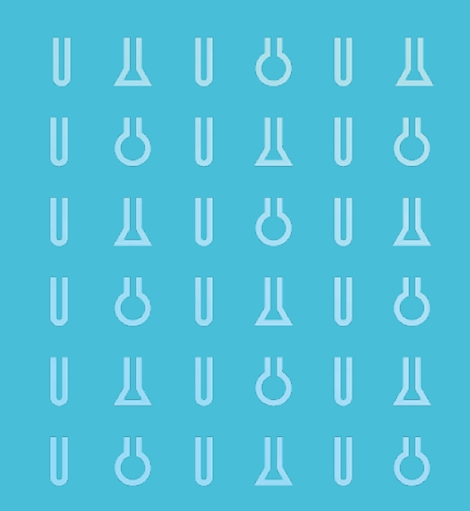
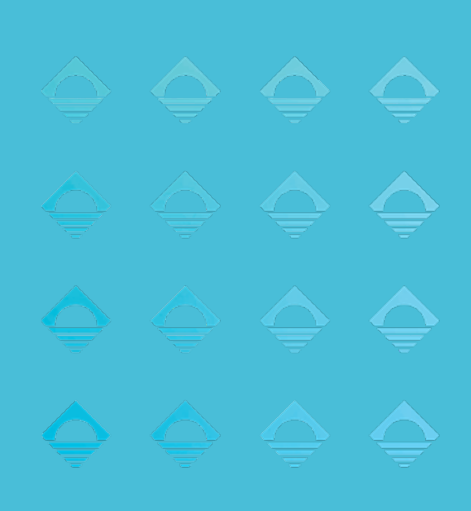


# A Glance at HKUST 2019-2020 香港科技大學重點成果





## A Glance at HKUST 2019-2020

Striding toward its fourth decade, HKUST is embarking on a new road map for innovative approaches to education and research with **Strategic Plan 2021-2028** (<https://strategicplan.hkust.edu.hk/>). Our strategic objectives have been instrumental in guiding the university development and our response to local and global issues despite the many changes and challenges we faced particularly over 2019-2020. Here is a glance at our key achievements and contributions during these unprecedented times.

# FIGHTING COVID-19 攜手抗疫

*HKUST races against time to fight the global challenge with innovation and technology*

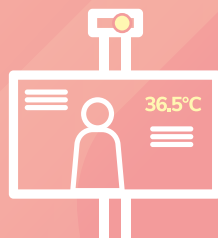
科大分秒必爭，以創新發明及科技抵禦全球危機



Detection in  
**40 mins**  
分鐘快速測試

Portable COVID-19 device  
to detect virus speedily

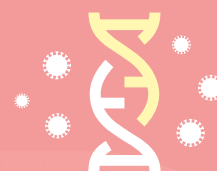
快速測試新型冠狀病毒的便  
攜式檢測儀面世



**16+**  
border control points,  
private & public premises  
邊境口岸、政府及私人處所

Smart Fever Screening Systems deployed  
across HK borders and different places to  
detect fever sufferers in a crowd

於各口岸及不同地點裝設「智能發燒偵測系  
統」，在人群中識別有發燒徵狀的人士



**215,105\***  
analyzed sequences  
已分析序列

COVIDep (coviddep.ust.hk) guiding  
vaccine development by providing  
vaccine target recommendations  
based on analyzed sequences

COVIDep (coviddep.ust.hk) 根據序列分  
析結果建議疫苗靶點，推動疫苗研發

\* as of Dec 2020 截至2020年12月

2020

2021



**14,900+**

hospitals, universities, elderly homes and  
public facilities, etc. 醫院、大學、長者院舍及公共設施等

Protecting the city with non-toxic sanitizer killing 99.9% of bacteria  
and viruses with 90 days of effectiveness

在全港多處噴灑不含毒性、可殺滅99.9%細菌及病毒的消毒塗層，有效期長  
達90日，保障市民健康



**50+** driverless vehicles  
無人駕駛汽車

Delivering food and supplies in locked-down cities  
of Mainland China to minimize human contact

