

**Hong Kong University of Science and Technology**  
**Department of Economics**  
**ECON 5040: Economics of Financial Technology**  
**2019-20 Fall**

<b>Instructor: C.Y. (Eric) NG</b> <b>Office:</b> LSK 6073 <b>Email:</b> <a href="mailto:ecyng@ust.hk">ecyng@ust.hk</a> <b>Office hour:</b> Thu 1pm – 2pm or by appointment <b>Teaching Assistant: Dominic PEGLER</b> <b>Office:</b> LSK 6066 <b>Email:</b> <a href="mailto:djpepler@connect.ust.hk">djpepler@connect.ust.hk</a> <b>Office hour:</b> Thu 5pm – 6pm or by appointment	<b>Lecture (L1)</b> <b>Time:</b> Wed 2:00pm – 5:20pm <b>Room:</b> G001, LSK Bldg  <b>Course website:</b> <a href="https://canvas.ust.hk">https://canvas.ust.hk</a>
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**Description**

Financial technology (FinTech) refers to technologically enabled financial innovation that could result in new business models, processes or products with an associated material effect on financial markets and institutions and the provision of financial services. The emergence of FinTech firms may have both positive and negative impacts on the financial sector and the broader economy: affecting the viability of traditional financial institutions, the provision of financial services, the interest rates, and the riskiness of investment projects being financed. In other words, the rise of financial technologies may affect the financial stability of the economy and have important macroeconomic implications. This course focuses on using economic concepts to analyze the implications of financial technologies on the macroeconomy. It also addresses policy implications of FinTech on financial stability, central banking, and monetary policy. The aim is to highlight the importance of formulating appropriate policies to foster healthy development of the FinTech sector and at the same time ensure the financial stability of the economy.

**Prerequisite**

Basic knowledge of microeconomics

**Course Intended Learning Outcomes**

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

1. Use economic concepts to analyze the reasons for the rises of FinTech. (PILG 1, 4)
2. Explain implications of FinTech on the financial sector and the rest of the economy. (PILG 1, 4)
3. Identify potential benefits and risks of FinTech for financial stability. (PILG 1, 4)
4. Address implications of FinTech on central banking and monetary policy. (PILG 1, 4)

## Teaching Approach

This course is mainly delivered through lectures, in-class discussion, and a group project with presentation.

Teaching & Learning Activities	Roles in the Course	Course Learning Outcomes Addressed
Lectures	Explain key concepts and models to students.	1, 2, 3, 4
In-class discussions	Learn to develop critical thinking in analyzing Fintech questions.	1, 2, 3, 4
Group project with presentation	Learn to apply theories to analyze real world issues and present case-study analysis.	1, 2, 3, 4

## Course Outline\*

1. Introduction to FinTech
  - Types of FinTech
  - Reasons for the Rises of FinTech
2. Determinants of FinTech
  - Supply and Demand Analysis of FinTech
  - Economics of Crowdfunding
  - Economic and Technological Determinants
3. Economic and Financial Implications of FinTech
  - Impacts on Household Saving
  - Impacts on Financial Services Industry
  - Monetary Policy Implications
4. FinTech and Financial Stability
  - Potential Benefits and Risks for Financial Stability
  - Policy Implications for Financial Stability
5. Macroeconomic Implications of Virtual Currencies
  - Implications of Virtual Currencies
  - Central Bank Digital Currencies

\*Note: This is a tentative course outline. The instructor may adjust the order or compress/expand the topics while ensuring the course objectives being achieved.

## Assessments

Case Study Analysis	25%	A group project, about 6 members per group
Presentation	15%	Presentation of the group project (Oct 9)

Final Exam	60%	Individual exam (Oct 16)
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### **Teaching Materials**

There is no required textbook. Lecture notes and supplementary readings/references are downloadable from the course's CANVAS website.

### **Academic Policy**

Dishonesty or plagiarism will not be tolerated. Any student violating HKUST Academic Integrity and Honor Code (<http://www.ust.hk/vpao/integrity>) will be subjected to disciplinary procedure.