



SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act 1956)

Re - accredited by NAAC with 'A' Grade

Founder: Prof. Dr. S. B. Mujumdar, M.Sc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

(Established under section 3 of the UGC Act 1956, by notification No.F.9-12/2001-U3
Government of India)

Sub Committee - Specialization for Curriculum Development

Post Graduate/ Under Graduate

Course Title: Block Chain

Course Code: T3603

Number of Credits: 02

Level: 03

Learning Objective/Outcome (s): Understanding Block chain & Crypto currencies and how they can be used as a tool to increase the speed, security, efficiency and transparency in financial and non-financial world.

Pre-learning: Previous knowledge of Digital Currencies, programming, economics or finance and some background in stock / derivative trading will be useful although not essential.

Course Outline

Sr. No.	Topics	Hours
1	BlockChain	
	What is Blockchain?	1.5
	Origin & journey of Blockchain	1.5
	Key Characteristics	1.5
	How Blockchain works (PKI and digital signatures)	1
	Applications of Block Chain	1
	Permissioned and Permissionless Blockchains	1
	Challenges	1.5
2	CryptoCurrencies	
	What is Cryptocurrency?	0.5
	Bitcoin & Ethereum	1.5
	Top Cryptocurrencies	1
	Cryptocurrency Wallets	1
	Why Cryptocurrencies and ICOs	1
	Cryptocurrency Mining	2
	Cryptocurrency Exchanges	1
	Bitcoin futures on CME	1

	Attempts to regulate cryptocurrencies	1
	Major frauds and hacking incidents in Cryptocurrencies	1
	Current Cryptocurrency Scenario and biggest exchanges in India	1
	Cryptocurrencies banned by RBI and Govt of India	1
	Some Cryptocurrency apps (For trading and monitoring price movements)	1
	Smart contracts, Forking (Hard & Soft)	1
	Case Studies (JPX, GEORGIA, Mersk, DAO)	2.5
	Abstract of Satoshi Nakamoto's paper & GITHUB	0.5
	Impact on IT, Economics / Finance & Politics	1
	Future of Cryptocurrencies and block chain technology	2
	Total	30

Pedagogy:

Books Recommended: Blockchain Basics (A non-technical introduction in 25 steps) by Daniel Drescher
The Internet of Money (Vol 1 &2): Talks by Andreas M. Antonopoulos
Bitcoin: A Peer-to-Peer Electronic Cash System (White paper by Satoshi Nakamoto)

Suggested Assessment/ Evaluation Methods:

Benchmarked against similar courses in other national/ international universities /organizations

S. No.	Name of the Course	Name of University where it is offered
1	Courses on Block Chain	Princeton University
2	Courses on Block Chain	Stanford University
3	Courses on Block Chain	Duke University
4	Courses on Block Chain	The University of California, Berkeley

Name of Members	Mr. Girish Joshi	Dr. Pramod Damle			
Designation	Adjunct Faculty	Professor			
Org. / Inst.	SSBF	SITM			
Signature					

Name of Experts					
Designation					
Org. / Inst.					
Signature					

Signature of Dean:

Date: