Gyanmanjari Innovative University

Course Syllabus
Gyanmanjari Institute of Management Studies
Semester-4 (MBA)

Subject: Block chain and Crypto currencies – MBAFT14514

Type of course: Major (Core)

Prerequisite:
A foundational understanding of Information Technology and Financial Management is recommended to effectively engage with the concepts of block chain and crypto currencies.

Rationale:
Block chain and crypto currencies are transforming traditional business practices and finance. Understanding these technologies equips students with critical skills necessary for navigating the evolving digital economy.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks					Total Marks
				Theory Marks		Practical Marks		CA	
CI	T	P	C	ESE	MSE	V	P	ALA	
03	00	02	04	60	30	10	20	30	150

Legends: CI-Classroom Instructions; T – Tutorial; P - Practical; C – Credit; ESE – End Semester Examination; MSE- Mid Semester Examination; V – Viva; CA-Continuous Assessment; ALA- Active Learning Activities.

Course Content:

Sr.No	Course content	Hrs	% Weightage
1	**Introduction to Block chain Technology** • Definition and characteristics of block chain • Historical evolution of block chain technology • Components of block chain: blocks, nodes, miners • Types of block chain: public, private, consortium • Consensus mechanisms: Proof of Work, Proof of Stake, and others • Smart contracts and their applications	11	25
2	**Crypto currencies and Digital Assets** • Introduction to crypto currencies: Bit coin, Ethereal, and altcoins • Crypto currency wallets: types and security measures • Tokenization and Initial Coin Offerings (ICOs) • Trading and investing in crypto currencies • Regulatory landscape of crypto currencies in India and globally • Risks and challenges of investing in digital currencies	11	25
3	**Block chain Applications in Business** • Use cases of block chain in finance, supply chain, healthcare, and real estate • Decentralized Finance (DeFi) and its implications • Non-Fungible Tokens (NFTs) and their applications • Integration of block chain with Internet of Things (IoT) and Artificial Intelligence (AI) • Case studies of successful block chain implementations	10	25
4	**Future Trends and Ethical Considerations** • Future trends in block chain technology • The role of crypto currencies in a digital economy • Ethical concerns: security, privacy, and environmental impact • The role of government and regulatory bodies • Opportunities for innovation in block chain technology	13	25

Sr. No	Practical's	Unit no	App hours
1	Create a simple Crypto currency Trading Strategy using Technical Indicators	2	4
2	Block chain and Crypto currency Regulations: An exploratory Study of Global Frameworks	2	3
3	Mitigating Security risks in Crypto currency Exchanges: A	2	4

	Risk Assessment and Management Analysis		
4	Design a Block chain-based Solution for Social Impact	4	4
5	Emerging Block chain Trends: An exploratory Study	3	4
6	Create a Simple Block chain	1	4
7	Research a Block chain use case	3	3
8	Creating a Simple Smart Contract	1	4
			30

Continuous Assessment:

Sr.No	Active Learning Activities	Marks
1	**Comparative Study** Students will be provided with two Block chain platforms. Students will make a comparative analysis of the given platforms and upload thePDF report on GMIU Web Portal.	10
2	**Crypto currency Investment Strategies** Students will explore effective investment strategies in crypto currencies to maximize returns while minimizing risk and upload the PDF report on GMIU Web Portal.	10
3	**Case study analysis** Students will be provided a case study of International Finance. Students have to analyze the case and upload the solution on GMIU Web Portal.	10
Total		30

Suggested Specification table with Marks (Theory): 60

Distribution of Theory Marks (Revised Bloom's Taxonomy)						
Level	Remembrance (R)	Understanding (U)	Application (A)	Analyze (N)	Evaluate (E)	Create (C)
Weightage	20%	25%	20%	15%	10%	10%

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

After learning the course, the students should be able to:	
CO1	Understand the fundamentals of block chain technology and its significance in various sectors.
CO2	Analyze the features, benefits, and risks associated with crypto currencies and digital assets.
CO3	Evaluate the impact of block chain technology on various industries and business models.
CO4	Discuss the future of block chain and crypto currencies, including ethical implications and societal impact.

Instructional Method:

The course delivery method will depend upon the requirement of content and the needs of students. The teacher, in addition to conventional teaching methods by black board, may also use any tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction. Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses. The internal evaluation will be done on the basis of Active Learning Assignment.

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in the laboratory.

Reference Books:

[1] "Mastering Bit coin: Unlocking Digital Crypto currencies" by Andreas M. Antonopoulos.

[2] "Block chain Basics: A Non-Technical Introduction in 25 Steps" by Daniel Dresher.

[3] "The Basics of Bit coins and Block chains" by Antony Lewis

[4] "Mastering Ethereal: Building Smart Contracts and DApps" by Andreas M. Antonopoulos and Gavin Wood

[5] "Block chain Revolution: How the Technology behind Bit coin is Changing Money, Business, and the World" by Don Tapscott and Alex Tapscott