在內地各封城區運載糧食與日用品，減少人際接觸



Scan the QR code to get HKUST's  
latest updates on COVID-19  
掃描二維碼了解科大在疫情上的最新資訊

## 香港科技大學 2019-2020 年度重點成果

科大即將踏入第四個十年，由此誕生的《策略發展計劃2021-2028》(<https://strategicplan.hkust.edu.hk/>)將成為大學未來推動教育與科研創新的發展藍圖。科大的策略目標一直是大學發展的依據，同時引領大學應對全球及本港的種種挑戰，正如2019-2020年度充滿變化和困難，我們仍無畏無懼、堅守崗位。以下概述科大過去一年的主要成就及對社會的貢獻。

### HKUST community cares for students and society

關愛師生，惠澤社群

**\$1.7m+**



**56** students benefitted  
名學生受助

Student Hardship Relief Fund assisting students and families financially affected by COVID-19

「學生紓困援助金」協助因疫情而出現財政困難的學生及其家人



**900** students participated in  
學生受聘於

**40** start-ups  
初創企業

HKUST Internship Network (iNet) providing virtual start-up internship opportunities for students

iNet網上平台為同學提供在初創企業網上實習的機會

**3,000**



students took part in  
**81** online programs  
學生參與81個網上項目

Online career consultation preparing students for the challenging job market

網上就業諮詢支援同學應對求職挑戰



**463,000** masks  
口罩

Distributed to students and staff during critical shortage in market

在市場供應短缺之際及時向學生及教職員派發口罩

**7,800+** hand sanitizers  
搓手液

**5,000+** masks  
口罩

Sharing anti-pandemic supplies with the wider community

與市民及香港不同社群分享抗疫物資



# RESEARCH POWER

## 科研實力

*Our research capabilities boosted by securing*  
多項撥款提升科研能力

**\$1.1b** external funding  
(+32% YoY) 校外撥款

**1,469** projects  
研究項目

**\$1.1b (+32% YoY)** of external funding for **1,469** projects covering Sustainability, Life Science, AI, Robotics, and Public Policy, among others, with **\$197.6m (+16% YoY)** coming from Research Grants Committee.

科大在年內合共取得 **\$11億 (按年+32%)** 校外撥款，共**1,469**個項目獲得資助，涵蓋可持續發展、生命科學、人工智能、機械人科技及公共政策等範疇，當中 **\$1.976億(按年+16%)** 來自香港研究資助局。



*Research excellence manifested in the high frequency of being cited among academia*  
引文次數名列前茅，彰顯卓越科研成就



**# 1** in Asia  
亞洲#1

Citations per Paper Score in QS Asia  
University Rankings 2021  
《2021 QS亞洲大學排名》論文引徵次數得分

**# 1** in Hong Kong  
香港#1

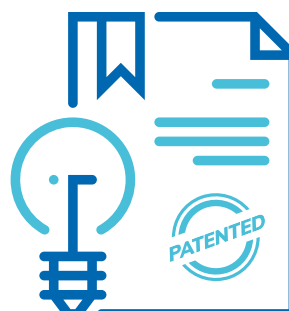
**# 2** in Greater China  
大中華區#2

Citations per Faculty Score in QS World University Ranking 2021  
《2021 QS世界大學排名》學院論文引徵次數得分

*We transfer knowledge and technology to industry*  
轉移知識，與業界共享科技成果

**147** inventions disclosed  
項公開發明

**874** cumulative active granted  
patent applications  
項累計在效專利申請及授權





*We contribute our expertise to society; the returns generated will be used to support university development*

以專長貢獻社會，收入助大學持續發展

**\$100.8m**

from services of **218** contract research cases  
218 份研究服務合約總值 \$1.008 億



**\$6m**

from **369** consultancy projects including analytical & testing services  
369 個顧問項目 (包括分析及測試服務) 總值 \$600 萬



Overall licensing income came to **\$8.9m** with IP licensing worth **\$6.3m**  
整體授權收入 \$890 萬，當中 \$630 萬為知識產權授權收入

Massive Open Online Courses (MOOCs) licensing worth **\$2.6m**  
大規模開放在線課程 (MOOCs) 授權收入 \$260 萬



