

# ECON 5040 (L1): Economics of Financial Technology

HKUST Department of Economics

2024/25 Fall

<u>Instructor:</u> C.Y. (Eric) Ng Email: <a href="mailto:ecyng@ust.hk">ecyng@ust.hk</a> Office: LSK 6016D	<u>Dates:</u> Oct 30 – Dec 18 <u>Lecture:</u> Wed 1:30 – 4:50 pm <u>Room:</u> Rm 2504, Lift 25-26
<u>Teaching Assistant:</u> Victor Yip Email: <a href="mailto:victory@ust.hk">victory@ust.hk</a> Office: LSK 6066	<u>Course website:</u> <a href="https://canvas.ust.hk">https://canvas.ust.hk</a>

## Description

This course applies economic concepts and econometrics to analyze the economic and financial implications of Fintech. It analyzes the demand and supply drivers of Fintech, economic incentives and determinants of Fintech adoption and formation, the implications of Fintech for the financial industry, central banking, economic growth, financial stability, and monetary policy. The aim is to highlight the importance of promoting healthy development of the Fintech sector and simultaneously ensuring the financial stability of the economy.

## Prerequisite

Undergraduate training in introductory microeconomics and regression analysis is expected.

## Course Intended Learning Outcomes (CILOs) and Mapped PILOs

Upon successful completion of this course, students will be able to:

1. Analyze the driving forces for Fintech adoption and formation (PILO 4, 10, 12);
2. Address the implications of Fintech on the financial services sector (PILO 4, 10, 12);
3. Conduct risk-benefit analysis on financial stability implications of Fintech (PILO 5, 10, 12);
4. Address the implications of Fintech on economic growth, central banking, and monetary policies (PILO 5, 10, 12).

## Assessments

Group Project: Written Report*	45%	Analysis on a specific Fintech sector, due Dec 11
Group Project: Presentation*	15%	In-class presentation on Dec 11
In-Class Exam	40%	To be held on Dec 18

\*Please form a group of 6 members. Please email your group information (with student names and ID numbers) to me by Nov 2. We may conduct peer evaluation to assess individual contribution to the group project. Please refer to the file “Group Project on Fintech Analysis” (downloadable from CANVAS course website under Files/Group Project) for more details.

## Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped CILOs	Explanation
Exam	CILOs 1, 2, 3, 4	The exam assesses students' understanding of the Fintech economics concepts discussed in the lectures.
Project	CILOs 1, 2, 3	The project assesses students' ability to apply the Fintech economics concepts to conduct economic and risk-benefit analysis on a Fintech sector.

## Learning Resources

Lecture slides and selected articles are downloadable from the course's CANVAS course website (<https://canvas.ust.hk>). The course materials rely on various sources, including books, academic articles, and policy papers. A full list of references is available in the CANVAS course website.

## Final Grade Rubrics

Grade	Short Description	Elaboration
A range	Excellent Performance	Demonstrate a deep understanding of the Fintech economics concepts covered in the course. Exhibits exceptional skills in utilizing them to analyse the economic and financial implications of Fintech. Excels in the exam and project.
B range (B+, B)	Good Performance	Shows a solid grasp of the Fintech economics concepts covered in the course. Demonstrates good skills in utilizing them to analyse the economic and financial implications of Fintech. Performs well in the exam and project.
B-, C+, C	Marginal Performance	Demonstrate a basic understanding of the Fintech economics concepts covered in the course. Demonstrates limited skills in utilizing them to analyse the economic and financial implications of Fintech. Performs fairly in the exam and project.
F	Fail	Students display a lack of understanding of the course materials, inadequate application of concepts, and unsuccessful completion of exam and project.

## **Course Outline**

1. Introduction (Week 1)
  - Fintech Services by Sector
  - Microeconomic and Macroeconomic Implications of Fintech
2. Determinants of Fintech Adoption and Formation (Weeks 1-3)
  - Economic Forces Driving Fintech Adoption
  - Supply and Demand Analysis of Fintech
  - Economics of Crowdfunding
  - Economic and Technological Determinants
3. Economic and Financial Implications of Fintech (Weeks 3-4)
  - Impacts on Household Saving
  - Impacts on Economic Growth
  - Implications for Incumbent Financial Institutions
  - Monetary Policy Implications
4. Fintech and Financial Stability (Weeks 4-5)
  - Benefits and Risks of Fintech on Financial Stability
  - Policy Implications for Financial Stability
  - Fintech Credit and Financial Stability
5. Macroeconomic and Financial Stability Implications of Digital Currencies (Week 6)
  - Private Digital Currencies
  - Central Bank Digital Currencies

## **Course AI Policy**

The use of Generative AI is permitted for learning only, but not for all of the assessment tasks.

## **Academic Integrity**

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to [Academic Integrity | HKUST - Academic Registry](#) for the University's definition of plagiarism and ways to avoid cheating and plagiarism.