大小。

In the two-year randomized double-blinded clinical trial, DIMS lens has proven to slow down myopia progression in children by 60%, and 21.5% of the subjects experienced no increase in myopia at all during the trial period.

DIMS 眼鏡片在為期兩年的隨機雙盲臨床實驗中,證實能減慢參與研究兒童的近視加深速度達60%,21.5%兒童的近視更是零增加。

### PolyU Innovation Makes Global Impacts 理大發明影響深遠

The team's effort was internationally recognized. The DIMS lens won the Grand Prize (Overall Championship), Grand Award and Gold Medal with the Congratulations of Jury at the 46th International Exhibition of Inventions of Geneva. Apart from Hong Kong, the novel device is highly relevant to many Asian regions, such as Singapore, Malaysia, Korea and mainland China, where the prevalence of myopia is significantly high. Since the launch of the DIMS Lens onto the market in 2018, positive feedback on the effectiveness and significant demand from these regions were received.

研究團隊的努力獲國際肯定;DIMS 眼鏡片在瑞士日內瓦舉行的第四十六屆國際發明展中,勇奪全場總冠軍、特別大獎及評判特別嘉許金獎。除了香港以外,此項發明尤對近視率偏高的亞洲地區影響深遠,如新加坡、馬來西亞、韓國及中國內地等。鏡片自2018年推出市場後,一直備受歡迎並獲佩戴者肯定其效用。



DIMS Spectacle Lens comprises of a central optical zone and multi-segments of constant myopic defocus micro lenses.

「多區正向光學離焦」眼鏡片由中心光學區及 多個近視離焦微型鏡片組成。



DIMS Spectacle Lens designed by Prof. Carly Lam (left) and Prof. Chi-ho To (right) won three prizes at the 46th International Exhibition of Inventions of Geneva.

林小燕教授(左)和杜嗣河教授(右)設計的 「多區正向光學離焦」眼鏡片,在瑞士日內瓦 第四十六屆國際發明展中贏得三項大獎。

### Knowledge Transfer and Wider Engagement 知 識 轉 移 及 廣 泛 參 與

- Transforming research excellence into impactful applications 轉化卓越科研為具影響力的應用方案
- Nurturing entrepreneurs to do well and do good 培育「創富創善」企業家

### **ENTREPRENEURSHIP DEVELOPMENT**

創業發展

### Statistics & Achievements 統計數據與成就

Entrepreneurship Funding & Training 創業基金及教育

Number (ca.) 數目(約)



Start-ups Supported 初創企業支援





Entrepreneurs Nurtured 已培育之企業家人數





Training Hours Offered 提供之培訓時數 97,400



Awards 獎項





Follow-on Funding / Investment 延續基金 / 投資





Actively Operating Company 活躍營運之企業\* 61%

\*Counting those still operating 3 years after funding support. 
於取得基金後持續營運了3年或以上。

### Patents 專利



Patents and Trademarks Filed 商標及專利申請 135



Patents and Trademarks Granted 商標註冊及專利發明 58

## Internationalisation and Engagement with the Nation

國際化及參與國家發展

- Embracing internationalisation for education and research 推動教育與科研的國際化
- Championing Belt and Road and Greater Bay Area development initiatives 推動「一帶一路」與「大灣區」發展的項目



## Opening Minds • Shaping the Future

啟迪思維•成就未來

### **GLOBAL CONNECTIONS**

環 球 網 絡

**251** Exchange Partners 學生交流計劃夥伴 38 Europe 歐洲 North America Mainland China, 北美洲 Macau & Taiwan 中國內地、澳門 及台灣 Central & South America 中美及南美洲 Oceania 大洋洲

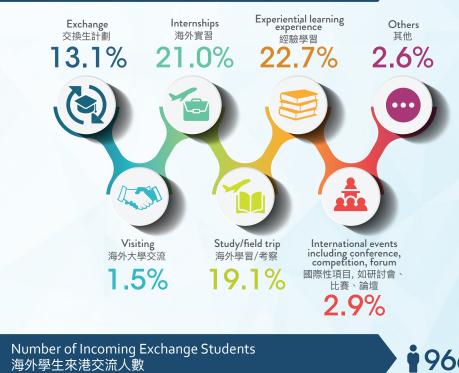
### Internationalisation and **Engagement with the Nation**