*Nurturing entrepreneurial talent and new ideas*

培育創業人才，激發嶄新思維

**47**

start-ups at HKSTP founded by HKUST members, participation rate among the highest in the local higher education sector

科大成員於香港科技園成立 47 家初創企業，參與率為本地高等教育學府中最高之一



**229**

start-ups & spin-off companies incubated by HKUST **+14% YoY**

育成 229 家初創及分拆公司，按年 +14%



Funding programs offered to aspiring entrepreneurs nurturing start-up businesses:  
提供資助計劃，扶持有志者創業

**\$50m**

**Entrepreneurship Fund (E-Fund)**  
\$5,000 萬科大創業基金  
<https://e-fund.hkust.edu.hk/>

**\$5m**

**Bridge Gap Fund**  
\$500 萬科研實踐基金  
<https://ttc.ust.hk/>

**\$2.4m**

**Entrepreneurship Center Funds**  
\$240 萬科大創業中心各項資助

# LEARNING JOURNEY

## 求學之旅

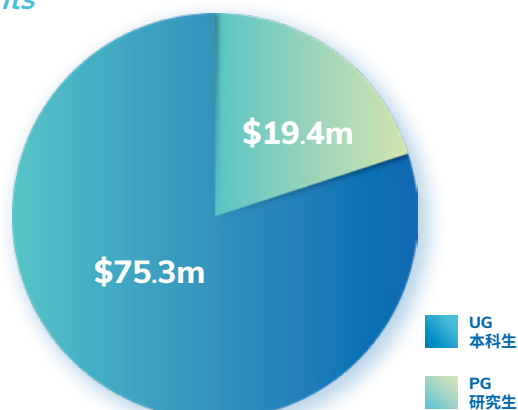
### University scholarships for academic merits and talents

頒發獎學金予成績及才華卓越的學生，培育明日棟樑

## \$95m

for UG and PG students (+9% YoY)

本科生及研究生獲取獎學金近\$9,500萬 (按年+9%)



### Broadening students' horizons with exchange opportunities

安排交流機會，擴展學生視野

## 890 students

位同學

studied at 172 partner institutions in 28 countries  
獲安排於172家夥伴院校交流，足跡遍及28個國家



### Helping students with financial burden

提供財政支援，助同學渡難關



## \$6.4m

of financial aid offered to 212 students  
212位同學獲發放合共\$640萬援助金

### Giving students a head start on their careers

爭取實習機會，提供就業先機



## 230

students joined the government's STEM Internship Scheme to gain industry experience  
位同學透過特區政府「創科實習計劃」及早體驗創科行業的工作

## 580

alumni referred 250+ jobs and internships to 560+ students via HKUST United Program  
位校友透過「科大·同心」就業計劃，轉介250+個工作及實習機會予560+位同學

## 3,340

participants engaged in Entrepreneurship Centre seminars and workshops (+6% YoY)  
學生參與科大創業中心主辦的講座及工作坊 (按年+6%)

# DIVERSE AND INTERNATIONAL COMMUNITY

## 人才薈萃

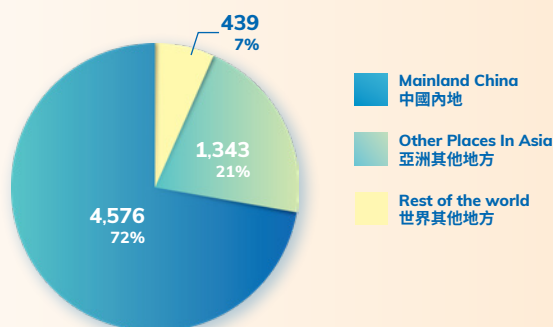
A diverse campus environment consisting of  
科大社群兼容並蓄，彰顯多元化特色

### 25%

non-local student enrolments, highest among  
UGC-funded institutions\*  
非本地學生百分率高達25%，冠絕教資會院校\*

### 6,358

non-local students at undergraduate and  
postgraduate levels\* (+6% YoY)  
非本地本科生及研究生\* (增長6%)

