

A Glance at HKUST

2021 — 2022

香港科技大學重點成果



# Research Power 研究力量

## FUNDING TO SCALE IMPACT

善用撥款提升影響力

# \$1.08B

external funding (+4.9% YoY) with **\$210.3m** from Research Grants Council

**\$10.8億**校外撥款 (按年+4.9%)，當中**\$2.103億**來自香港研究資助局



# Highest

combined application success rate among all local universities for:

資助計劃的綜合申請成功率為本地**大學之冠**：

General Research Fund  
一般研究基金

# 43%

Early Career Scheme  
早期職業計劃

# 47%

# 1,743

funded projects (+12% YoY), covering areas including biomedical development, COVID-19 and Green Finance

**1,743**個獲資助項目 (按年+12%)，涵蓋生物醫學發展、新冠疫情研究及綠色金融

## BUILDING FRONTIER RESEARCH HUBS

創立前沿研究樞紐

# 3 HKUST-led research labs

admitted to HKSAR government's flagship InnoHK initiative

**3**所由科大領導的研究實驗室，入選香港特區政府的創科旗艦項目「InnoHK創新香港研發平台」

Health@InnoHK

Air@InnoHK

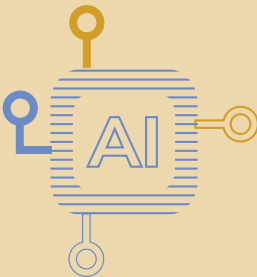
Hong Kong Center for  
Neurodegenerative  
Diseases  
(HKCeND)

香港神經退行性疾病中心



AI Chip Center for  
Emerging Smart  
Systems  
(ACCESS)

智能晶片與系統研發中心



Hong Kong Center for  
Construction Robotics  
(HKCRC)

香港智能建造研發中心



## EMPOWERING KNOWLEDGE AND TECHNOLOGY TRANSFER 促進知識及技術轉移

HKUST has created/incubated:<sup>1</sup>  
科大參與創立 / 培育：<sup>1</sup>

# 9 Unicorns

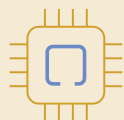
9 間獨角獸



# 1,645 active start-ups

covering emerging fields including

1,645間初創企業涵蓋以下新興範疇



Chip  
Technology  
晶片技術



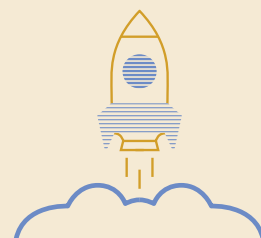
Upcycling  
升級再造



Nanofilm  
Technology  
納米薄膜技術



Sports  
Science  
運動科學



with a total economic impact of

# HK\$400B+

合共帶來逾\$4,000億經濟效益



Over 2021-22:

# 201

 invention disclosures<sup>2</sup>  
(+19.3% YoY)

在2021-22：

公佈201項新發明<sup>2</sup> (按年+19.3%)

# 1,873

 active granted patents /  
pending patent applications (+6.5% YoY)

1,873項獲批的專利及在效專利申請 (按年+6.5%)

1. As at Sep 30, 2022  
截至2022年9月30日

2. Intellectual property including new software developments created by HKUST personnel and disclosed to HKUST's Office of Knowledge Transfer.  
由科大人員創造及向科大知識轉移辦公室披露的知識產權，包括新開發軟件

## CUTTING-EDGE RESEARCH INFRASTRUCTURE 先進科研基建

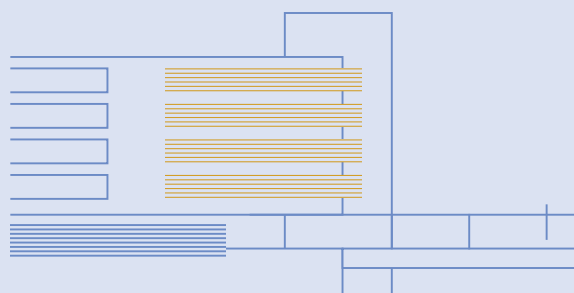


Life and Chemical Sciences and  
Technologies Building (design phase)

