

Bachelor of Science (Honours) in

APPLIED COMPUTING (BSC-AC)

計算機應用(榮譽)理學士



Department of Computing



AN APPLIED COMPUTING DEGREE PROGRAMME FOR THE FUTURE - BSC-AC 面向未來的電腦IT學士課程 - BSC-AC

From Al and mobile computing to e-commerce, computers and their applications have become the enabling technologies for modern societies and smart cities in the future. However, Hong Kong and the world at large are now facing a shortage of software development experts. Our Applied Computing degree programme aims to train computing and IT professionals for various sectors.

Programme Characteristics

- Include traditional courses of Computer Science as well as hot topics such as Artificial Intelligence and Mobile Computing
- Secondary focus on user experience design, graphics and multi-media subjects
- Small class teaching: class size does not exceed 35 students for lab-based modules in general

人工智能、移動軟件、用戶體驗設計、雲端科技、電子商貿…… 近年計算機科學在多個應用 範疇都取得了重大成果,而本港以至環球相關的科技人才卻相對缺乏。有見及此,香港恒生 大學電子計算系開創了一門面向未來的「計算機應用理學士」學位課程,以滿足不同界別對 電腦及資訊科技人才之渴求。

課程特色

- 涵括計算機科學(Computer Science)的傳統科目以及近年的熱門議題,比如人工智能 (Artificial Intelligence) 和移動App開發(Mobile Computing)等課程
- 輔以用戶體驗設計(User Experience Design)、電腦圖像和多媒體等學科
- 實施小班教學,技術科目一般不多於35人一班

Words from Our Graduates 畢業生的話

I am very thankful to this place, where I had lots of joyful learning experiences. I had a lot of opportunities to develop my talents. The valuable chances to visit banks and companies helped me get familiar with the current market. Last summer, I joined a cultural exchange programme and completed my internship. Albert Einstein once said, "Education is what remains after one has forgotten everything he learned in school". I believe what we earned from this place is far more than what we forgot.

Chan Wing Yan, Graduate 2020

I am glad to have studied in the computing programme in the HSUHK. This pioneering programme was launched in 2016. Here, the professors provided me with a lot of guidance and opportunities to participate in internships and competitions. I am grateful for the support I got from the university. I enjoyed learning at the HSUHK. My studies here have been transformed into my experiences and better equipped me.

Tai Shing Pong, Graduate 2020





PROGRAMME FEATURES 課程特色

BSC-AC is a career-oriented programme that focuses on the essential skills related to software development, with selected traditional and advanced topics from computing, computer science, as well as user-interface design. The focus is on the practical aspect rather than theoretical. The programme is supplemented by subjects in various application areas.

BSC-AC是一門以職業需求為主導的課程。 課程傳授與軟件開發相關的各種實用技能, 內容選自電腦學、電腦科學、用戶介面設計 等,從基本到進階的各種科目。課程強調實 際應用而非理論,並包括各種應用學科。

Computing and Software Development

電腦學及軟件研發

- Software Application Developm 程式編寫及軟件開發技巧
- Mobile Application Development 移動軟件開發
- Web Application Development 網站程式開發

Computer Science 計算機科學

- Artificial Intelligence 人工智能 Big Data and Machine Learning 大數據與機器學習 Algorithm Design 演算法設計
- Network 電腦系統與網絡

User Experience Design 用戶體驗設計

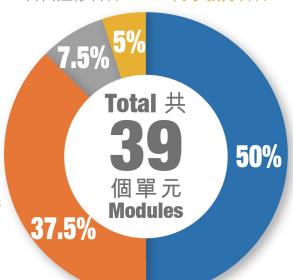
ACADEMIC OVERVIEW 課程概覽

BSC-AC is a four-year degree programme. Students need to complete a total of 120 credits from a four-year curriculum consisting of Major modules, Common Core modules, Business Education modules and Free Elective modules.