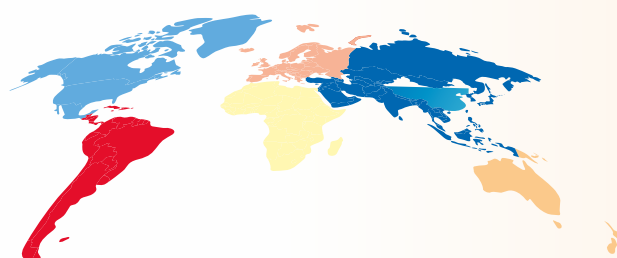


\*as of Oct 2019  
2019年10月資料

\*according to UGC data report  
2019-20 教資會 2019-20報告

Diversified faculty with 74%+  
from places outside Hong Kong

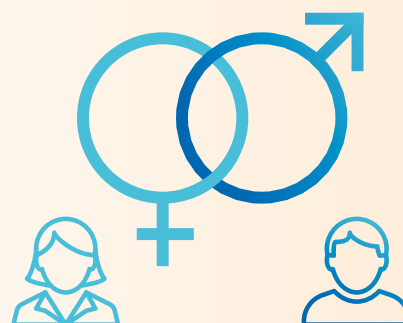
科大廣納各地學者，74%+ 教員來自香港以外地方



\* as of June 30, 2020 截至2020年6月30日

Women's faculty appointments grew with  
female to male ratio improved from 1:3.11 to  
女性教員人數上升，女教員與男教員比例從 1:3.11 增至

### 1:2.96





# GROWTH AND COMPETITIVENESS

## 擴展實力

*Advancing academic and research excellence*

追求學術及科研卓越

# 315

active global institutional academic  
and research partnerships

與全球315家大學結成夥伴，開展學術與科研合作



North America  
北美

Europe  
歐洲

Asia  
亞洲

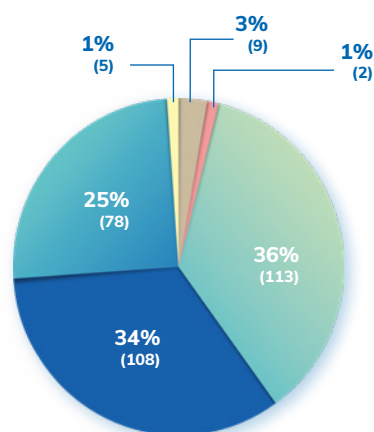
Latin America  
拉丁美洲

Oceania  
大洋洲

Africa  
非洲

Geographical Distribution of Global Partnership

全球夥伴院校分佈



# 5

strategic partnerships  
項策略夥伴合作協議

5 new strategic partnerships established to collaborate on research projects covering:

締結5項新策略夥伴合作協議，開展相關研究，包括：



Data Science, Machine Learning  
數據科學、機器學習



Brain Science  
腦科學



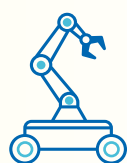
Ocean Research  
海洋研究

# 4

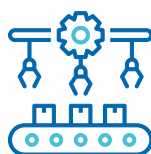
joint research units  
個聯合研究所

4 new joint research units with industrial partners taking lab knowledge to market covering: robotics, smart manufacturing, and new materials, among others.

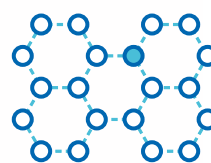
夥同業界成立4個新聯合研究所，將實驗室成果推出市場，如機械人科技、智能製造及新材料



Robotics  
機械人科技



Smart Manufacturing  
智能製造



New Materials  
新材料

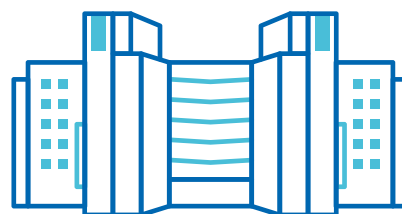


## Campus development at Clear Water Bay campus

### 清水灣校園再添新基建

## Global Graduate Tower 賽馬會集賢樓

Global Graduate Tower completed to provide **504 beds for accommodation**.  
賽馬會集賢樓於年內竣工，提供 **504 個宿位**



