

Fintech and Regulation

SYLLABUS

VU Amsterdam Summer School

7-18 July 2025



Any general questions for the Summer School support team? Contact amsterdamsummerschool@vu.nl.

Course Details

Title	Fintech and Regulation
Coordinator(s)	Vera Lubbersen
Other lecturers	Bernhard van der Biessen
Study credits	<i>Equivalent to 3 ECTS</i>
Form(s) of tuition	On campus
Approximate contact hours	45 hours
Approximate self-study hours	35 hours

Teaching staff (in order of appearance)

Vera Lubbersen

<https://nl.linkedin.com/in/veralubbersen>

Bernhard van der Biesen

<https://www.linkedin.com/in/bernhard-van-der-biessen-4129187a/?originalSubdomain=nl>

Course description

After more than a decade since Nakamoto's Whitepaper on Bitcoin has been published, more and more financial institutions are looking into new ways to offer financial services based on Distributed Ledger Technology (DLT). Most DLTs are generally known as blockchains. Being the proud winner of the 2022 Dutch Blockchain Awards 2022 "Meaningful Education Award", we offer the best blockchain education of the Netherlands. During this summer school you will get a crash course into the blockchain basics.

The course consists of two parts. In the first part, students learn how to strategically deploy tokens within an ecosystem, such as loyalty points, cryptocurrencies, or digital assets. These digital tokens represent ownership, access rights, certification, and incentives. This is a hands-on course where you will create your own ecosystem. In the second part, students learn how this new ecosystem affects existing financial institutions and what regulatory requirements they should be aware of while applying DLT to products and services in the financial industry.

Learning objectives

At the end of this course, you

- Understand and Apply Systems Thinking to Blockchain Ecosystems: Participants will to design and optimize blockchain-based ecosystems for greater efficiency and sustainability.
- Design and Evaluate Blockchain Solutions for Real-World Challenges: Participants will gain practical skills to create and assess blockchain-driven solutions within multi-stakeholder environments.
- Are able to work in cross-cultural teams, write a lean plan and present a innovation and funding request in a Dragons' Den setting.
- Understand the role of the regulator to balance risks and opportunities of new technologies used by financial institutions
- Assess the impact of new technologies on the roles of different financial institutions in the financial system
- Assess which financial activities are regulated under which regulatory regime and understand the main differences between these regimes
- Grasp some of the difficulties and challenges in applying 'old' regulation to 'new' technologies

Assignments and Assessment

In this course there will be a group assignment consisting of two parts. During the first week, the focus will be on designing a decentralized system utilizing token-based mechanisms. Emphasis will be placed on analyzing strategies to foster engagement through incentive structures tailored to diverse stakeholder groups. During the second week, a critical evaluation will be conducted to assess the system's compliance with existing legal frameworks and regulatory requirements. The groups assignments at the end of both weeks will be graded equally weighted based on a presentation and a report.

Provisional reading list

- Several academic papers and readings distributed before the lecture
- Digital Business Ecosystems by Roel Wieringa & Jaap Gordijn
- Token Economy Shermin Voshmgir
- The Value of a Whale by Adrienne Buller
- Regenerative Finance by John Fullerton <https://capitalinstitute.org/>

Other readings (for reference):

- Mastering Bitcoin – Programming the open blockchain by Andreas M. Antonopoulos
- Bitcoin, blockchain, and cryptoassets – A comprehensive introduction by Fabian Schär and Aleksander Berentsen
- Blockchain revolution – How the technology behind Bitcoin is changing money, business and the world by Don Tapscott and Alex Tapscott

Course Schedule

There will be 3 to 4 hours of lectures scheduled each day. Additionally, you will have the opportunity to work on assignments under supervision. The lecture times will typically be between 10:00 AM and 12:00 PM, and between 1:00 PM and 3:00 PM. Supervised work sessions can take place before, during the break, or after the lectures. Due to the availability of guest lecturers, we kindly ask for a flexible attitude.

July 7 Introduction to Ecosystem Design:

Introduction blockchain How can blockchain replace trusted third party (i.e. Banks) based on games Ecosystems. Are you able to use the checks and balances of your origination in a network? How are organizations going to change if trust can be distributed?

July 8 Stakeholder Engagement & tokenization:

Tokens: Tokens are the digital representations of a particular asset, Merit or utility in a blockchain. Use cases Tokens: Customer loyalty and energy.

July 9. Self-Sovereign Identity (SSI). & Decentralized Autonomous Organizations (DAOs)

Guest lecture Grasp the foundational principles of Self-Sovereign Identity (SSI). Explain the core concepts, including decentralization and user control. Differentiate SSI from traditional identity models.

July 10

Excursion to the NFT playground. Working on exercises.

July 11 Presentations exercises

July 14 Role of the Regulator in Innovation

Explore the regulator's role in balancing risks and opportunities of new financial technologies. Engage in a collaborative exercise to test YOUR design in a regulatory framework.

July 15 Impact of New Technologies on Financial Institutions

Discuss case studies on the evolving responsibilities of banks, insurers, and asset managers. Participate in a group activity to map technological impact on financial system stability.

July 16 Regulatory Regimes and Challenges with Innovation

Compare financial activities under different regulatory regimes and their key differences. Examine difficulties in applying traditional regulations to new technologies like cryptocurrencies.

July 17 Excursion to a financial institution.

*July 18 **Presentations exercises***

** Please be advised that we try to do 2 excursions and 3-4 guest lectures. Location and topics might differ due to availability of the expert, but it will be the most valuable part of your course.*

