

資訊科技 Information Technology

Python程式編寫證書課程 Certificate Programme in Python Programming

☎ 3943-9131 / 3943-9045 ✉ scs-it@cuhk.edu.hk

Course Code: 212000



Python is an open-source and popular general purpose programming language that can be used to develop many different types of desktop and web applications. Recently, with the rise of data science applications like Machine Learning, Data Analytic and Quantitative Trading, there has been a high demand for learners to study Python, including school students, educators, managers, financial experts and IT experts. The target participants of this programme will be those with little or no programming experience, and hope to learn programming in Python systematically, with an aim to develop more advanced Python programming skills in various application fields in future.

Programme Structure

Module	Title	Hours
179000	Fundamentals of Programming	30
179010	Python Programming	30
179020	Python Application Project	30

Assignment Methods and Award

Assignment, Case Studies, Project and Final Exam.

Admission Requirements

Applicants should:

- have completion of secondary education, or equivalent; or
- be a mature student aged 21 or above.

Application Fee: HK\$ 150

👤 CUSCS Instructors 🗨 Cantonese (supplemented with English)

💰 HK\$15,690 🕒 90 hours

📍 Central Learning Centre

📅 4 April 2023, Friday (6:45p.m.-9:45p.m.)



QF Level: 3
QR Registration No: 20/000683/L3
Registration Validity Period: 21/10/2020 - On-going
This course has been included in the list of reimbursable courses under the Continuing Education Fund.
This course is recognised under the Qualifications Framework (QF Level 3).
CEF Course Code: 34C13354A
CEF Course Name: Certificate in Python Programming

資料探勘及機器學習證書課程 Certificate Programme in Data Mining and Machine Learning

☎ 3943-9131 / 3943-9045 ✉ scs-it@cuhk.edu.hk

Course Code: 212300



This programme is targeted for participants who are interested to learn how to extract and analyse data to obtain valuable information and knowledge by using the popular data mining and machine learning algorithms. While theoretical and mathematical knowledge will also be introduced, the programme will focus on real-life applications of readily available data mining and machine learning techniques and algorithms to help participants to apply the knowledge at their own context. Common data mining tools such as R and Python will be used for the students to do hands-on practices. Ethical and privacy issues will also be discussed.

Programme Structure

Module	Title	Hours
169945	Introduction to Data Mining	30
191115	Machine Learning Algorithms	30
169955	Applications of Data Mining and Machine Learning	30

Admission Requirements

Applicants shall have basic knowledge of database* and computer programming#, and

- have completion of secondary education, or equivalent; or
- be a mature student aged 21 or above.

Remark:

* database such as Access, MySQL, etc

computer programming such as Python, Java, etc.

Application Fee: HK\$ 150

👤 CUSCS Instructors 🗨 Cantonese (supplemented with English)

💰 HK\$18,000 🕒 90 hours

📍 Central Learning Centre

📅 June 2023 (please refer to CUSCS website for details.)



QF Level: 3
QR Registration No: 18/000239/L3
Registration Validity Period: 21/03/2018 - On-going
This course has been included in the list of reimbursable courses under the Continuing Education Fund.
This course is recognised under the Qualifications Framework (QF Level 3).
CEF Course Code: 34C121177
CEF Course Name: Certificate in Data Mining and Machine Learning

網絡保安證書課程

Certificate Programme in Cyber Security

☎ 3943-9131 / 3943-9045 ✉ scs-it@cuhk.edu.hk

Course Code: 212100



With the rapid growth of Information and Communication Technology (ICT), people are more connected than ever, new threats related to Cyber Security are also spreading in similar rapid rate. Thus, increasing awareness of Cyber Security in both personal and corporate levels is certainly a significant and undisputable obligation to the society. This programme aims to help participants to understand basic computer and networking knowledge, as well as essential cyber security technologies to allow them to apply in personal and work environment. Participants shall be able to identify potential security threats and apply early intervention to common cyber security problems.

Programme Structure

Module	Title	Hours
149320	Fundamentals of Computer and Networking	30
149325	Introduction to Secure Programming Practices	30
149330	Practical Cyber Security	30

Admission Requirements

Applicants shall have basic computer literacy and understand operations of computing devices (PC/Mac/Mobile Devices), and

- have completion of secondary education, or equivalent; or
- be a mature student aged 21 or above.

Application Fee: HK\$150

- 👤 CUSCS Instructors 🗨️ Cantonese (supplemented with English)
- 💰 HK\$13,500 🕒 90 hours
- 📍 Central Learning Centre
- 📅 May 2023 (please refer to CUSCS website for details.)