新科研樓2 (設計階段)

Martin Ka Shing Lee Innovation Building  
(work in progress)

李家誠創科大樓 (施工階段)



# Talent Incubator 人才培育

## NURTURING 21ST CENTURY SKILLS

### 掌握21世紀技能

## Clear Water Bay 清水灣

### BSc in Sustainable and Green Finance

Hong Kong's first undergraduate program nurturing green financial knowledge and skills

理學士(可持續發展及綠色金融)  
全港首個教授綠色金融知識及技能的學士課程

### Extended Major in Digital Media and Creative Arts

Fostering technical skills to apply computing and media technologies across a variety of digital media

延伸主修數碼媒體及創意藝術  
運用專業技能，將電腦及媒體科技應用於各種數碼媒體

## Guangzhou 廣州

### MBA in Innovation and Entrepreneurship

Integrating business, science and engineering using a project-based approach

工商管理碩士(創新及創業)  
採用項目為本的模式結合工商、科學與工程學

### MSc in Data-Centric Artificial Intelligence

Big data and AI, with hands-on project experience and industry internships

理學碩士(數據核心人工智能)  
著重大數據及人工智能，提供務實的項目管理及企業實習機會

## DRIVING ALL-ROUND DEVELOPMENT

### 推動全人發展

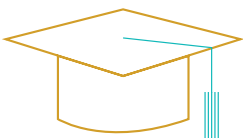
### Academic Excellence

## \$93M

in scholarships for academic talents (+10% YoY)

#### 學術表現

發放\$9,300萬獎學金予優異生(按年+10%)



### Career

## 921 students

joined the Hong Kong government's STEM Internship Scheme, the highest among all participating universities (+76% YoY)

#### 事業發展

921名學生參與香港政府推出的創科實習計劃，為參與大學之冠(按年+76%)



### Service Learning

## Changemaker 30

campaign launched with 300 students participating in 98 community projects

#### 服務學習

Changemaker 30 活動共300名學生參與98個社區項目



### Knowledge Transfer

## Largest

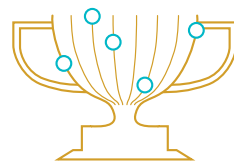
number of winners among local universities at Hong Kong's first City I&T Grand Challenge

- 3 champions
- 2 innovation awards
- 1 most favored honor

#### 知識轉移

全港首屆城市創科大挑戰，科大得獎人數為本地大學之冠

- 3 項冠軍
- 2 項創新獎
- 1 項最喜愛獎

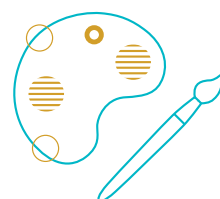


### Arts and Creativity

The Shaw Auditorium hosted 9 arts and cultural activities since opening in November 2021

#### 藝術創意

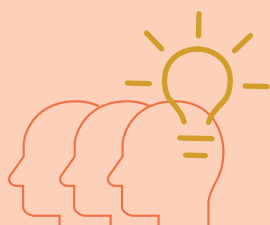
逸夫演藝中心自2021年11月開幕以來，共舉辦9場文化藝術活動



# Growing Footprint 擴展足跡

## NEW ERA OF GROWTH 開展新里程

Under **HKUST 2.0**, the University's Clear Water Bay and Guangzhou campuses will jointly:  
在**港科大2.0**的願景下，清水灣及廣州校園將攜手合作：

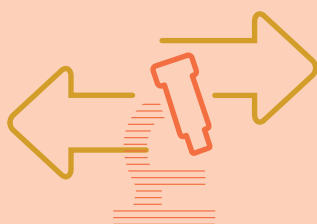


Pioneer **disciplinary-oriented** and **cross-disciplinary** research endeavors in emerging and frontier fields

在新興及前沿領域推動**以學科為主導及融合學科**的研究

Develop **forward-looking creative talents**

培育**高瞻遠矚的創新人才**



Drive **knowledge transfer** and **commercialization** in the Greater Bay Area and beyond

於大灣區及以外地區，推動**知識轉移及創新成果商業化**

500+ postgraduate students studying at the new Guangzhou campus upon its opening in September 2022  
逾500名學生於2022年9月廣州校園啟用時就讀研究生課程



