

Course Code	Course Title	ECTS Credits
BADM-491	Special Topics in Business: Digital Currency & Blockchain Technology	6
Prerequisites	Department	Semester
None	Management & MIS	Fall
Type of Course	Field	Language of Instruction
Elective	Business/MIS	English
Level of Course	Lecturer(s)	Year of Study
1 <sup>st</sup> cycle	Mr. Andreas Vlachos	3 <sup>rd</sup> or 4 <sup>th</sup>
Mode of Delivery	Work Placement	Co-requisites
DL/ Face to Face	N/A	N/A

## **Objectives of the Course:**

The main objectives of the course are to:

- Provide an overview of blockchain technology as the backbone of decentralized digital currencies (cryptocurrencies), such as Bitcoin.
- Examine the theory and principles by which Blockchains operate
- Provide practical examples of basic cryptocurrency transact i ons
- Introduce smart contracts over blockchains.

### Learning Outcomes:

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

- 1. Demonstrate how blockchain technology works.
- 2. Discuss and place cryptocurrencies and Blockchain ac vi es, within an appropriate technical, currency, regulatory, legal and monetary context.
- 3. Master basic usage skills around Bitcoin.
- 4. Discuss the innovative nature and usability of smart contracts.



## **Course Contents:**

- 1. History of Money
- 2. Introduction to Cryptocurrencies
- 3. Become a Cryptocurrency user
- 4. Exploring Bitcoin transactions
- 5. Cryptocurrency Wallet Protection
- 6. Cryptocurrencies beyond Bitcoin
- 7. Introduction to Blockchains
- 8. Public Vs Private Blockchains
- 9. Smart Contract Fundamentals
- 10. Ethereum Smart Contracts
- 11. Blockchain Applications I
- 12. Blockchain Applications II

### Learning Activities and Teaching Methods:

Lectures, Practical Assignments, Theoretical Assignments

#### **Assessment Methods:**

- Assignment: 20%
- Final presentation: 80%

## **Required Textbooks / Reading:**

Title	Author(s)	Publisher	Year
Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction	Arvind Narayanan, Steven Goldfeder	Princeton University Press	2016,
Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business and the World	Don Tapscott, Alex Tapscott	Penguin Books Limited	2016



# **Recommended Textbooks / Reading:**

Title	Author(s)	Publisher	Year
Mastering Bitcoin	Andreas Antonopoulos	O'Reilly Publishing	2014