



計算機科學系
DEPARTMENT OF COMPUTER SCIENCE
香港恒生大學
THE HANG SENG UNIVERSITY
OF HONG KONG



Master of Science in Data Science and Artificial Intelligence

(MSc-DSAI)

数据科学及人工智能理学硕士



Cloud technology

Data science

Artificial intelligence

Marketing
analytics

Big data security
and privacy

Big data management

Machine learning

2024 现正招生



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

Master of Science in Data Science and Artificial Intelligence (MSc-DSAI) 数据科学及人工智能 理学硕士

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.

大数据科技，结合人工智能（AI）技术，正在改写我们的决策方式。新科技带来的颠覆性变化比目皆是。这门崭新而全面的硕士课程是为来自不同背景、对新一代大数据和AI应用有兴趣的学生而设计。在课程中，学生将会掌握大数据和机器学习相关的最新知识，以及它们的应用实例，让学生在数据科学和AI时代的各行各业中领先一步。

Key Features 课程特色

- Integrating latest developments in data science and artificial intelligence
课程涵盖「大数据」与「人工智能」两大热点，毕业即可踏入高薪行业
- Interdisciplinary programme team consisting of experts from computer science, statistics, as well as information management
由计算机科学、统计学和信息管理等范畴的专家组成跨学科课程团队
- Well-known companies from the industry (e.g. AWS and IBM) serving as programme consultants and providing strong teaching supports
由业界知名商业机构（如AWS及IBM）担任课程顾问及提供强大课程支援
- English as the medium of instruction with Putonghua consultation available
英语教学，普通话咨询
- Obtaining Master degree in a year, and be able to work in Hong Kong or mainland China, or study abroad after graduation
一年即拿硕士学位，毕业后可选择留港/回国工作，或者海外升学

Target Students 课程对象

- People who perform big data analytics in their job duties
从事大数据分析的人员
- People taking part in AI or machine learning projects
从事或管理人工智能及机器学习相关项目的人员
- People interested in data science and AI, and aspired to pursue a career in related areas
对数据科学及人工智能感兴趣，并有志于从事相关行业的人士

Career Prospect 就业前景

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:

隨著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



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：

- Google Professional Data Engineer
- AWS Certified Big Data – Specialty
- SAS® Global Certification Program
- Microsoft Certifications (Data Engineer/Data Scientist/AI Engineer)

Programme Facilities 课程设施

Students have a chance to use the following state-of-the-art computing laboratories and facilities.
学生可以使用下列多个尖端电脑实验室和设施。

Research and Development Centres 研发中心



Big Data Intelligence Centre (BDIC)
大数据及智能中心
<https://bdic.hsu.edu.hk/>

Laboratory facilities 实验室设施



Decision Sciences
Technology Laboratory
决策科学科技实验室



Applied Statistics Laboratory
应用统计实验室



Virtual Reality and
Big Data Analytics Laboratory
虚拟现实及大数据分析研究实验室

Industry Support 业界支持



The programme receives strong supports from well-known companies in the industry
本课程得到业界知名机构在不同范畴提供支援

- **Curriculum design:** the curriculum is designed in consultation with industrial partners, including IBM, to make sure the course contents meet the fast-changing industrial demand
课程设计：本课程的设计参考来自业界顾问(包括IBM)提供的意见，以确保内容紧贴最新形势和业界需求
- **Systems support:** state-of-the-art software platforms and high-end desktop with NVidia RTX3080 are available to our students
系统支持：本课程提供最新的相关软件系统，以及配备NVidia RTX3080独立显卡的计算机
- **Teaching support:** industrial partners, including AWS and Google, provide active and practical teaching support and master lectures
教学支持：本课程得到商业夥伴（包括AWS和Google）提供实质的教学支援，以及业界专家讲座

Interdisciplinary Programme Team 跨学科课程团队

陈伟森 教授 美国天普大学博士
精算建模，商业预测，金融计量经济

Wai Sum CHAN, PhD (Temple) Professor
Actuarial Modeling, Business Forecasting, Financial Econometrics

蔡少佳 教授 香港浸会大学博士
机器学习，模式识别，图像处理

Siu Kai CHOY, PhD (HKBU) Professor
Machine Learning, Pattern Recognition, Image Processing