Learn more about HKUST(GZ)  
了解更多關於港科大(廣州)的資訊

## EXPANDING REGIONAL AND GLOBAL CONNECTIONS 拓展區域及全球網絡

New strategic partnerships with mainland government and businesses in the Greater Bay Area:  
與大灣區內的政府機構及企業結成新戰略夥伴：



Double carbon lab\* to accelerate green development  
建設雙碳實驗室，促進綠色發展

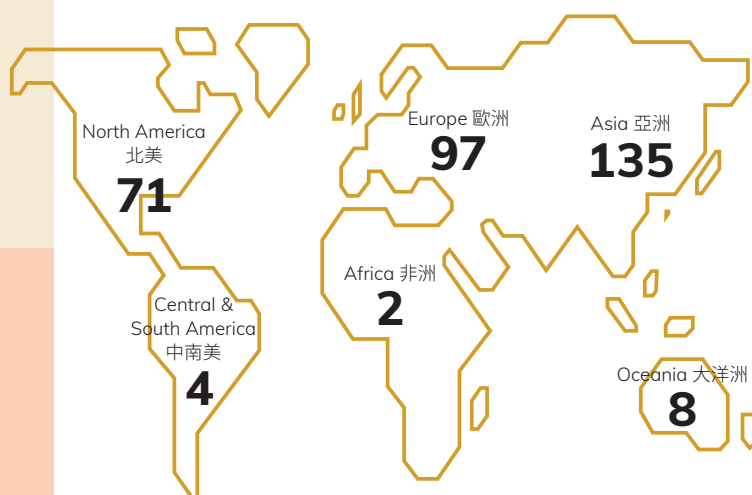


Sustainability and smart city research  
研究可持續發展及智慧城市



R&D and production base in Qingsheng, Guangzhou  
於廣州慶盛建造科研發展與生產基地

\* HKUST(GZ) partnered with the Jiangmen Municipal Government to build the Double Carbon Laboratory that will investigate carbon peak and carbon neutrality.  
港科大(廣州)與江門市政府合作建設雙碳實驗室，研究碳達峰及碳中和。



# 317

active global institutional academic and research partnerships  
31 agreements initiated over 2021-22 (+14.8% YoY)  
與全球**317**所大學結為學術及科研夥伴  
31份新協議於2021-22年簽署(按年+14.8%)

No. of Active Partners  
活躍夥伴數目  
(2021-2022)

# Spearheading Campus Sustainability 推動校園可持續發展

The University's "2028 Sustainability Challenge" made good progress in four key areas:  
大學「2028年可持續發展挑戰」行動計劃於四大範疇獲得良好進展：

## PROGRESS & PERFORMANCE 進度及表現

Electricity (kWh)  
耗電量

89,692,408



-3.6%

Trash (ton)  
廢物量 (噸)

1,575



-52.6%

Greenhouse gas (ton CO<sub>2</sub>-e)  
溫室氣體排放 (噸二氧化碳當量)

36,252



-40.8%

Recyclables (ton)  
回收量 (噸)

1,120



+882%

Food waste recycling (ton)  
廚餘回收量 (噸)

390



+13,348%

\* 2014-15 as baseline  
2014-15為基線

# Gross floor area and campus population have increased by approximately 104,446m<sup>2</sup> (+22%) and 4,203 (+26%) respectively since 2014-15  
自2014-15年度以來，校園總樓面面積及使用者分別增加104,446平方米 (+22%) 及4,203人 (+26%)

### Landscape

Established sustainable performance goals to improve campus conditions

### 園境資源

定下可持續發展績效指標以改善校園環境



### Water

Recaptured water wasted through air conditioning and used in cooling towers

### 用水量

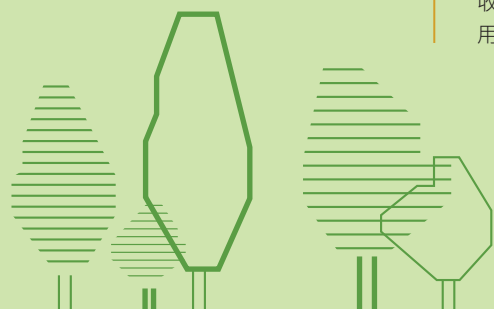
收集空調系統產生的廢水循環用於冷卻水塔

### Well-being

Conducted surveys and focus groups to evaluate working conditions and learn how to foster an engaging environment for students and staff