## Shaw Auditorium 逸夫演藝中心

Shaw Auditorium, the new landmark for arts performance and large-scale events housing up to **1,300 audiences**, is expected to complete in 2021.  
逸夫演藝中心預計於2021年落成，此新校園地標為大型藝術表演及活動提供場地，可容納**1,300名觀眾**



## Seizing GBA opportunities with the establishment of HKUST (GZ)

### 創建港科大(廣州)，抓緊大灣區機遇

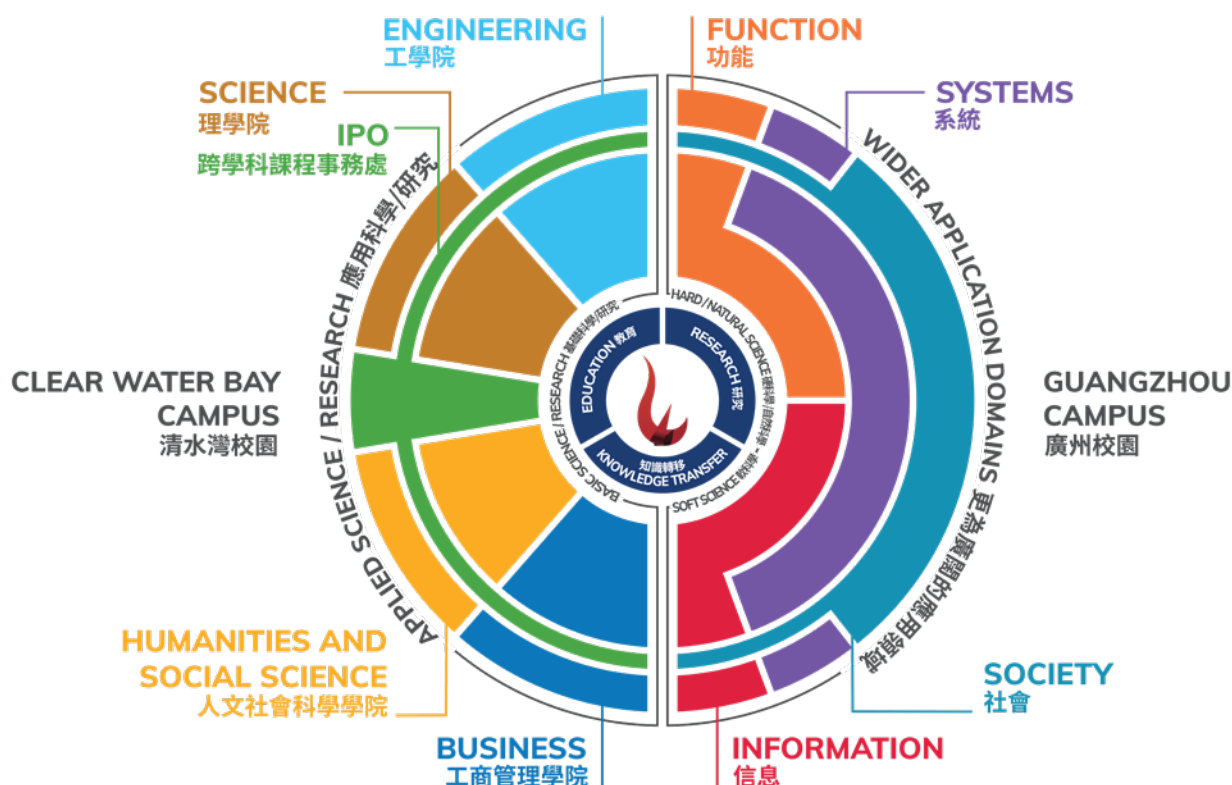
**1.1km<sup>2</sup>**

Located in Nansha, Guangzhou and scheduled to open in **fall 2022**, HKUST(GZ) spans **1.1km<sup>2</sup>, nearly doubling the size of the Clear Water Bay (CWB) campus**.  
位處廣州南沙的香港科技大學(廣州)，佔地**1.1平方公里**，面積超出清水灣校園接近兩倍，預計於**2022年秋季**啟用