本課程為四年制本科課程。課程結構由主修 科目、共同核心科目、商學教育科目及自由 選修科目所組成。學生須於四年內修讀合共 120學分。

Free Electives 自由選修科目

Business Education ■ 商學教育科目



Common Core Modules 共同核心學科

General education, languages, and mathematics 通識教育,語文,數學等

*The percentages are based on the number of credits in each area. 顯示之百分比是以每個範疇所佔學分計算。

BSC-AC Major Modules BSC-AC 主修學科



PROGRAMME STRUCTURE

課程架構



Major Studies 主修科目

Computing 電腦學

- Programming Methodology
- Programming and Data Structures
- Computer System
- Contemporary Information Technologies

Mathematics 數學

• Linear Algebra and Calculus

Language and Culture 語文及文化

• Freshman Chinese • University English (I & II)

Liberal and Social Studies 通識及社會

- General Education
- Introduction to Business

Major Studies 主修科目

Computing 電腦學

- Computer Network
- Discrete Mathematics and Algorithms
- Database Design and Management
- Graphic and Digital Design
- Advanced Programming

Language and Culture 語文及文化

- Putonghua for Business
- English (x2)
- Chinese Literature Appreciation

Liberal and Social Studies 通識及社會

- General Education
- Principles of Management



YEAR 3

Major Studies 主修科目

Computing and User Experience Design 電腦學,用戶界面 (體驗) 設計

- Artificial Intelligence
- Computing Technologies in Web Applications
- Software Engineering
- Human-Computer Interaction
- Professionalism and Ethics in Computing
- Major Elective 1
- Major Elective 2

Liberal and Social Studies 通識及社會

- General Education (x2)
- Free Elective

YEAR 4

Major Studies 主修科目

Computing and User Experience Design 電腦學,用戶界面 (體驗) 設計

- Senior Project (2 semesters)
- User Experience Designs
- Major Elective 3
- Major Elective 4

Liberal and Social Studies 通識及社會

- General Education (x3)
- Free Elective (x2)

Major Electives 主選修科

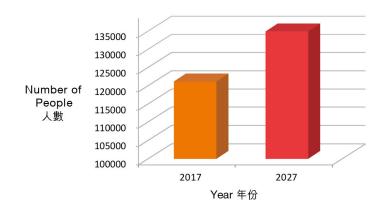
- Machine Learning Techniques and Applications
- Mobile Computing
- E-commerce Application Development
- Frontiers in Computing
- Introduction to Financial Computing
- Project Management

- Computer Animation for Interactive Content
- Multimedia Design for Organization
- Cognition in Everyday Life
- Digial Humanities and Chinese Computing
- Student Internship

(Any four of the above) (以上選讀四科)

MANPOWER REQUIREMENT - IT AND COMMUNICATION SECTOR

資訊科技及通訊人才需求



The demand for IT talents keeps surging. There is a shortage of IT talents in Hong Kong. There are a lot of career opportunities after graduation.

近年資訊科技人才的需求快速增長,本港的資 訊科技人才供不應求。學生畢業後可獲多方面 不同的就業機會。

(Data source: OGCIO, 資料來源: 政府資訊科技總監辦公室)

CAREER PATHWAYS

就業出路

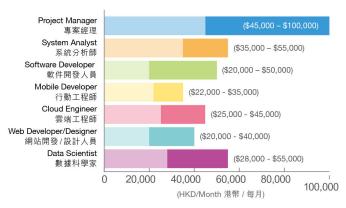
Software Development 軟件開發	Software Developer, Software Engineer, System Analyst, IT Consultant, Web Developer, Mobile Apps Designer, Entrepreneur 軟件開發人員、軟件工程師、系統分析師、資訊科技顧問、網頁開發人員、移動應用程式設計師、企業家
Creative Industry and Multimedia 創意產業及多媒體	Interface Designer, Video Game Developer, Computer Graphic Designer, Multimedia Content Developer 界面設計師、遊戲開發人員、圖像設計師、多媒體內容開發人員
IT Architecture	IT Architect
IT架構	資訊科技架構設計師
Project Management (IT)	IT Project Manager
項目管理 (IT)	資訊科技專案經理
User Experience Design	User Experience Designer
用戶體驗設計	用戶體驗設計師
Software Quality Assurance	Software Quality Assurance Professional
軟件質量保證	軟件質量保證專業人員
Education and Research	Further Education (Higher Degrees),Teacher (after obtaining PDGE), Research and Development (R&D) Personnel
教育及科研	高等學位、教師 (需要教育文憑)、研究開發人員

