

International Summer School Manipal University Jaipur (IWSMUJ2023)

Course Overview

Name of course: Decentralized Finance

Name of instructor: Dr Nupur Ojha

Session: January 2023

Language of instruction: English Number of contact hours: 36

Credit awarded: 03

Objective of course

- 1. The course will enable the students to learn concept of decentralized finance and its significance.
- 2. Elaborating the evolution of decentralized finance and its present status.
- 3. Detailing the decentralized financing infrastructure and the prominent applications.
- 4. Detailing the key issues decentralized finance solves and its future prospectus.

Syllabus

Unit 1: Introduction to Decentralized finance and its evolution, difference between centralized and decentralized finance, decentralized foundation, key issues decentralized finance answers, issues in decentralized finance status, Myths and current status.

Unit 2: Defi trading mechanism, meaning of Fungible and non-fungible tokens, market mechanism and operations, role of loans and swaps, introduction to cryptocurrency, Blockchain and the related aspects.

Unit 3: Introduction to smart contracts, Governance issues, risks and opportunities, Regulatory framework, Introduction to CBDC.

Unit 4: Credit and lending mechanism, Decentralized exchanges, Role of derivatives, Tokenization.

Organization of course

Total contact hrs 36				
1st week:	10 hrs (classes)	2 hrs (self-study/project)		
2nd week:	10 hrs (classes)	2 hrs (Mid term exam/assessment/discussion)		
3rd week:	10 hrs (classes)	2 hrs (End term exam)		



Mode of lectures: online lecture/workshop/ hands-on

Course Plan

Lecture no.	Topic	Lecture mode	Instructor
L: 1-8	Introduction to Decentralized finance and its evolution, difference between centralized and decentralized finance, decentralized foundation, key issues decentralized finance answers, issues in decentralized finance status, Myths and current status	Hybrid	Dr Nupur Ojha
L: 9-10	Defi trading mechanism, meaning of Fungible and non-fungible tokens	Hybrid	Dr Nupur Ojha
L: 11-18	Market mechanism and operations, role of loans and swaps, introduction to cryptocurrency, Blockchain and the related aspects.	Hybrid	Dr Nupur Ojha
L: 19-24	Introduction to smart contracts, Governance issues, risks and opportunities.	Hybrid	Dr Nupur Ojha
L: 25-30	Risks and opportunities, Regulatory framework, Introduction to CBDC.	Hybrid	Dr Nupur Ojha
L: 31-36	Credit and lending mechanism, Decentralized exchanges, Role of derivatives, Tokenization	Hybrid	Dr Nupur Ojha

Brief profile of the instructor

I am a passionate teacher who believes in constant learning and updating the existing skill base. I have been teaching accounting and finance related courses from last 18 years and have focused on student centric learning methodologies. I have worked with several prominent universities across the country and have been guiding research scholars from last 10 years.

