



Course Code ?	Course Title Blockchain Applications	ECTS Credits 6
Prerequisites Introduction to Cryptocurrencies and Blockchains	Department Management & MIS	Semester Fall
Type of Course Elective	Field Business/MIS	Language of Instruction English
Level of Course 1 st cycle	Lecturer(s) Mr. Andreas Vlachos	Year of Study 3 rd or 4 th
Mode of Delivery DL/ Face to Face	Work Placement N/A	Co-requisites N/A

Objectives of the Course:

The main objectives of the course are to:

- Examine the likely interaction of Blockchain applications with the banking, financial, legal and regulatory systems.
- Evaluate the disruptive nature of Blockchain technology.
- Evaluate how various industry sectors are to be disrupted by this emerging technology.
- Evaluate blockchain-based crowdfunding innovation and relevant regulation.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Understand how cryptocurrencies and blockchains disrupt financial services.
2. Evaluate how blockchain applications disrupt other industries, such as supply chains and health care.
3. Evaluate blockchain use cases in various industries.
4. Compare traditional crowdfunding methods and blockchain-based ones, such as ICOs.

Course Contents:

1. Current Landscape in Banking & Finance
2. Blockchain Applications for Banking & Finance I
3. Blockchain Applications for Banking & Finance II
4. Blockchain Applications for Data storage and Authentication
5. Blockchain Applications for Digital Rights Management and Copyrights
6. Blockchain Applications for Academic Records and Real Estate
7. Blockchain Applications for Supply Chain and Shipping
8. Blockchain Applications for Healthcare and Solar Energy Management
9. Blockchain Applications for Governments and Digital Identity
10. Traditional Crowdfunding vs Initial Coin Offerings
11. Initial Coin Offerings – Current Landscape and Developments
12. Global Adoption and Regulatory Treatment

Learning Activities and Teaching Methods:

Lectures, Practical Assignments, Theoretical Assignments

Assessment Methods:

- Mid-Term Examination: 30%
- Final Examination: 70%

Required Textbooks / Reading:

Title	Author(s)	Publisher	Year
The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology	William Mougayar, Vitalik Buterin	Wiley	2016
Supply Chain Finance and Blockchain Technology	Hofmann, Erik, Strewe, Urs Magnus, Bosia, Nicola	Springer International Publishing	2017