

BSc Computational Finance and Financial Technology — "No Stream" - 4 Year Structure (2021 Intake)

Effective from Catalogue Term: Semester A 2021 / 2022

Yr/Sem							Offer Year
1A	CB2400 Microeconomics	CS1102 Introduction to Computer Studies	MA1200 Calculus and Basic Linear Algebra I or MA1300 Enhanced Calculus and Linear Algebra I	<u>College-specified course</u> CB2240 Introduction to Business Programming in Python	GE1401 University English or EAP (Note 1)	<u>Sem A or B</u> CHIN1001 University Chinese I (Note 3)	2021 2022
1B	CB2100 Introduction to Financial Accounting	CB3410 Financial Management	MA1201 Calculus and Basic Linear Algebra II or MA1301 Enhanced Calculus and Linear Algebra II	CS2311 Computer Programming	GE2402 English for Business Communication or EAP (Note 1)	GE1501 Chinese Civilization – History & Philosophy	
2A	EF3320 Security Analysis and Portfolio Management	CS3402 Database Systems	MA2001 Multi-variable Calculus and Linear Algebra	IS3501 Cybersecurity for Business	<u>College-specified course</u> CS3334 Data Structures	GE1401 University English (for students taken EAP)	2022 2023
2B	EF4313 Corporate Finance	MA2506 Probability and Statistics (4 credit units)	MA3001 Differential Equations	GE (Note 2)	Free Elective / Minor	GE2402 English for Business Communication (for students taken EAP)	
3A	EF4321 Derivatives and Risk Management	MS3252 Regression Analysis	EF3520 Stochastic Calculus for Finance	IS3240 Advanced Business Programming in Python	<u>College-specified course</u> MA3525 Elementary Numerical Methods		2023 2024
3B	EF4820 Derivatives Pricing I: Stock and FX	IS3101 Cryptocurrency and Blockchain	IS4335 Data Visualization	GE (Note 2)	Free Elective / Minor		
4A	EF4821 Derivatives Pricing II: Interest Rate and Credit Risk	CB4001 Honor Thesis (Sem A or B)	IS4837 Regulatory Compliance for Financial Services Technologies	IS4861 Machine Learning for Business	Major Elective 1		2024 2025
4B	Major Elective 2	GE (Note 2)	GE (Note 2)	Free Elective / Minor	Free Elective / Minor		

Minimum Credits Required

GE: GE Area courses (12 CU) + College-specified courses (9 CU)

GE: ENGL (6 CU) + CCIV (3 CU)

College: College Core courses (9 CU)

Major Core: 31 CU

Major Required Courses: 36 CU

Major Electives: 6 CU

Minor/Free Electives: 12 CU

Min. No. of credit units: 124 CU

Max. No. of credit units: 144 CU

Individual Class

Note:

(1) English Language Requirement:

Students admitted with HKDSE English Level 3 or equivalent are required to complete two 3-credit EAP courses, LC0200A English for Academic Purposes 1 and LC0200B English for Academic Purposes 2, prior to taking the 2 GE English courses (GE1401 and GE2402).

Note: Students who demonstrate that they have achieved a grade B or above in their overall course results for LC0200A will achieve 3 credits and also be considered to have satisfied the pre-requisite for entry to the GE English courses without needing to take LC0200B.

(2) Gateway Education Course Distributional Requirements

Take at least 3 credits from each of the 3 areas:

Area 1: Arts and Humanities

Area 2: Study of Societies, Social and Business Organizations

Area 3: Science and Technology

(3) Chinese Language Requirement

Students scoring below Level 4 in HKDSE Chinese Language, or scoring below Grade D in HKALE AS-level Chinese Language and Culture are required to take a 3-credit unit course CHIN1001 University Chinese I.

Major Electives : Students are required to take 2 courses (or 6 credit units) from the following list:

CB2101 Introduction to Managerial Accounting
CB2201 Operations Management
CB2300 Management
CB2402 Macroeconomics
CB2500 Information Management
CB2601 Marketing
CB3043 Business Case Analysis & Communication
CS3391 Advanced Programming
CS4335 Design and Analysis of Algorithms #
EF4312 Mergers & Acquisitions
EF4314 Corporate Valuation
EF4323 Trading Room Workshop
EF4327 Fixed Income Securities

EF4328 Asset Management
EF4331 International Finance and Banking
EF4334 Regulation and Management of Financial Institutions
EF4822 Financial Econometrics
IS2502 Social Media and Social Networks
IS3230 Java Programming for Business
IS3430 System Analysis and Design
IS4032 Mobile Apps
IS4537 Information Systems Audit
IS4543 Risk Management and Information Systems Control
IS4920 FinTech Capstone Project (6 credit units)
IS4940 Global Technology Entrepreneurship and Innovation
MA3514 Numerical Methods for Differential Equations

MA4542 Real Analysis
MGT2324 Introduction to Entrepreneurship
MKT3603 Consumer Behaviour
MS2602 Statistical Inference
MS3106 Simulation
MS3111 Quantitative Business Analysis with Visual Basic for Applications
MS3601 Optimization Methods
MS4212 Predictive Analytics & Forecasting
MS4224 Enterprise Data Mining
MS4252 Big Data Analytics

Subject to fulfilling the precursor requirement

This document is subject to change without prior notice.

Last Update: 15 Apr 2021

BSCCBU4 (CFFT) - No Stream - MA012