

**MN5312 – Financial Technology****MODULE TYPE/SEMESTER:** Core (20 credits), Semester 2**MODULE CO-ORDINATOR:** Dr Marcel Lukas**CONTACT DETAILS:** mfl3@st-andrews.ac.uk**AIM:**

Financial Technology (FinTech) has seen a dramatic increase of popularity in terms of business applications but also academic research in the last decade (for a review see for example, Allen, Gu & Jatiani, 2020). Importantly, FinTech is not only improving profit-margins of financial service companies but also helps to democratise finance help unbanked individuals and support responsible financial enterprises. The module equips students with a sound understanding of the technology underlying FinTech by introducing advancements in blockchain, machine learning and artificial intelligence. Building on this technological basis, it provides an overview of key trends and discuss the impact of FinTech on financial services such as payments, investing, lending, borrowing and spending.

The aim of this course is to introduce the changing landscape of financial systems and services and discuss possible factors driving and hindering this change. To do so, the module has XX objectives. First, it helps to define Financial Technology by discussing the influence of technology on all elements of financial services. This includes but is not limited to role and importance of banks, payment and point-of-sales innovation; the current trends in FinTech, Blockchain and crypto-currencies; crowdfunding and peer-to-peer platforms. Second, the module discusses the relevance of FinTech for emerging markets and the social impact of FinTech for example for the ‘under-banked’ or otherwise financially excluded individuals.

**INTENDED LEARNING OUTCOMES:**

- Understanding FinTech
- Contextual awareness of intermediation and the use of money in financial technology.
- Awareness of the role and importance of banks; payment and point-of-sales innovation.
- Knowledge of current trends in FinTech: Blockchain and Electronic currencies
- Knowledge of capital and Investment; equity crowdfunding; peer-to-peer platforms
- Analysis of FinTech startups and FinTech hubs
- Recognition of the role of emerging markets in, and social impact of, FinTech
- Awareness of the regulatory and societal perspectives of FinTech

**TEACHING FORMAT:**

- 11 x weekly 2-hour lectures
- 9 x weekly 50-minute seminars

**TOPIC OUTLINE (Indicative):**

The topics of this course will include:

- FinTech Business and Personal Applications
- Payment Technology
- Blockchain Cryptocurrency
- Crowdfunding and ICOs
- Artificial Intelligence
- Insurtech and Real Estate Technology
- Financial Security and Regulation
- Financial Inclusion

**ASSESSMENT:**

The assessment is divided into two parts. Each student is required to write three blog posts at the end of each third week. The blog should discuss one of the topics presented in class.

The second form of assessment is a group project. Its aim is to develop a business idea and plan for a financial technology company which should cover at least one of the topics discussed in class.

- Individual blog entries (3 entries, each 500 words): 40%
- Group project – individual essay (2,000 words): 30%
- Group project – presentation: 30%

**READING LIST:**

*Main Textbooks:*

[\*The Routledge handbook of fintech\*](#) (2021) edited by K. Thomas Liaw

Disrupting finance: Fintech and Strategy in the 21st century by Lynn, T., Mooney, J. G., Rosati, P., & Cummins, M. (2019). Springer Nature.

FinTech Revolution - Universal Inclusion in the New Financial Ecosystem by S. Blakstad & R. Allen (2018). Springer Nature.

*Additional references (additional readings will be provided on a weekly basis):*

Allen, F., Gu, X., & Jagtiani, J. (2020). A Survey of Fintech Research and Policy Discussion.

D'Acunto, F., Prabhala, N., & Rossi, A. G. (2019). The promises and pitfalls of robo-advising. *The Review of Financial Studies*, 32(5), 1983-2020.

Deloitte (2020) Fintech by the numbers, Incumbents, startups, and investors adapt to fintech evolution. [LINK](#)

PWC (2020), Assessing the future trends for financial services. [LINK](#)

Stewart, H., & Jürjens, J. (2018). Data security and consumer trust in FinTech innovation in Germany. Information & Computer Security.

*Organisation of courses may be subject to change without notice.*