### 身心健康

透過意見調查及小組訪談評估工作環境，了解如何為學生及員工建立良好的校園環境





## BUILDING OUR COMMUNITY

### 建立大學社群

The **Sustainability/Net-Zero Office** established in September 2021 to strengthen sustainable campus culture and oversee "2028 Sustainability Challenge".

Goals encompass:

- Halving carbon emissions by 2035 and achieving carbon neutrality on campus by 2050

Initiatives launched over 2021-22:

- Incentive Scheme for Net-Zero Carbon Research Projects in collaboration with HKUST's GREAT Smart Cities Institute drew 9 entries and funded 4 projects
- Inaugural cross-campus Sustainable Smart Campus Net-Zero Journey: Innovation Challenge for students

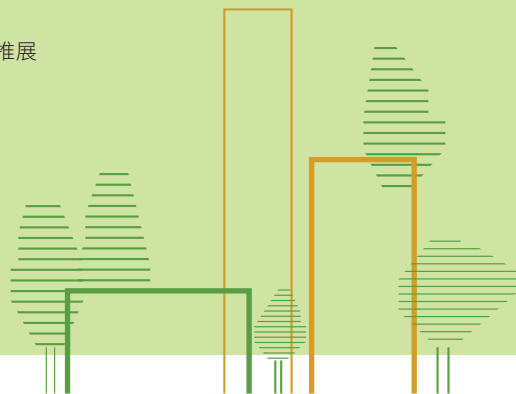
**可持續發展及零碳辦公室**於2021年9月成立，以加強校園可持續發展文化及推展「2028可持續發展挑戰」為首要任務。

目標包括：

- 2035年前將碳排放減半，2050年前在校園達至碳中和

上年度落實之項目包括：

- 與科大「極智慧城市研究院」推出淨零排放研究獎勵計劃，共有9個參賽作品，4個項目獲資助
- 舉辦首個跨校園「可持續發展智慧校園淨零之旅：設計思維挑戰大賽」



## LIVING LAB

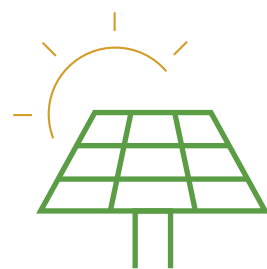
### 生活實驗室

**150+ faculty members** and **400 students** have participated in 30-plus Sustainable Smart Campus-funded projects, including:

- A smart cooling coating for photovoltaic solar panels to improve electricity conversion efficiency
- A tree-inspired and solar-driven transpiration system for humidity control in buildings

逾**150名教職員**及**400名學生**參與「可持續發展智慧校園」計劃，逾30個項目獲資助，包括：

- 為光伏板鋪設智能冷卻塗層
- 靈感來自樹木、以太陽能驅動的蒸騰系統，用作調節建築物濕度



#### 2021 Sustainable Smart Campus Student Competition

The winning team organized second-hand items collection and marketplace on campus to promote zero waste.

#### 舉辦2021可持續發展智慧校園大賽

勝出隊伍舉辦二手物品回收及市集，宣揚減廢目標

## SUSTAINABILITY EDUCATION

### 可持續發展教育



1st Life Cycle Lab established at an academic institution in Hong Kong and the Greater Bay Area in 2022, providing training, research and support for students and academics

2022年成立香港及大灣區學術機構中首間生命週期實驗室，為師生提供培訓、研究及支援平台

**95%** of recent graduates having taken at least one sustainability-focused course

**95%**畢業生完成最少一個以可持續發展為主題的課程

**68%** of graduates have completed two or more courses

**68%**完成兩個或以上課程



Learn more about the HKUST "2028 Sustainability Challenge"  
了解科大「2028可持續發展挑戰」的詳情