QF Level: 3
QR Registration No: 16/000657/L3
Registration Validity Period: 06/07/2016 - On-going
This course has been included in the list of reimbursable courses under the Continuing Education Fund.
This course is recognised under the Qualifications Framework (QF Level 3).
CEF Course Code: 34C121150
CEF Course Name: Certificate in Cyber Security

辦公室及行政支援文憑課程

Diploma Programme in Office and Executive Support

☎ 3943-9131 / 3943-9045 ✉ scs-it@cuhk.edu.hk

Course Code: 203100



This programme is designed to develop students' necessary skills to be supervisory and supportive roles in small and large professional offices. Skills include: essential office text and data processing, effective office communication and business presentation through speaking and writing practices. Graduates of the programme are prepared to take up positions such as executive secretary, receptionist, executive assistant and so on.

Programme Structure

Module	Title	Hours
190030	Business English for Effective Communication	30
119107	Modern Word Processing Techniques	15
119207	Modern Spreadsheet Processing (Excel)	15
119407	Business Graphics and Presentation (PowerPoint)	15
189307	Database Software and Application (Access)	15
119117	Advanced Word Processing Techniques	15
119217	Advanced Spreadsheet Processing (Excel)	15
190040	Office Procedures	30
190050	Office Automation and Management	15
190060	Practical Chinese for Business	35

Admission Requirements

- Form 5 graduates with basic computer processing skills; or
- Equivalent qualifications; or
- Mature students aged 21 or above with basic computer processing skills.

Application Fee: HK\$150

- 👤 CUSCS Instructors 🗨️ Cantonese (supplemented with English)
- 💰 HK\$20,800 (Installment 1: HK\$10,400; Installment 2: HK\$10,400)
- 🕒 200 hours
- 📍 Central Learning Centre
- 📅 Please refer to CUSCS website for details.



QF Level: 3
QR Registration No: 07/000672/3
Registration Validity Period: 05/05/2008 - On-going
This course has been included in the list of reimbursable courses under the Continuing Education Fund.
This course is recognised under the Qualifications Framework (QF Level 3).
CEF Course Code: 34L121323
CEF Course Name: Diploma in Office and Executive Support

精選短期課程 Selected General Courses

資訊科技基礎及管理 IT Fundamentals & Management

微軟Excel試算表製作深造班 Advanced Spreadsheet Processing (Excel)

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 232-119217-01

This course will equip participants with advanced skills in Excel to complete more powerful data organisation, analysis and management tasks. Advanced functions, filters and pivot table skills for extracting and analysing data will be taught, as well as more macro programming for automation of tasks. Additional data analytic tools like What-if analysis and Scenario Manager will also be introduced.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$1,740 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 8 May 2023, Monday (6:45a.m.-9:45p.m.)

Excel VBA程式編寫 Excel VBA Programming

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-119260-01
(Class B) 231-119260-02
(Class C) 232-119260-01

Visual Basic for Applications (VBA) is a macro programming tool in Microsoft Excel for developers to create sophisticated user-oriented applications for automating tasks like data analysis. Topics include: (1) Getting start with recording macros; (2) VBA Programming fundamentals; (3) Creation of specific user forms; (4) VBA interaction with charts; (5) Data analysis in Excel; (6) Case studies.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,150 ⌚ 15 hours (5 sessions)
📍 Class A: Tsim Sha Tsui Oriental Learning Centre 📅 Class A: 1 February 2023, Wednesday (6:45p.m.-9:45p.m.)
Class B & C: Central Learning Centre Class B: 20 March 2023, Monday (6:45p.m.-9:45p.m.)
Class C: 15 May 2023, Monday (6:45p.m.-9:45p.m.)

Excel VBA程式編寫深造班 Advanced Excel VBA Programming

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 232-119265-01

This course is the continuation of 'Excel VBA Programming' course, and will teach participants more Excel VBA programming techniques. Topics include: (1) Speed up applications with Arrays; (2) Automate Pivot Table; (3) Build web queries to obtain data from Internet; (4) Create customised classes and functions; (5) Interaction with databases; (6) Mini-project.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,150 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 7 June 2023, Wednesday (6:45p.m.-9:45p.m.)