國際化及參與國家發展

- Embracing internationalisation for education 推動教育與科研的國際化
- Championing Belt and Road and Greater Bay Area development initiatives 推動「一帶一路」與「大灣區」發展的項目

Undergraduate Students with International Learning Experience 有國際學習經驗的本科生

**†** 50.3%







### Opening Minds • Shaping the Future 啟 迪 思 維 • 成 就 未 來

### **CAMPUS FACILITIES** 校 園 設 施

Library Collections and Facilities 圖書館館藏及設施



Total Library Holdings 全館收藏資料總數

5,593,941



Computer Files 電腦檔案

10,081



Volumes in Library 圖書總冊數

1,276,904



Audio-visual Materials 知聴恣蚁

566,729



e-Books 電子書籍

3,382,996



Microforms 縮微複制資料

187,150



e-Journals (titles) 電子期刊(種類)

169,637



itudy Spaces 运位數目

3,963



## Financial Health and Institutional Sustainability

財務健康與機構可持續性

- Boasting a robust governance structure 維繫一個穩健完善的管治架構
- Enhancing infrastructure to foster development 提升人才與基建質素以促進大學發展

### IT Facilities 資訊科技設施



Buildings with Optical Fibre Connection 光纖連接的建築物

100%

Internet Bandwidth 互聯網頻寬



International Maximum (shared) 國際最高 (共享)

11,420 Mbps

International Guarantee (allocated) 國際保證 (獨享)

2,397 Mbps

Local Maximum (shared) 本地最高 (共享)

10 Gbps

#### Wi-Fi 無線網絡



Wi-Fi Coverage in Campus 校園無線網絡覆蓋

100%

Wi-Fi Access Points in Campus 校園無線接入點

2,350

Wi-Fi Access Points in Student Halls of Residence 學生宿舍無線接入點

3,100

Wi-Fi Access Points outside Campus for PolyU users (via agreement with external service

provider) 為理大用戶提供的校外無線接入點

(通過與服務供應商的協議)

>20,000

### Student Halls of Residence 學生宿舍



Number of Students Accommodated (Hung Hom) 學生宿位數目 (紅磡)

3,004

Number of Students Accommodated (Homantin)

學生宿位數目 (何文田)

1,650

## COLLEGE OF PROFESSIONAL AND **CONTINUING EDUCATION**

專業及持續教育學院



PolyU has established the College of Professional and Continuing Education (CPCE) to oversee the operation of two self-financed education units, namely Hong Kong Community College (HKCC) and School of Professional Education and Executive Development (SPEED).

理大設立了專業及持續教育學院,轄下教學 單位包括香港專上學院及專業進修學院。

### Total CPCE Student Enrolment 總學生人數

**•** 13,901

**CPCE Student Enrolment by Programme Type** 以課程類別分類之學生人數

### HKCC 香港專上學院

Higher Diploma 高級文憑

679

Associate Degree 副學士

8,754

Bachelor's Degree 學士學位

2,998

Bachelor's Degree 學士學位 (Franchised programmes of PolyU理工大學特許經營課程) .470

SPEED 專業進修學院

**CPCE Student Enrolment by Mode of** 

Programme 以修讀模式分類之學牛人數

**CPCE Student Enrolment by Place of Origin** 以學生出生地區分類之學生人數

Hong Kong 13.749

Mainland China, Macau & Taiwan 中國內地、澳門及

48

Other Overseas Countries & Regions 其他海外國家及地區

Full-time 全日制 12,075

> Part-time 兼讀制 1,826

Note: The above figures do not include students enrolled on programmes leading to awards of overseas universities, credit bearing courses offered under Credit Accumulation Mechanism (CAM), and other non-credit bearing courses offered via SPEED

#### 附註:上述數字不包括就讀於專業進修學院與海外合辦之課程、學分累積制及非學分累積制課程的學生

### CPCE Full-time Staff 全職制職員

¥566

Teaching Staff 业293

Administrative/Support Staff 273

### Graduates Articulation Overview 畢業生升學總覽



# Including those pursuing further studies for programmes other than undergraduate level. 包括升讀學士學位以外課程

<sup>\*</sup> Including 7 graduates pursued part-time degree studies. 包括七位畢業生升讀兼讀學士學位課程。