# International Community 國際社群

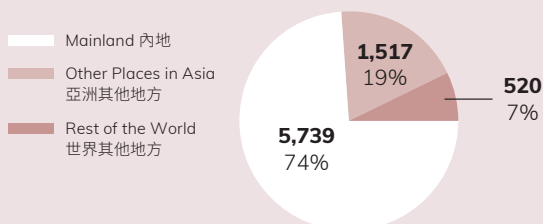
## STUDENTS 學生

# 26%

non-local student enrolments, highest among UGC-funded institutions\*

26%非本地生，冠絕教資會資助大學\*

\* from UGC data report 2021/22  
來自教資會報告2021/22

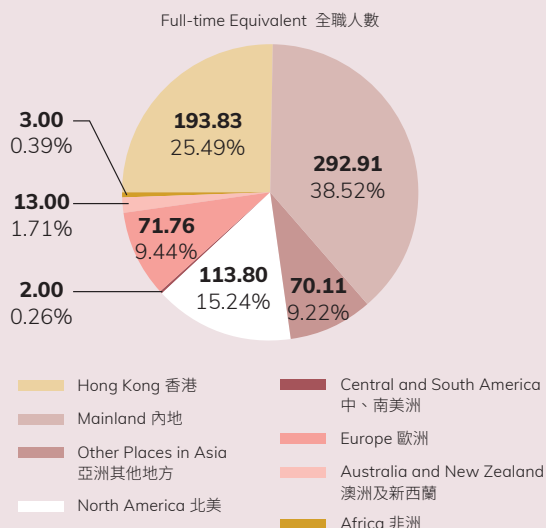


## FACULTY 教員

# 75%

from outside Hong Kong

75%來自香港以外地方



\* as of Jun 30, 2022  
截至2022年6月30日

# Global Recognition 享譽全球

## UNIVERSITY RANKINGS 大學排名

### World 全球

**#3** World's Top 500+ Young Universities  
Times Higher Education Young University Rankings 2022  
2022《泰晤士高等教育》全球頂尖500+所年輕大學排名榜

**#3** World's Most International Universities  
Times Higher Education Most International Universities in the World 2022  
2022《泰晤士高等教育》全球最國際化大學排名榜

**#40** World's Top 1400+ Universities  
QS World University Rankings 2023  
2023《QS全球大學排名》世界頂尖1400+所大學排名榜

**#58** World's Top 1700+ Universities  
Times Higher Education World University Rankings 2023  
2023《泰晤士高等教育》全球頂尖1700+所大學排名榜

### Asia 亞洲

**#9** Asia's Top 600+ Universities  
Times Higher Education Asia Universities Rankings 2022  
2022《泰晤士高等教育》亞洲頂尖600+所大學排名榜

**#14** Asia's Top 500+ Universities  
QS Asia University Rankings 2023  
2023《QS亞洲大學排名》亞洲頂尖500+所大學排名榜

## PROGRAMS AND FIELDS 課程與學科

# #1

Global EMBA Rankings – Kellogg-HKUST  
EMBA Program – Financial Times 2022  
凱洛格 – 科大EMBA課程 – 2022《金融時報》  
全球EMBA課程排名

# #1

Engineering subject in Hong Kong,  
**#5** in Asia, **#26** in the world  
Times Higher Education Universities Rankings  
2023 by Subject  
工程學科全港#1，亞洲#5，全球#26  
2023《泰晤士高等教育》全球大學分科排名

## FACULTY 教研人員

# 28%

of faculty members ranked as World's  
Top 2% Scientists 2022 – Stanford University  
教員躋身2022全球頂尖2%科學家排名  
史丹福大學

## EMPLOYABILITY 畢業生就業能力

# #1

in Hong Kong, #3 in Greater China, #30 in the world  
Global University Employability Ranking 2022,  
produced by Emerging and published by  
Times Higher Education  
大學就業能力排名全港#1，大中華#3，全球#30  
由人力資源顧問公司Emerging於2022  
《泰晤士高等教育》發佈



More university-wide rankings  
更多大學排名