许溢宏 教授 美国维珍尼亚理工大学博士
商业分析，运营管理

Yer Van HUI, PhD (Virginia Tech) Professor
Business Analytics, Operations Management

刘海 教授 课程主任 香港城市大学博士
机械人网络，云计算，群体智能

Hai LIU, PhD (HK CityU) Professor, Programme Director
Robotic Networks, Cloud Computing, Swarm Intelligence

潘忠强 教授 加拿大多伦多大学博士
数据挖掘，信息检索

Chung Keung POON, PhD (UToronto) Professor
Data Mining, Information Retrieval

何道森 副教授 香港理工大学博士
大数据分析，物联网应用，商业智慧

George HO, PhD (HK PolyU) Associate Professor
Big Data Analytics, Internet-of-Things, Business Intelligence

林树仁 副教授 香港城市大学博士
机器学习，数据挖掘，图像处理

Shu Yan LAM, PhD (HK CityU) Associate Professor
Machine Learning, Data Mining, Image Processing

马凯琳 副教授 香港理工大学博士
大数据与机器学习交通网络分析

Helen MA, PhD (HK PolyU) Associate Professor
Big Data and Machine Learning in Transportation Network Analysis

巫耀荣 副教授 香港科技大学博士
物流系统优化，智慧系统设计

Daniel MO, PhD (HKUST) Associate Professor
Logistics Systems Optimization, Design of Intelligent Systems

王越 副教授 香港科技大学博士
机器学习，自然语言处理

Yue WANG, PhD (HKUST) Associate Professor
Machine Learning, Natural Language Processing

黄彦璋 副教授 香港大学博士
运筹学和优化，人工智能，虚拟实境

Eugene WONG, PhD (HKU) Associate Professor
Operations Research and Optimisation, Artificial Intelligence, Virtual Reality

胡镇浩 副教授 香港理工大学博士
工业物联网，智慧物流与制造

Jack WU, PhD (HK PolyU) Associate Professor
Industrial Internet-of-Things, Smart Logistics and Manufacturing

朱振辉 助理教授 香港中文大学博士
数据挖掘与人工智能，金融预测模型

Carlin CHU, PhD (CUHK) Assistant Professor
Data Mining and Artificial Intelligence, Financial predictive modelling

侯云 助理教授 英国伦敦帝国学院博士
车联网，智慧城市，无线网络优化

Yun HOU, Aileen, PhD (Imp Lond) Assistant Professor
V2X, Smart City, Wireless Network Optimization

李檀 助理教授 香港城市大学博士
分布式机器学习，无线通信网路

Tan LI, PhD (HK CityU) Assistant Professor
Distributed Machine Learning, Wireless Communication Network

马裕得 助理教授 美国普渡大学博士
网络物理系统安全和隐私

Chris MA, PhD (Purdue) Assistant Professor
Security and Privacy of Cyber Physical Systems

张晨 助理教授 香港城市大学博士
网络安全，联邦学习，移动边缘计算

Chen ZHANG, PhD (HK CityU) Assistant Professor
Network Security, Federated Learning, Mobile Edge Computing

陈志江 高级讲师 香港中文大学博士
人工智能（多智能体系统），博弈论

Chi Kong CHAN, PhD (CUHK) Senior Lecturer
Multi-Agent Systems, Game Theory

余璐 讲师 香港浸会大学博士
无线认知网路，无线充电，无线室内定位

Lu YU, PhD (HKBU) Lecturer
Cognitive Radio Networks, Wireless Charging, Wireless Indoor Localization

Programme Details 课程详情

Programme Duration 学制

- One year (Full-time)
一年（全日制）
- Two year (Part-time)
二年（兼读制）

Medium of Instruction 授课语言

- English
英语
- Putonghua Consultation
普通话咨询

Study Plan 修读计划

Semester 1: Four major cores 第一学期：四门必修科目

Computing
with Big Data
大数据计算
1

Big Data
Management
大数据管理

Data Mining
数据挖掘

Statistical Modeling
统计模型

Semester 2: One major core and three major electives* 第二学期：一门必修科目和三门选修科目*

Artificial Intelligence
and
Machine Learning
人工智能与机器学习
2

Marketing Analytics
with Machine Learning
机器学习辅助市场分析

Distributed Systems
and Cloud Computing
分布式系统与云计算

Big Data Security
and Privacy
大数据安全与隐私

Topics in
Data Science and
Artificial Intelligence
数据科学与
人工智能专题

Supply Chain Modeling
and Analytics
供应链模型与分析

Major core 必修科目

Major elective 选修科目

* Electives to be offered will be subject to the curriculum plan of each academic year

