電子計算系
DEPARTMENT OF COMPUTING
香港恒生大學
THE HANG SENG UNIVERSITY OF HONG KONG

DSAI
數據科學及人工智能
理學碩士

Master of Science in
Data Science and
Artificial Intelligence (MSC-DSAI)
數據科學及人工智能 理學碩士

Cloud technology

Data science

Artificial intelligence

Marketing analytics

Big data security and privacy

Big data management

Machine learning

2022 現正招生

Some modules have been included in the list of reimbursable courses for CEF purposes

Master of Science in Data Science and Artificial Intelligence
數據科學及人工智能 理學碩士

The convergence of Artificial Intelligence (AI) and Big Data technologies is changing the way we make decisions. Disruptive changes can be seen everywhere. In this new and exciting Master Degree programme, students will learn to master the latest technologies in data science and machine learning and their real world applications. The programme is designed for students from a wide range of disciplines with interests in applied AI technologies.

大數據科技，結合人工智能（AI）技術，正在改寫我們的決策方式。新科技帶來的顛覆性變化比目皆是。這門嶄新而全面的碩士課程是為來自不同背景、對新一代大數據和AI應用有興趣的學生而設計。在課程中，學生將會掌握大數據和機器學習相關的最新知識，以及它們的應用實例，讓學生在數據科學和AI時代的各行各業中領先一步。

Key Features 課程特色

- Integrating latest developments in data science and artificial intelligence
  課程涵蓋「大數據」與「人工智能」兩大熱點，畢業即可踏入高薪行業

- Interdisciplinary teaching team consisting of experts from computer science, statistics, as well as information management
  由電腦科學、統計學和信息管理等範疇的專家組成跨學科的課程團隊

- Well-known companies from the industry serving as programme consultants and providing strong teaching supports
  由業界知名商業機構擔任課程顧問及提供強大課程支援

Target Students 課程對象

- People who perform big data analytics in their job duties
  從事大數據分析的人員

- People taking part in AI or machine learning projects
  從事或管理人工智能及機器學習相關項目的人員

- People interested in data science and AI, and aspired to pursue a career in related areas
  對數據科學及人工智能感興趣，並有志於從事相關行業的人士

Career Prospect 就業前景

Fueled by the recent advances in technologies, the global demand for data science and AI talents is increasing exponentially. Some job titles that are in high demand in Hong Kong as well as globally include:
隨着相關科技之急速發展，近年香港以至全球對於數據科學及人工智能的人才需求出現幾何級數的增長。現時，多個專業都缺乏相關人才，其中包括：

- Data scientist 數據科學家
- Big Data developer 大數據開發人員
- Big Data analyst 大數據分析師
- AI developer / architect 人工智能開發人員 / 架構師
- AI scientist / researcher 人工智能科學家 / 研究員

Reference Salary 薪酬參考

Average Monthly Salary in 2020 (Hong Kong Region)

Job Title	Salary
IT Architect	$57890
Business Analysis Manager	$50338
Senior Data Analyst	$35189
Data Analyst	$31344

Source: JobsDB Salary Survey 2020

HKD 港幣

Monthly Salary Range in 2020 (US Region)

Job Title	Salary Range
AI Researcher	$12,593 - $126,260
AI Architect	$20,020 - $151,447
Big Data Analyst	$38,104 - $87,833
Big Data Developer	$51,020 - $107,854
Data Scientist	$23,572 - $123,031

Source: ZipRecruiter.com

HKD 港幣

Professional Recognition 專業認可

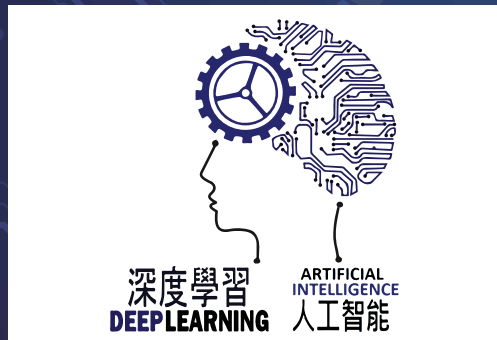The programme facilitates students to obtain professional recognitions, such as:
課程有助學生獲得以下專業資格：

