



電子計算系
DEPARTMENT OF COMPUTING
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

2022 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

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 teaching 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 serving as programme consultants and providing strong teaching supports
由业界知名商业机构担任课程顾问及提供强大课程支持
- English as the medium of instruction with supplementary Putonghua tutorials
英语教学，提供普通话辅导
- 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

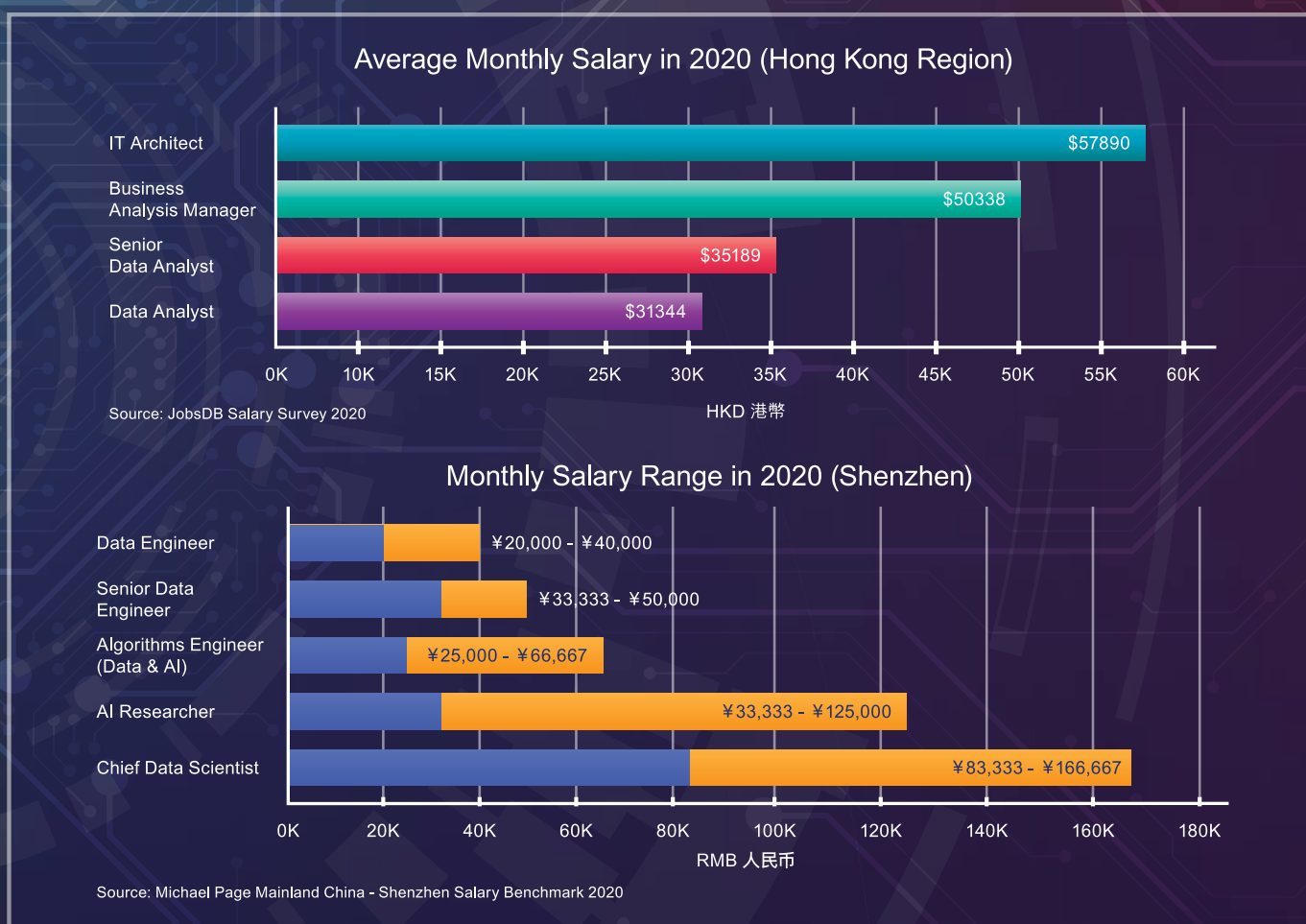
Career Prospect 就业前景

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:

随着科技的急速发展，近年香港以至全球对于数据科学及人工智能的人才需求出现几何级数的增长。现今，多个专业都缺乏相关人才，其中包括

- Data scientist 数据科学家
- Big Data developer 大数据开发人员
- Big Data analyst 大数据分析师
- AI developer / architect 人工智能开发人员/架构师
- AI scientist / researcher 人工智能科学家/研究员

Reference Salary 薪酬参考



Professional Recognition 专业认可

The programme facilitates students to obtain professional recognitions, such as:

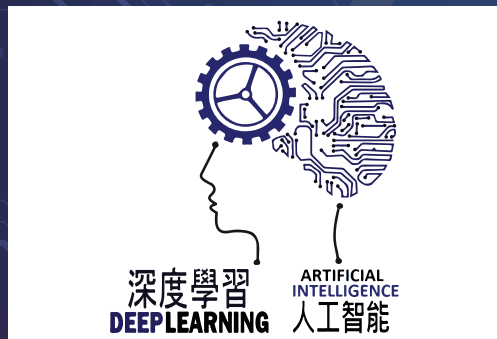
课程有助于学生获得以下专业资格：

- 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 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