SALARY TREND

薪酬趨勢

IT talents in Hong Kong are in short supply. Young practitioners with 1-3 years experiences may enjoy a monthly salary of \$20,000 to \$50,000, while experienced senior professionals could earn up to \$100,000 per month.

香港目前電腦及創新科技人才供不應求,一至三年經驗的年輕從業員,月薪可達港幣\$20,000至\$50,000, 而富經驗的高級專業人員更可達月入十萬元。



Data source 資料來源:The Adecco Hong Kong Salary Guide 2021





COMPUTING FACILITIES

電腦設施

We provide state-of-the-art computing laboratories and facilities for our students. Some of the facilities the students may enjoy include:

我們提供多個尖端電腦實驗室給同學使用,其中包括:

- Deep Learning and Cognitive Computing Centre 深度學習與認知計算中心
- Decision Science Laboratory 決策科學科技實驗室
- VR Centre VR and Big Data Analytics Laboratory 虚擬實境及大數據分析研究實驗室
- IT Learning Centre 資訊科技學習中心
- Applied Statistics Laboratory 應用統計實驗室
- Multi-media Laboratory 多媒體教室

Additionally, multiple computing laboratories are available for students in every academic building on campus, including laboratories that are open 24 hours a day.

此外,每座教學大樓均設有多個電腦實驗室供同學使用,部分更為24 小時開放。

INTERNSHIP PROGRAMME

實習機會

We maintain good cooperation with the industry to provide internship opportunities for our students. The on-the-job training and tutors' supervision of internship projects help students put textbook knowledge into practice, making the learning experience even more rewarding and challenging. Some of the internship opportunities include:

我們一直和業界保持聯繫,為學生提供多個實習機會和在職培訓,讓學生能學以致用,印證課堂所學,為將來就業做出充分準備。實習機會包括:

- IBM
- NetDragon Websoft 網龍
- Caching Technology Limited
- Vico Capital Limited
- WWF Hong Kong 世界自然基金會 (香港)
- Ernst & Young 安永

- Hang Seng Bank 恒生銀行
- Broad Learning Education 博文教育
- YMCA
- DECENT
- ZynerSoft
- Hong Kong Observatory 香港天文台







SCHOLARSHIPS

獎學金

- Entrance Scholarship 入學獎學金
- Dean's Award 院長入學獎學金
- Academic Excellence Scholarship 卓越學業獎學金
- Scholarship for Principal Recommended Admission Scheme 校長推薦入學計劃獎學金
- eClass Scholarship in Applied and Human-Centred Computing* eClass應用及人本計算學獎學金*
- Overseas Learning Scholarships / Awards & Subsidies 海外學習獎學金 / 獎項及資助
- Self-financing Post-secondary Scholarship Scheme (SPSS) 自資專上獎學金計劃
- HSBC Hong Kong Scholarship 匯豐香港獎學金
- * This scholarship is only available for Year 2 and Year 3 students of the programme 該獎學金只供本課程二年級及三年級學生申請







CAMPUS LIFE

校園生活

The Hang Seng University of Hong Kong (HSUHK) has been developing rapidly. The campus is equipped with brand-new facilities, including computers, sports and accommodation facilities.

香港恒生大學(恒大)發展迅速,並設有全新的校園設施,包括多項 電腦、體育和住宿設施。

The HSUHK Jockey Club Residential Colleges with 1,200 places benefit students of the dynamic and inspiring hall life education programmes offered at HSUHK. In addition to the Residential Colleges, 206 places are provided at the Old Hall where residents can enjoy residential life.