SQL實戰應用 Practical SQL

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-189350-01
(Class B) 232-189350-01

SQL (Structured Query Language) is a popular language for manipulating relational database management systems (RDBMS) because it is cross-platform and easy to use. This course will help participants to acquire the basic SQL skills for common database tasks. Topics include: (1) SQL structure, syntax and commands; (2) Managing databases; (3) Queries and sub-queries; (4) Views design; (5) SQL functions.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,100 ⌚ 15 hours (5 sessions)
📍 Class A: Central Learning Centre 📅 Class A: 6 February 2023, Monday (6:45p.m.-9:45p.m.)
Class B: Tsim Sha Tsui Oriental Learning Centre Class B: 7 June 2023, Wednesday (6:45p.m.-9:45p.m.)



系統開發及程式編寫 System Development & Programming

使用者體驗與介面概述 Introduction to UX / UI Design

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-179763-01
(Class B) 232-179763-01

This course is targeted for mobile application developers to help them understand UX/UI (User Experience / User Interface) design concepts and applications, identify the importance of UX/UI design and to equip them the foundation of design thinking. Topics includes: (1) Introduction to UX/UI Design; (2) Mobile Application in UX/UI design; (3) Design and Thinking; (4) Mobile Apps design workshop.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$1,690 ⌚ 12 hours (4 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 Class A: 6 February 2023, Monday (6:45p.m.-9:45p.m.)
Class B: 6 June 2023, Tuesday (6:45p.m.-9:45p.m.)

C#程式編寫入門攻略 C# Programming for Beginners

New

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 232-179825-01

C# is a powerful general purpose programming language and it is widely used in scientific, engineering and financial markets for developing applications in different platforms. This course will introduce to beginners the basic C# programming concepts and techniques. Topics include: (1) Basic Syntax and structure of C# program; (2) Overview of .NET Framework; (3) Looping and branching; (4) Data Types; (5) Input and Output; (6) Self-defined Structs; (7) Mini Project.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$1,980 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 25 May 2023, Thursday (6:45p.m. – 9:45p.m.)

Java入門攻略 Java Programming for Beginners

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-179852-01
(Class B) 232-179852-01

Java is a very popular programming language for creating desktop and mobile applications. This course will teach basic Java programming techniques for beginners with little or no programming experience. Topics include: (1) Setting up computer for Java programming; (2) Basic Java structures and syntax; (3) Branching and looping; (4) Basic HTML; (5) Introduction to Object Oriented Programming concepts.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$1,910 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 Class A: 9 January 2023, Monday (6:45p.m.-9:45p.m.)
Class B: 7 June 2023, Wednesday (6:45p.m.-9:45p.m.)

Python程式編寫入門 Introduction to Python Programming

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-179600-01
(Class B) 231-179600-02
(Class C) 231-179600-03

Python is a general purpose scripting language that are being used to develop websites like Google and Yahoo. This course is designed for beginners and will cover Python from basic to feature like using Google Web Services. Topics include:(1) Basic Python structure and syntax; (2) Control and Iteration; (3) Functions; (4) Files, Strings and Lists; (5) Regular Expressions; (6) Network and Web Services.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$4,010 ⌚ 30 hours (10 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 Class A: 10 January 2023, Tuesday (6:45p.m.-9:45p.m.)
Class B: 15 March 2023, Wednesday (6:45p.m.-9:45p.m.)
Class C: 4 April 2023, Tuesday (6:45p.m.-9:45p.m.)

精選短期課程 Selected General Courses

Excel之數據分析入門 Introduction to Data Analytic Using Excel

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-169935-01

This course will introduce participants to the basic concepts of statistical and data analysis, and how to perform basic analytical tasks using Excel. Topics include: (1) Data Visualisation techniques using Excel; (2) Statistical Analysis basics; (3) Time Series Analysis and Forecasting; (4) Principal Component Analysis; (5) Use of Clustering; (6) How to link Excel with R for data mining tasks.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,020 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 21 February 2023, Thursday (6:45p.m.-9:45p.m.)

Python之量化交易應用 Quantitative Trading with Python

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-169955-01

This course will help participants to use Python to perform automated quantitative finance and trading. Topics include: (1) Python basics; (2) Data management with Python; (3) Database Integration; (4) Web scraping with BeautifulSoup and Selenium; (5) Automatic performance monitoring; (6) Backtesting techniques; (7) Introduction to Machine Learning techniques for forecasting.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$4,010 ⌚ 30 hours (10 sessions)
📍 Central Learning Centre 📅 2 February 2023, Thursday (6:45p.m.-9:45p.m.)