- Certified Professionals For Apache projects (CPFA)
- Google Professional Data Engineer
- AWS Certified Big Data ─ Specialty
- SAS® Global Certification Program
- Microsoft Certifications (Data Engineer/Data Scientist/AI Engineer)

Programme Facilities 課程設施

Students have a chance to use the following state-of-the-art computing laboratories and facilities.
學生可以使用下列多個尖端電腦實驗室和設施。

Research and Development Centres 研發中心

Deep Learning and
Cognitive Computing Centre (DLC³)
深度學習與認知計算中心
https://dlc.hsu.edu.hk/

Big Data Intelligence Centre (BDIC)
大數據智能中心
https://bdic.hsu.edu.hk/

Laboratory Facilities 實驗室設施

Decision Sciences
Technology Laboratory
決策科學科技實驗室

Applied Statistics
Laboratory
應用統計實驗室

Virtual Reality and
Big Data Analytics Laboratory
虛擬實境及大數據分析研究實驗室

Industry Support 業界支持

The programme receives strong supports from well-known companies in the industry
本課程得到業界知名機構在不同範疇提供支援

- **Curriculum design consultants**: the curriculum is designed in consultation with industrial partners, to make sure the course contents meet the fast-changing industrial demand
  課程設計顧問：本課程的設計參考來自業界顧問提供的意見，以確保內容緊貼最新形勢和業界需求

- **Software systems support**: state-of-the-art software platforms and computing resources are available to our students and supported by our industrial partners
  軟件系統支援：本課程得到業界提供最新的相關軟件系統，以及電腦學習資源上的支援

- **Teaching support**: some of the industrial partners, including IBM, provide active and practical teaching support
  教學支援：本課程得到部分商業夥伴（包括IBM）提供實質的教學支援