香港恒生大學賽馬會住宿書院提供1,200個宿位,加上原有可提供206個宿位的元舍堂,可讓更多同學享受充滿活力的宿舍生活。

STUDENT EXCHANGE PROGRAMME

學生交流計劃

We encourage our students to take part in our Overseas Exchange Programme, which allows selected students to spend one semester in an overseas higher education institution. In the past few years, students from our department have embarked on fruitful exchange journeys to Asia Pacific and Europe.

我們與海外學府合作,讓同學到海外進行長達一個學期之交流學習,擴闊視野。過去幾年,本系同學成功派往亞太 及歐洲等地。

Asia-Pacific 亞太區

- Western Sydney University, Australia
- Australian Catholic University, Australia
- Tsinghua University, China
- Fudan University, China
- Nanzan University, Japan
- Osaka International University, Japan
- Pukyong National University, South Korea
- National Taiwan University, Taiwan
- National Taipei University of Technology, Taiwan

EUROPE 歐洲

- University of Applied Sciences BFI Vienna, Austria
- University of East Paris, France
- SRH University Heidelberg, Germany
- University of Adger, Norway
- Laurea University of Applied Sciences, Finland
- Amsterdam University of Applied Sciences, the Netherlands
- Stockholm University, Sweden
- University of Huddersfield, UK

NORTH AMERICA 北美洲

- Concordia University, Canada
- Illinois Wesleyan University, USA
- Susquehanna University, USA
- Albright College, USA
- Cottey College, USA
- Gordon College, USA and more...





ENQUIRIES ON APPLICATION AND ADMISSION

入學申請查詢

Year 1 Entry

Local applicants should apply through the Joint University Programmes Admissions System (JUPAS). Applicants should possess HKDSE or equivalent qualifications. **JUPAS code: JSSH03**

入讀一年級

本地申請者可透過「大學聯合招生辦法」申請。申請者應具備香港中學文憑或同等學歷。JUPAS code: JSSH03

Year 3 Entry*

Applicants can submit their applications through the HSUHK Online Application System. Applicants should have completed an Associate Degree or Higher Diploma in a related discipline.

入讀三年級*

申請者可透過恒大網上入學申請系統申請。申請者須修畢相關學科的副學士或高級文憑課程。

*Senior year (Year-3) entries on or before 2022 will be admitted under the programme title Bachelor of Arts (Hons) in Applied and Human-Centred Computing. Please refer to the programme website for information.

2022年或以前入學的高年級(三年級)學生將會以應用及人本計算學(榮譽)文學士課程名稱收錄,詳情請參閱課程網站。

Information for Non-local Applicants 非本地生資訊

Applicants with International Qualifications 國際學歷申請人:

https://registry.hsu.edu.hk/prospective-students/undergraduate/international-qualifications/

Applicants with Mainland Qualifications 內地學歷申請人:

https://registry.hsu.edu.hk/hk/prospective-students/undergraduate/jee/

Tel 電話 : 3963 5555 Fax 傳真 : 3963 5553

Website 網頁 : http://www.hsu.edu.hk

https://comp.hsu.edu.hk

Programme Email 課程查詢 : computing@hsu.edu.hk Admission Email 入學查詢 : ugadmission@hsu.edu.hk

Address 地址 : Hang Shin Link, Siu Lek Yuen, Shatin, NT

新界沙田小瀝源行善里

In case of any discrepancy between the English and Chinese versions of the contents of this pamphlet, the English version shall prevail.

木課程簡介內容以革文版木為淮,中文譯木僅供參老。

The Hang Seng University of Hong Kong is incorporated in Hong Kong with limited liability by guarantee. 香港恒生大學是一間於香港註冊成立之擔保有限公司。

Information updated as of June 2021.

有關資料更新至2021年6月。

2021. QF Level: 5

QR Registration No.: 21/000430/L5

Registration Validity Period: 01/09/2021 to 31/08/2026