Python之統計分析 Statistical Analysis with Python

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-179607-01

This course will help participants to perform basic statistical analysis using Python. Topics include: (1) Python basics - syntax, data type, control and functions; (2) Using Pip and Anaconda; (3) Use of Python libraries and packages (e.g. Pandas, Numpy, Scipy and iPython, etc.); (4) Basic data cleaning and processing techniques; (5) Introduction to Analytical and Statistical modelling techniques.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$4,010 ⌚ 30 hours (10 sessions)
📍 Central Learning Centre 📅 14 April 2023, Friday (6:45p.m.-9:45p.m.)

Python之機器學習應用 Machine Learning with Python

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: (Class A) 231-191110-01
(Class B) 231-191110-02

This course will explain the motivation and impact of Machine Learning and Deep Learning, and teach how to design intelligent systems that can learn from complex and large-scale datasets using Python. Topics include: (1) Data management with Python; (2) Web scraping; (3) Data Visualisation; (4) Introduction to Machine Learning; (5) Use of Scikit-learn; (6) Deep learning with Tensorflow; (7) Mini project.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$4,010 ⌚ 30 hours (10 sessions)
📍 Central Learning Centre 📅 Class A: 13 January 2023, Friday (6:45p.m.-9:45p.m.)
Class B: 14 March 2023, Tuesday (6:45p.m.-9:45p.m.)

深度學習入門 Introduction to Deep Learning

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-169978-01

This course is an introduction to Deep Learning, a branch of Machine Learning in development and applications of Modern Neural Networks. Topics include: (1) Deep Learning (DL) basics; (2) Math review, Learning in Neural Networks, Backpropagation; (3) Keras/TensorFlow; (4) CNNs, RNNs, Deep Belief Nets; (5) Neural Turing Machines, Unsupervised DL; (6) Deep Reinforcement Learning; (7) DL Applications reviews.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,050 ⌚ 15 hours (5 sessions)
📍 Central Learning Centre 📅 7 February 2023, Tuesday (6:45p.m.-9:45p.m.)



Unreal Engine 3D電腦遊戲設計入門 Introduction to 3D Game Design Using Unreal Engine

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 232-179995-01

This course will help participants to learn how to develop basic 3D computer games using the popular Unreal Engine platform. Topics include: (1) Familiar with Unreal Engine environment; (2) Setup basic Projects; (3) Level Editor; (4) Actors and Resources; (5) Introduction to Blueprints; (6) Game Controls and User Interfaces; (7) Collisions management; (8) Mini-project.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$3,780 ⌚ 30 hours (10 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 6 May 2023, Saturday (2:30p.m.-5:30p.m.)

Flutter之跨平台流動應用程式開發 Cross-platform Mobile Application Development Using Flutter

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-179275-01

Flutter is a mobile UI framework for building both iOS and Android applications natively. This course will teach participants to use Flutter with Dart language and Firebase to develop cross-platform applications. Topics include: (1) Flutter Setup; (2) Dart Basics; (3) Using Widgets; (4) Scaffold; (5) Notification; (6) Navigation; (7) Graphics and Animation; (8) Firebase Integration; (9) UX considerations.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$3,750 ⌚ 30 hours (10 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 2 March 2023, Thursday (6:45p.m.-9:45p.m.)

C程式編寫入門 Introduction to C Programming

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-179726-01

C is a powerful cross-platform, general purpose programming language and is widely used in different platforms and operating systems. This course will teach beginners the basic programming concepts and techniques using C. Topics include: (1) Basic Syntax and structure of C programme; (2) Looping and branching; (3) Array and pointer; (4) Dynamic memory allocation; (5) Self-defined functions.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$1,910 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 6 March 2023, Monday (6:45p.m.-9:45p.m.)

HTML5及CSS之網站開發入門 Introduction to HTML 5 and CSS Website Development

☎ 3943-9131 ✉ scs-it@cuhk.edu.hk Course Code: 231-169780-01

HTML5 is a new standard that helps building better modern web applications. With HTML5, you can use more descriptive tags and new tools to design structure of web page easily. Furthermore, special effects and improved interface on web form can be achieved by HTML5 tags. By integrating Javascript to HTML5, developers can build web storage for accessing data easily. The objective of this course is to teach participants how to use HTML5 to design web application development with special effects and data handling.

👤 CUSCS Instructor 🗣 Cantonese (supplemented with English) 💰 HK\$2,190 ⌚ 15 hours (5 sessions)
📍 Tsim Sha Tsui Oriental Learning Centre 📅 19 January 2023, Thursday (6:45p.m.-9:45p.m.)