

ERASMUS+ COURSE SYLLABUS

Kazimierz Wielki University in Bydgoszcz

1. General Information

Course title	Cryptocurrencies and Digital Assets
Field of study / Faculty	Business, Administration and Law / Faculty of Law and Economics
Academic year	2026/2027
Semester	Winter / Summer
Course type	Lectures and practical classes (exercises)
Number of contact hours	30 hours: 15 hours of lectures and 15 hours of practical classes (exercises)
ECTS credits	4 ECTS = 100 hours of total student workload: Participation in classes: 30 h (15 h lectures + 15 h exercises) Studying literature and course materials: 20 h Preparation of the project and presentation: 25 h Individual work and homework assignments: 15 h Preparation for the final written exam: 10 h
Language of instruction	English
Prerequisites	
Assessment methods	Class activity, individual assignments and a practical project.

2. Course Content

- Digital money and blockchain fundamentals; economic comparison of proof of work and proof of stake.
- Bitcoin, Ethereum, coins and tokens: issuance, supply, incentives, governance and economic functions.
- Wallets, keys, custody, transaction verification and practical use of blockchain-explorer information.
- Centralised and decentralised exchanges: price formation, liquidity, spreads, fees and data quality.
- Stablecoins and decentralised finance: stabilisation, lending, staking, sources of returns and risks.
- Non-fungible tokens and asset tokenisation: use cases, economic rights and valuation challenges.
- Volatility, diversification limits, leverage, counterparty and smart-contract risk, fraud and biases.
- Regulation and investor protection, including MiCA; comparative digital-asset project and risk assessment.

3. Learning Outcomes

- Students explain blockchain and consensus fundamentals and distinguish cryptocurrencies, stablecoins, tokens and tokenised assets by their economic function.
- Students interpret basic market and blockchain data and compare issuance, governance, liquidity, custody and transaction arrangements.
- Students assess market, operational, technological and regulatory risks and prepare a documented comparison of selected digital assets.
- Students critically evaluate project claims and information sources, recognise fraud indicators and explain responsible approaches to digital-asset security.

4. Teaching Methods

- Lectures explaining economic concepts and technological foundations.
- Practical classes (exercises) using public market data and blockchain explorers.
- Guided demonstrations of transactions, custody and security principles.
- Case studies of digital-asset projects, stablecoins and market failures.
- Group discussions of regulation, investor behaviour and risk.
- Individual comparative project and a short presentation of findings.

Exercises are analytical or simulated. No real-money transactions, personal wallet access or disclosure of private keys are required.

5. Assessment Criteria

The written exam covers concepts, market mechanisms and risk interpretation. Practical assessment includes individual exercises and a comparative digital-asset report with a short presentation. Class activity includes critical discussion of project claims and security risks.

Grade	Criteria
3.0	Basic understanding of asset categories; identifies major risks with guidance.
3.5	Satisfactory comparison, with limited risk analysis and source evaluation.
4.0	Correct asset and data analysis; recognises custody, liquidity and other risks.
4.5	Very good comparison and well-supported technological and regulatory analysis.
5.0	Excellent independent assessment; challenges claims and integrates risk factors.

6. Lecturer Information

Name of lecturer	Paweł Błoński
Academic title	PhD
Faculty / Institute	Faculty of Law and Economics
E-mail address	blonski.pawel@ukw.edu.pl

7. Literature

Selected chapters and excerpts will be specified by the lecturer.

Required literature:

- Narayanan, A., Bonneau, J., Felten, E., Miller, A., and Goldfeder, S. (2016). *Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction*. Princeton University Press.
- Schär, F. (2021). *Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets*. Federal Reserve Bank of St. Louis Review, 103(2), 153-174. DOI: 10.20955/r.103.153-74.
- Bank for International Settlements (2023). *Blueprint for the Future Monetary System: Improving the Old, Enabling the New*. Annual Economic Report, Chapter III. BIS.

Additional literature:

- Nakamoto, S. (2008). *Bitcoin: A Peer-to-Peer Electronic Cash System*. White paper.
- Financial Stability Board (2023). *FSB Global Regulatory Framework for Crypto-asset Activities*. FSB.
- European Parliament and Council (2023). *Regulation (EU) 2023/1114 on Markets in Crypto-assets (MiCA)*. EUR-Lex. Selected provisions.