Interdisciplinary Teaching Team 跨學科教學團隊

師資	Profiles
陳偉光 教授 澳大利亞新南威爾斯大學博士 自然語言處理，人工智能	Samuel CHAN, PhD (UNSW) Professor Natural Language Processing, Artificial Intelligence
許溢宏 教授 美國維珍尼亞理工大學博士 商業分析，運營管理	Yer Van HUI, PhD (Virginia Tech) Professor Business Analytics, Operations Management
梁志堅 教授 美國維珍尼亞理工大學博士 供應鏈管理，空運物流管理	Lawrence LEUNG, PhD (Virginia Tech) Professor Supply Chain Management, Air Cargo Logistics Management
潘忠強 教授 加拿大多倫多大學博士 數據挖掘，信息檢索	Chung Keung POON, PhD (UToronto) Professor Data Mining, Information Retrieval
蔡少佳 副教授 香港浸會大學博士 機器學習，模式識別，圖像處理	Siu Kai CHOY, PhD (HKBU) Associate Professor Machine Learning, Pattern Recognition, Image Processing
何道森 副教授 香港理工大學博士 大數據分析，物聯網應用，商業智慧	George HO, PhD (HKPolyU) Associate Professor Big Data Analytics, Internet-of-Things, Business Intelligence
林樹仁 副教授 香港城市大學博士 機器學習，數據挖掘，圖像處理	Shu Yan LAM, PhD (HKCityU) Associate Professor Machine Learning, Data Mining, Image Processing
劉海 副教授 香港城市大學博士 機械人網絡，雲計算，群體智能	Hai LIU, PhD (HKCityU) Associate Professor Robotic Networks, Cloud Computing, Swarm Intelligence
巫耀榮 副教授 香港科技大學博士 物流系統優化，智慧系統設計	Daniel MO, PhD (HKUST) Associate Professor Logistics Systems Optimization, Design of Intelligent Systems
王越 副教授 香港科技大學博士 機器學習，自然語言處理	Yue WANG, PhD (HKUST) Associate Professor Machine Learning, Natural Language Processing
黃惠虹 副教授 香港中文大學博士 知識管理和決策支援系統	Collin WONG, PhD (CUHK) Associate Professor Knowledge Management and Decision Support System
黃彥璋 副教授 香港大學博士 運籌學和優化，人工智能，虛擬實境	Eugene WONG, PhD (HKU) Associate Professor Operations Research and Optimisation, Artificial Intelligence, Virtual Reality
陳謝天 助理教授 香港中文大學博士 無線通信與網絡，機器學習	Tse Tin CHAN, David, PhD (CUHK) Assistant Professor Wireless Communications and Networking, Machine Learning
朱振輝 助理教授 香港中文大學博士 數據挖掘與人工智能，金融預測模型	Carlin CHU, PhD (CUHK) Assistant Professor Data Mining and Artificial Intelligence, Financial predictive modelling
侯云 助理教授 英國倫敦帝國學院博士 車聯網，智慧城市，無線網絡優化	Yun HOU, Aileen, PhD (Imp Lond) Assistant Professor V2X, Smart City, Wireless Network Optimization
馬裕得 助理教授 美國普渡大學博士 網絡物理系統安全和私隱	Chris MA, PhD (Purdue) Assistant Professor Security and Privacy of Cyber Physical Systems
馬凱琳 助理教授 香港理工大學博士 大數據與機器學習交通網絡分析	Helen MA, PhD (HKPolyU) Assistant Professor Big Data and Machine Learning in Transportation Network Analysis
胡鎮浩 助理教授 香港理工大學博士 工業物聯網，智慧物流與製造	Jack WU, PhD (HKPolyU) Assistant Professor Industrial Internet-of-Things, Smart Logistics and Manufacturing
陳志江 高級講師 香港中文大學博士 人工智能（多智能體系統），博弈論	Chi Kong CHAN, PhD (CUHK) Senior Lecturer Multi-Agent Systems, Game Theory
何健漢 講師 英國薩里大學博士 數據科學，人工智能，區塊鏈和加密貨幣	Roy HO, PhD (Surrey) Lecturer Data Science, Artificial Intelligence, Blockchain and Cryptocurrency

Programme Details 課程詳情

Programme Duration 學制

- One year (Full-time)
  一年（全日制）

- Two years (Part-time)
  二年（兼讀制）

Medium of Instruction 授課語言

- English
  英語

Study Plan 修讀計劃

Semester 1: Four major cores
第一學期：四個必修科目

| Computing with Big Data 大數據計算 [1] | Big Data Management 大數據管理 | Data Mining 數據挖掘 | Statistical Modeling 統計模型 |

Semester 2: One major core and three major electives*
第二學期：一個必修科目和三個選修科目*

| Artificial Intelligence and Machine Learning 人工智能與機器學習 [2] | Marketing Analytics with Machine Learning 機器學習輔助市場分析 | Distributed Systems and Cloud Computing 分佈式系統與雲計算 |
| Big Data Security and Privacy 大數據安全與私隱 | Topics in Data Science and Artificial Intelligence 數據科學與人工智能專題 | Supply Chain Modeling and Analytics 供應鏈模型與分析 |

■ Major core 必修科目   ■ Major elective 選修科目

* Electives to be offered will be subject to the curriculum plan of each academic year
* 選修科目將取決於該學年的課程計劃

This module has been included in the list of reimbursable courses under the Continuing Education Fund. The mother programme (Master of Science in Data Science and Artificial Intelligence) of this module is recognised under the Qualifications Framework (QF Level 6). CEF reimbursement is only applicable to local students. CEF Course Code: (1) 34Z136429; (2) 34Z136437

Graduation Requirements 學位授予

Complete and obtain a Grade D or above in 8 modules (24 credits), including five core modules and three major elective modules; and obtain a minimum cumulative GPA of 2.0
完成8個科目（包括5個必修科目及3個選修科目，共24學分）並於每科取得D級或以上成績，及累積平均積分點達到2.0或以上。

