

**Hong Kong Shue Yan University
Minor Programme**

Department of Economics and Finance

Minor Programme Offered: Minor in FinTech

(Available for Year 1 entry: 2020 cohort onwards; Year 2 entry: 2021 cohort onwards; Year 3 entry: 2022 cohort onwards)

Students are required to complete a minimum of 15 credits by studying 3 compulsory courses and choosing 2 courses out of the 7 courses offered:

Course code	Course Title	Credits	Pre-requisite(s)	
Compulsory				
ECON 105*	Quantitative Methods for Economics and Finance	3	Nil	
FINT 100	Introduction to Fintech	3	Nil	
FIN 245*	Introduction to Corporate Finance	3	ECON105 or JOUR200 or ACCT131 or BUS220 or SOC108 or SOC221 or SOC221A or PSY103 or ADS130*	
Electives (choose 2 out of 7; at least one FINT course)				
FinTech area	FINT200	Fundamentals of Fintech Computing	3	Nil
	FINT301	Cloud and Cyber Security	3	Nil
	FINT400	Artificial Intelligence	3	Nil
	FINT401	RegTech and Fintech Regulation	3	Nil
Economics and Finance area	FIN349	Wealth Management and Planning	3	ACCT340 or BUS308 or FIN245
	FIN423	Financial Risk Analysis and Management	3	ACCT340 or BUS308 or FIN245
	ECON450	Economics and Ethics	3	Nil

**Note: Double counting of overlapping courses (with Major) is allowed for up to 6 credits. These credits will only count once towards the total credits attained by the student. Exceeding this limit of 6 credits, students should take replacement courses chosen from the list of Minor courses to fulfil the Minor credit requirement. Examples include:*

	Students may apply for double counting of overlapping courses if they studied the following course previously:
ECON 105	JOUR200 or ACCT131 or BUS220 or SOC108 or SOC221 or SOC221A or PSY103 or ADS130
FIN 245	ACCT340 or BUS308

DESCRIPTION OF COURSES (MINOR IN FINTECH)

Econ. 105 Quantitative Methods for Economics and Finance

1 Term; 3 Credits

This course aims to provide students with a quantitative foundation in mathematics for economic and financial analysis. It further aims to equip students with knowledge in various quantitative techniques, such as differentiation, integration, optimization, annuities, and present values applicable to economic and financial problems and enable students to interpret the analytical results, and a broad overview of statistics.

Fint. 100 Introduction to Fintech

1 Term; 3 Credits

The aim of this course is to provide students with an introduction to the principles of FinTech. Areas such as FinTech evolution, digital transformation trends in financial services and virtual banking will be covered. The course further aims to explore how FinTech services such as digital payments, cryptocurrencies, blockchain, big data and machine learning, are driving the business world. By the end of the course, students will possess a basic understanding of the key programming languages, such as Python and C#, for developing FinTech applications.

Fin. 245 Introduction to Corporate Finance

1 Term; 3 Credits

Integrating Accounting and Finance, the theory and practice of corporate finance in this course enable students to address the concepts and techniques of valuation of cash flows, capital budgeting decisions, risk and return, cost of capital, capital structure theories and decisions, dividend theories and policy, working capital management, and financial planning.

Fint. 200 Fundamentals of Fintech Computing

1 Term; 3 Credits

This course aims to introduce the concepts of computer programming in the context of the FinTech business environment. Students will learn basic programming knowledge and techniques, that facilitate decision making in a business environment, such as data curation methods and data visualisation methods. By the end of the course, students will be able to apply basic principles of programming to solve business problems. This course will mainly focus on the programming language of Python (Python 3) and will be supplemented by elements of other programming languages (e.g. C#, Java, etc.).

Fint. 301 Cloud and Cyber Security

1 Term; 3 Credits

This course aims to provide a comprehensive overview and a critical awareness of current problems related to cybersecurity. It further aims to provide solutions to meet the security needs of various organizations through risk analysis, incident handling, integrated network responses, compliance initiatives and cybersecurity applications. Upon completion of this course, students are able to implement privacy and security management models within the current dynamic business environment.

Fint. 400 Artificial Intelligence

1 Term; 3 Credits

This course aims to provide a comprehensive understanding of the underlying concepts of artificial intelligence. Students will develop a working knowledge of search algorithms, probabilistic representations, learning algorithms and various artificial intelligence applications. The course introduces different intelligence algorithms used in the industry which extend beyond conventional technology's capabilities. By the end of the course, students will have a thorough understanding of algorithmic decision making, and hands on experience in connecting the algorithms to artificial intelligence applications in computer vision, robotics, and related domains. The course will also prepare students for external qualifications.

Fint. 401 RegTech and Fintech Regulation

1 Term; 3 Credits

This course aims to develop an understanding of the theoretical and practical aspects concerning the evolution of FinTech and RegTech. Students will learn how to analyse and evaluate supervisory and regulatory approaches to FinTech. By the end of this course, students will be able to make recommendations to executives within the business environment, explain how to respond to the changing regulatory environment.

Fin. 349 Wealth Management and Planning**1 Term; 3 Credits**

The course aims to provide students with a comprehensive process of wealth planning and management, and equip them with the knowledge and skills that a wealth manager should acquire in assessing clients' financial needs and goals. Moreover, it helps students to develop asset allocation and portfolio management techniques. Students will also be trained to make all aspects of wealth management and planning decisions from an integrated perspective.

Fin. 423 Financial Risk Analysis and Management**1 Term; 3 Credits**

This course provides an overview of the key theoretical concepts and principles underlying financial risk analysis and management, and demonstrates how these concepts and principles can be implemented in practice in a variety of contexts. It also discusses both quantitative and qualitative approaches in evaluating different risks faced by financial institutions. Specific topics include Value at Risk, liquidity coverage ratio, Basel III capital requirements and securitization.

Econ. 450 Economics and Ethics**1 Term; 3 Credits**

This course introduces students to the relevance and importance of ethics and social responsibility in economics and finance. It aims to increase students' awareness and understanding of ethical issues in everyday life, and to provide students with useful conceptual tools to guide their analysis and decisions. After completing the course, students are expected to be equipped with basic ethical concepts so that they can identify, think critically about, and resolve ethical issues that are encountered in decision making at the individual, organizational and societal levels.