

**BSc Computational Finance - 4 Year Structure**

**2017 Intake**

Effective from Catalogue Term: Semester A 2017 / 2018

Yr/Sem	Offer Year					
1A	CB2100 Introduction to Financial Accounting	CB2400 Microeconomics	CS1102 Introduction to Computer Studies	MA1200 Calculus and Basic Linear Algebra I or MA1300 Enhanced Calculus and Linear Algebra I	GE1401 University English or EAP (Note 1)	2017 2018
	CB3410 Financial Management	CS2311 Computer Programming	CB2402 Macroeconomics	MA1201 Calculus and Basic Linear Algebra II or MA1301 Enhanced Calculus and Linear Algebra II	GE1501 Chinese Civilization – History & Philosophy	
2A	EF3320 Security Analysis and Portfolio Management	MA2001 Multi-variable Calculus and Linear Algebra	CS3402 Database Systems	GE - College Elective 1	Free Elective / Minor	2018 2019
2B	EF4313 Corporate Finance	MA3001 Differential Equations	MA2506 Probability and Statistics	MS3601 Optimization Methods	GE (Note 2)	
3A	EF3520 Stochastic Calculus for Finance	EF4321 Derivatives and Risk Management	MS3252 Regression Analysis	MS2602 Statistical Inference	GE - College Elective 2	2019 2020
3B	EF4822 Financial Econometrics	EF4820 Derivatives Pricing I: Stock and FX	MS3111 Quantitative Business Analysis with Visual Basic for Applications	GE (Note 2)	GE (Note 2)	
4A	EF4821 Derivatives Pricing II: Interest Rate and Credit Risk	CB4001 Honor Thesis	Major Elective 1	GE - College Elective 3	Free Elective / Minor	2020 2021
4B	EF4328 Asset Management	Major Elective 2	GE (Note 2)	Free Elective / Minor	Free Elective / Minor	

Minimum Credits Required

GE: 4 GE courses + 3 GE College Electives (21 CU)

GE: 2 ENGL + CCIV (9 CU)

College: 3 College Core courses (9 CU)

Major: 22 Major Core courses (67 CU) + 2 Major Electives (6 CU)

Minor/Free Electives: 4 courses (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, EL0200A English for Academic Purposes 1 and EL0200B 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 EL0200A 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 EL0200B.*

**(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 electives from the following list:**

CB2300 Management

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

EF4331 International Finance and Banking

EF4334 Regulation and Management of Financial Institutions

MA3514 Numerical Methods for Differential Equations

MA4542 Real Analysis

MS3106 Simulation

MS4212 Predictive Analytics & Forecasting

MS4224 Enterprise Data Mining

MS4252 Big Data Analytics

# Subject to fulfilling the precursor requirement

Last Update: 14 Sep 2020

BSCU4 (CFIN) - MA010