Admission Requirements 入學要求

- A bachelor's degree in science, technology, engineering, business, social science or related disciplines from a recognized university; and
  具有獲認可的大學理科、工科、商科、社會科學或相關學科的本科學歷或同等學歷；及

- Fulfilment of one of the following English language proficiency requirements if the applicant's bachelor's degree was not obtained from a university/tertiary institution where English is the medium of instruction.
  如果頒發申請人學士學位的大學或大專院校並非以英語為教學語言，則申請人需要完成以下任何一項英語語言能力考試。

  - TOEFL (paper-based): $\geq$550, or TOEFL (internet-based): $\geq$79, or TOEFL-iBT Special Home Edition: Overall $\geq$79
  - IELTS: $\geq$6.0
  - TEM-4: $\geq$70
  - CET–6: $\geq$430 or "Pass" if the test was taken before June 2005
  - An equivalent qualification

Exceptional consideration will be made for applicants who fall short of the admission requirements. Five percent of the admission quota is reserved for the exceptional cases.
未能達到入學要求的申請人將作特別考慮。特殊情況獲佔百分之五的錄取配額。

學費 (2022/23)
Tuition Fee (2022/23)

The tuition fee covers the whole programme. Deposit payment is HK$43,200 (local applicant) / HK$56,160 (non-local applicant). All payments are non-refundable and non-transferable.
學費涵蓋了整個課程。按金為港幣 43,200（本地生）/ 港幣 56,160（非本地生）。所有付款均不可退款且不可轉讓。

Local Applicant 本地生
HK$172,800 (Total 24 Credits)
港幣172,800元（總計24學分）

Non-local Applicant 非本地生
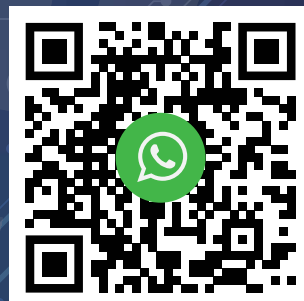HK$224,640 (Total 24 Credits)
港幣224,640元（總計24學分）

Scholarships 獎學金

- Outstanding Student Entrance Scholarship
  「優秀新生」入學獎學金（學費減半）：HKD $86,400 (Local applicant), HKD $112,320 (Non-local Applicant).
- Distinguished Graduate Scholarship
  「優秀畢業生」獎學金：待定.
- HSUHK "Alumni Fee Reduction Scheme"
  香港恒生大學「校友減費計劃」：HKD $17,280 (Local applicant), HKD $22,464 (Non-local Applicant).

Admission Enquiries 入學查詢

Email : dsai@hsu.edu.hk
Tel. : +852 3963 5015
Homepage : https://dsai.hsu.edu.hk
WhatsApp : +852 5416 1492

香港恒生大學的歷史可追溯至1980年，由何善衡慈善基金會、何添慈善基金會、大昌貿易行、若干恒生銀行創辦人及恒生銀行，慷慨捐資成立恒生商學書院，並於2010年根據《專上學院條例》（第320章）註冊成為非牟利私立專上學院及改組成為恒生管理學院，提供多元化本科及以上學位課程，其後於2018年10月30日獲香港特區政府批准正名為「香港恒生大學」。

香港恒生大學矢志成為區內具領導地位並以博雅教育為主導的私立大學；並透過卓越的教學、研究及服務，推動社會與世界發展。香港恒生大學由五個學院組成 — 商學院、傳播學院、決策科學學院、人文社會科學學院和翻譯及外語學院，現有逾6,000名全日制學生及約200名全職教學人員。

香港恒生大學提供範圍廣泛的四年制榮譽學士學位課程及碩士學位課程。部分課程為全港首創。所有課程均獲香港學術及職業資歷評審局（HKCAAVQ）審批認可並獲中國內地、香港和台灣政府承認。