



STUDY PROGRAMME

ECO, ECO-EEIB, ECO-ELEA, ECO-EPPA, MATA-ECO

ACADEMIC YEAR

2020 - 2021

SEMESTER

2nd

COURSE TITLE

FINTECH AND THE TRANSFORMATION OF DIGITAL SERVICES

COURSE PROFESSOR

M. SULIMIERSKA & M. AYALA

COURSE ASSISTANT

D. VILLAFÁÑEZ SAGARDOY

NATURE OF COURSE (COMPULSORY, OPTIONAL)

OPTIONAL

LANGUAGE OF INSTRUCTION

ENGLISH

ECTS CREDITS

4,5

1. COURSE OBJECTIVE

This module provides students with a practical introduction to FinTech. We will cover emerging technologies (Cloud Computing, Artificial Intelligence, Blockchain, etc.), new use cases and business models in the financial services industry. This course analyzes key aspects of the relevant regulation of the regulatory frameworks (PSD2, GDPR, Open Banking, MiFID, etc.) and environmental impact via Covid-19 implication on the financial sector by looking at problems related to cybersecurity.

2. LEARNING OUTCOMES

On completion of this course, students should:

1. Develop an understanding of the different aspects of FinTech – including underlying technologies, new business models and key players in the ecosystem.
2. Demonstrate understanding of why and how digital cash, cryptocurrencies and other value-transfer tools have emerged from innovations in computer science.
3. Discuss how the regulatory environment and ethical principles may affect a particular FinTech innovation.
4. Evaluate the trends and opportunities for the FinTech industry and its long-term impact on financial services.

The learning outcomes for this course tie in with the following learning outcomes for the European Economic Studies programme:

1. Use economic theory to assess current problems and policies;
2. Ability to demonstrate independent learning skills, communicate and work in a group, discuss and negotiate.
3. Competence to analyse the EU economic changes and policies;
4. Use their knowledge of business theory to define corporate strategy and assess corporate structures.
5. Find, select, critically evaluate and use references, data and other sources of information within a short amount of time.



6. Be autonomous in their preparation and review of materials for the courses as well as in their completion of assignments bearing different requirements in terms of methodology, workload and evaluation of the final work.
7. Work together in groups to solve problems, share tasks,
8. Think innovatively and provide constructive analytical commentary on how the evolution of EU rules and policies may impact on future market development.
9. Recognise, analyse, explain and critique the impact of EU policies on corporate strategy.

The learning outcomes for this course tie in with the following learning outcomes for the Transatlantic Affairs programme:

1. The graduate masters the most important theoretical approaches and concepts of, depending on his or her disciplinary focus, Economics, International Relations and Diplomacy Studies, Legal Studies and/or Political Science relevant for the analysis of transatlantic affairs.
2. The graduate has good knowledge of, depending on his or her disciplinary focus, the political and/or legal systems, the decision-making processes, the economic structures and the main internal and external policies of the European Union and the United States.
3. The graduate has insights into historical, political, legal and economic aspects of transatlantic affairs as well as into those policy areas that are of essential importance to transatlantic affairs. He or she can use these insights to contextualize and interpret new developments.
4. The graduate can approach the field of transatlantic affairs in a broad sense analytically by assessing the challenges in this domain with an open mind for diversity and for complex situations.
5. The graduate has the ability to critically reflect upon problems regarding an extensive range of transatlantic affairs, to adopt well-informed points of view and to communicate them effectively orally and in writing, whether working independently or in a team.
6. The graduate can independently transform complex transatlantic issues into a research question within the broader field of transatlantic affairs and, depending on his or her disciplinary focus, find, select and critically assess relevant sources, answer the question using appropriate concepts and methods and present the research results in line with the ethical rules of the chosen discipline.
7. The graduate is capable of processing a large amount of information and appropriately analyse relevant sources depending on his or her disciplinary focus within a short period of time and of suggesting possible actions that contribute to problem-solving in a creative way.

3. COURSE CONTENTS

1. What is FinTech and Digital Finance?

1. Introduction to FinTech
2. Digital Banking and AI

2. FinTech Product Innovation & Development

1. Introduction to Digital Product Development & New Ventures
2. Start-up Communities and Players in the Ecosystem: Entrepreneurs, Investors, Customers and Regulators
3. Regulatory Frameworks and FinTech Innovation (Sandbox)

3. Payments & Open Banking

1. Payments: Value-chain, Business Models and Emerging Players
2. The Open Banking Paradigm: Use Cases & Business Models
3. Regulatory Frameworks: Open Banking, PSD2 & GDPR

4. Wealth Management & Robo-advisory

1. Wealth Management: Value-chain, Business Models and Emerging Players
2. The Passive Investing Paradigm
3. Regulatory Frameworks: MiFID II, MiFIR

5. Cryptoassets & Blockchains

1. Web 3.0, Decentralized Computing and Crypto Networks
2. Intro to Bitcoin and Ethereum: Origins, Protocol and Adoption
3. Case studies: Stablecoins, Utility Tokens, Security Tokens, ICOs, NFT and DeFi



4. Regulating Cryptoassets and Cryptonetworks

6. Digital Finance -Online Lending

1. What is Fintech Lending/Credits (Online lending)?
 - a) Lending as a Service Lending (LaaS)
 - b) P2P lending Platforms
 - c) Banking-as-a-Service (BaaS)
2. The risks related to Online Lending
3. Regulating Online Lending

7. Digital Alternative Finance

1. PropTech and real estate innovation
2. InsurTech market: Use cases & Business Models
3. Infrastructure and Regtech

8. The Future of Data-Driven Finance and Cybersecurity

4. TEACHING METHOD(S)

Lectures with class participation, group work, workshops, interview and Q&A with guest speakers from the industry

5. COURSE MATERIAL

Lecture notes and readings. The readings will be made available through the course web page.

6. EVALUATION

The first session evaluation will be based on:

- A business report of 4000 words, accounting for 60pc of the final grade.
- A video project, accounting for 40pc of the final grade. This will be based on four tasks assigned during the course.

Second session:

- The business report accounts for 100pc of the final grade.

The College of Europe reserves the right to change the delivery and assessment of the course in case of restrictions related to the Covid-19 pandemic. Any communication from the Department in this regard takes precedence over the information provided in this ECTS card.