**4** hubs  
樞紐

**16** thrust areas  
學域

**4 hubs and 16 thrust areas** to complement the discipline-based foundation at the CWB campus and foster cross-disciplinary research  
設有**4大樞紐與16學域**，與清水灣校園以學科主導的架構相輔相成，促進跨學科研究



**109** postgraduate students admitted to the first cohort, **149** to second cohort 已錄取首批**109**名及第二批**149**名研究生

# GLOBAL RECOGNITION

## 享譽全球

*Priding ourselves on academic and research excellence*

傲視同儕的學術與科研成就

### Young University 新進大學排名

**#1** World's Top 400 Young Universities, Times Higher Education Young University Rankings 2020  
2020《泰晤士報高等教育》全球頂尖400所年輕大學排名榜

**#2** World's Top 150 Universities Under 50, QS Top 50 Under 50 2021  
2021《QS全球年輕大學排名》世界頂尖50所年輕大學

### Global University 全球大學排名

**#27** World's Top 1000 Universities, QS World University Rankings 2021  
2021《QS全球大學排名》全球頂尖1000所大學排名榜

**#56** World's Top 1500+ Universities, Times Higher Education World University Rankings 2021  
2021《泰晤士報高等教育》全球頂尖1500+所大學排名榜

### Top-ranked Programs 優質課程 馳譽國際

**#1 in the world** Global EMBA Rankings - Kellogg- HKUST EMBA Program, Financial Times 2020  
全球 凱洛格 - 科大EMBA課程 - 2020《金融時報》全球EMBA課程排名

**#2 in the world** QS Global Joint EMBA Rankings - Kellogg-HKUST EMBA Program, QS Global Joint  
全球 EMBA Rankings 2020  
凱洛格 - 科大EMBA課程 - 2020《QS全球聯合EMBA排名》

### World University High-Ranking Subjects 全球排名前列科目

School of Engineering 工學院 **#17** Civil and Structural Engineering\*  
土木及結構工程\*

**#18** Engineering and Technology\*  
工程及科技\*

School of Business Management 商學院 **#16** Business and Management Studies\*  
商業及管理學\*

**#19** Global MBA Rankings#  
全球工商管理碩士課程#

**#20** Accounting and Finance\*  
會計及金融學\*

^ Global Ranking of Academic Subjects, Academic Ranking of World Universities 2020  
2020《世界大學學術排名》全球頂尖學科排名

\* QS World University Rankings by Subject 2020  
2020《QS全球大學分科排名》

# Financial Times 2020  
2020《金融時報》全球排名

### Employability 畢業生就業能力

**#26 in the world** Global University Employability Ranking 2020, Emerging  
全球 Emerging 2020全球大學就業能力調查及排名

### Faculty Awards and Recognition 教員成就

Our distinguished faculties and impactful research work were recognized with numerous awards and accolades over the past year. Scan the QR code to view the full list of awards and recognition.

科大的教研團隊在過往一年屢獲殊榮，成績斐然。請掃描右面的二維碼，一覽科大學者取得的各項成就。



# SUSTAINABLE SMART CAMPUS

## 智慧校園

*Launched in 2014, the "2020 Sustainability Challenge" concluded its five-year endeavors with an eco-friendlier smart campus and a strong sustainability culture*

科大於2014年推出「2020可持續發展挑戰」藍圖，積累五年努力，實踐環保智慧校園，讓可持續發展文化落地生根。

Electricity (kWh)

耗電量(千瓦小時)

2014-15

93,067,200

2020

85,699,386

-7.9%



Trash (ton)

廢物量(噸)

2014-15

3,320

2020

1,655

-50.2%



Recyclables (ton)

回收量(噸)

2014-15

114

2020

897

+687%



Food waste  
recycling (ton)

廚餘回收量(噸)

2014-15

2.9

2020

269

+9,176%



Greenhouse gas

(ton CO<sub>2</sub>-e)

溫室氣體排放

(噸二氧化碳當量)

2014-15

61,233

2020

44,069

-28%