* 选修科目将取决于该学年的课程计划



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 学位授予

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个科目（包括5个必修科目及3个选修科目，共24学分）并于每科取得D级或以上成绩，及累积平均积分点达到2.0或以上。

Admission Requirements 入学要求

- A bachelor's degree in science, technology, engineering, business, social science or related disciplines from a recognized university; and
具有获认可的大学理科、工科、商科、社会科学或相关学科的本科学历或同等学历；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.
如果颁发申请人学士学位的大学或大专院校并非以英语为教学语言，则申请人需要完成以下任何一项英语语言能力考试。
 - ♦ TOEFL(paper-based): ≥550, or TOEFL(internet-based): ≥79
 - ♦ IELTS: ≥6.0
 - ♦ TEM-4: ≥70
 - ♦ CET-6: ≥430 or "Pass" if the test was taken before June 2005
 - ♦ An equivalent qualification

**Any home-based English tests will be no longer accepted. 不接受任何在家考的在线考试。*

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.
未能达到入学要求的申请人将作特别考虑。特殊情况获占百分之五的录取配额。

学费 (2024/25) Tuition Fee (2024/25)

The tuition fee covers the whole programme. Deposit payment is HK\$44,520 (local applicant) / HK\$57,840 (non-local applicant). All payments are non-refundable and non-transferable.

学费涵盖了整个课程。定金为港币44,520（本地生）/ 港币57,840（非本地生）。所有付款均不可退款且不可转让。

Local Applicant 本地生

HK\$178,080 (Total 24 Credits)
港币178,080元 (总计24学分)

Non-local Applicant 非本地生

HK\$231,360 (Total 24 Credits)
港币231,360元 (总计24学分)

Scholarships 奖学金

- Master of Science in Data Science and Artificial Intelligent Entrance Scholarship
「优秀新生」入学奖学金：HK \$89,040 (Local Applicant), HK \$115,680 (Non-local Applicant).
- Distinguished Graduate Scholarship
「卓越/优秀毕业生」奖学金：HK \$8,000 (Excellence award), HK \$3,500 (Merit award).
- HSUHK "Alumni Fee Reduction Scheme"
香港恒生大学「校友减费计划」：HK \$17,808 (Local Applicant), HK \$23,136 (Non-local Applicant).



Admission Enquiries 入学查询

Email : dsai@hsu.edu.hk
Tel. : +852 3963 5014
Homepage : <https://dsai.hsu.edu.hk>
WeChat : MSC-DSAI
WhatsApp : +852 5416 1492



香港恒生大学（恒大）的历史可追溯至1980年，由何善衡慈善基金会、何添慈善基金会、大昌贸易行、若干恒生银行创办人及恒生银行，慷慨捐资成立恒生商学书院，并于2010年根据《专上学院条例》（第320章）注册成为非牟利私立专上学院及改组成为恒生管理学院，提供多元化本科及以上学位课程，其后于2018年10月30日获香港特区政府批准正名为「香港恒生大学」。

恒大矢志成为区内具领导地位并以博雅教育为主导的私立大学；并透过卓越的教学、研究及服务，推动社会与世界发展。恒大由五个学院组成——商学院、传播学院、决策科学学院、人文社会科学学院和翻译及外语学院，现有逾6,000名全日制学生及约200名全职教学人员。

恒大提供范围广泛的四年制荣誉学士学位课程及硕士学位课程。部分课程为全港首创。所有课程均获香港学术及职业资历评审局（HKCAAVQ）审批认可并获中国内地、香港和台湾政府承认。

QR Registration No. : 21/000423/L6
Registration Validity Period : 01/09/2021 To 31/08/2025
QF Level : 6

In case of any discrepancy between the English and Chinese versions of this leaflet, the English version shall prevail.
本课程简介以英文为准，中文译本仅供参考。

The Hang Seng University of Hong Kong is incorporated in Hong Kong with limited liability by guarantee.
香港恒生大学是一间于香港注册成立之担保有限公司。

Information updated as of October 2023. Please refer to the homepage for the latest programme information.
有关资料更新至2023年10月。请浏览课程网站以获取最新信息。