Deep Learning and
Cognitive Computing Centre (DLC³)
深度学习与认知计算中心
<https://dlc.hsu.edu.hk/>



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持

- **Curriculum design consultants:** the curriculum is designed in consultation with industrial partners, to make sure the course contents meet the fast-changing industrial demand
课程设计顾问：本课程的设计参考来自业界顾问提供的意见，以确保内容紧贴最新形势和业界需求
- **Software systems support:** state-of-the-art software platforms and computing resources are available to our students and supported by our industrial partners
软件系统支持：本课程得到业界提供最新的相关软件系统，以及电脑学习资源上的支持
- **Teaching support:** some of the industrial partners, including IBM, provide active and practical teaching support
教学支持：本课程得到部分商业伙伴（包括IBM）提供实质的教学支持

Interdisciplinary Teaching Team 跨学科教学团队

师资 Profiles

陈伟光 教授	澳大利亚新南威尔士大学博士 自然语言处理·人工智能	Samuel CHAN, PhD (UNSW) Professor Natural Language Processing, Artificial Intelligence
许溢宏 教授	美国弗吉尼亚理工大学博士 商业分析·运营管理	Yer Van HUI, PhD (Virginia Tech) Professor Business Analytics, Operations Management
梁志坚 教授	美国弗吉尼亚理工大学博士 供应链管理·空运物流管理	Lawrence LEUNG, PhD (Virginia Tech) Professor Supply Chain Management, Air Cargo Logistics Management
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
蔡少佳 副教授	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) Associate Professor Machine Learning, Pattern Recognition, Image Processing
何道森 副教授	香港理工大学博士 大数据分析·物联网应用·商业智能	George HO, PhD (HKPolyU) 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 (HKCityU) Associate Professor Machine Learning, Data Mining, Image Processing
刘海 副教授	香港城市大学博士 机器人网络·云计算·群体智能	Hai LIU, PhD (HKCityU) Associate Professor Robotic Networks, Cloud Computing, Swarm Intelligence
巫耀荣 副教授	香港科技大学博士 物流系统优化·智能系统设计	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
黄惠虹 副教授	香港中文大学博士 知识管理和决策支援系统	Collin WONG, PhD (CUHK) Associate Professor Knowledge Management and Decision Support System
黄彦璋 副教授	香港大学博士 运筹学和优化·人工智能·虚拟现实	Eugene WONG, PhD (HKU) Associate Professor Operations Research and Optimisation, Artificial Intelligence, Virtual Reality
陈谢天 助理教授	香港中文大学博士 无线通信与网络·机器学习	Tse Tin CHAN, David, PhD (CUHK) Assistant Professor Wireless Communications and Networking, Machine Learning
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
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
马凯琳 助理教授	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 (HKPolyU) Assistant Professor Big Data and Machine Learning in Transportation Network Analysis
胡镇浩 助理教授	香港理工大学博士 工业物联网·智能物流与制造	Jack WU, PhD (HKPolyU) Assistant Professor Industrial Internet-of Things, Smart Logistics and Manufacturing
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
何健汉 讲师	英国萨里大学博士 数据科学·人工智能·区块链与加密货币	Roy HO, PhD (Surrey) Lecturer Data Science, Artificial Intelligence, Blockchain and Cryptocurrency

Programme Details 课程详情

Programme Duration 学制

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

Medium of Instruction 授课语言

- English
英语
- Putonghua Tutorials
普通话辅导

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



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



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门科目（包括5门必修科目及3门选修科目，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 , or TOEFL-iBT Special Home Edition: Overall ≥ 79
 - ◆ IELTS: ≥ 6.0
 - ◆ TEM-4: ≥ 70
 - ◆ CET-6: ≥ 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.

未能达到入学要求的申请人将作特别考虑。特殊情况可占百分之五的录取配额。

学费 (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.

学费涵盖了整个课程。定金为港币43,200（本地生）/ 港币56,160（非本地生）。所有付款均不可退款且不可转让。

Local Applicant 本地生

HK\$172,800 (Total 24 Credits)
港币172,800元（总计24学分）

Non-local Applicant 非本地生

HK\$224,640 (Total 24 Credits)
港币224,640元（总计24学分）

Scholarships 奖学金

- ◆ Outstanding Student Entrance Scholarship
“优秀新生”入学奖学金（学费减半）：HKD \$86,400 (Local applicant), HKD \$112,320 (Non-local Applicant).
- ◆ Distinguished Graduate Scholarship
“优秀毕业生”奖学金：待定。
- ◆ HSUHK "Alumni Fee Reduction Scheme"
香港恒生大学“校友减费计划”：HKD \$17,280 (Local applicant), HKD \$22,464 (Non-local Applicant).



Admission Enquiries 入学查询

Email : dsai@hsu.edu.hk
Tel. : +852 3963 5015
Homepage : <https://dsai.hsu.edu.hk>
WeChat : MSC-DSAI (或扫描以下二维码)
WhatsApp : +852 5416 1492



香港恒生大学的历史可追溯至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”。

香港恒生大学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。香港恒生大学由五个学院组成——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。

香港恒生大学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 November 2021. Please refer to the homepage for the latest programme information.
有关资料更新至2021年11月。请浏览课程网站以获取最新资讯。