3.0 university

SARDAR PATEL INSTITUTE OF TECHNOLOGY

Post-Graduate Micro-Certifications for Blockchain Technology Specializations

01
FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY

02
ETHEREUM DEVELOPER COURSE

03
BLOCKCHAIN TECHNOLOGY IN FINANCE (FINTECH)

04
APPLICATIONS OF BLOCKCHAIN IN BUSINESS

ABOUT THE MICRO-SPECIALIZATION

This Micro-Specialization is designed as an industry relevant course to prepare the students as an industry-ready professional in the sunrise sector of Blockchain Technology. This courses will also help the young professionals and entrepreneurs to adopt digital transformation of their businesses and kickstart an efficient and tech-enabled process using the disruptive technology of Blockchain and Smart Contracts.

The hands-on and industry interactive program is designed to provide the incumbent with a conceptual clarity and contextual familiarity of the recent on-going developments in the field of Blockchain Technology enabled business processes.

The course also aims to prepare the interested candidates with DApp and DAO development skills on one of the most prominent Public Blockchain Platforms – Ethereum. This will not only enable the candidates to qualify for the currently in-demand roles of Blockchain Developers, Architects, DevOps Engineers but also function as a thought-leader and change agent in the digital transformation of the business one is currently involved in – with a special emphasis on Capital Markets and Financial Services. Business Analysts, Project Managers, Product Designers, Top Level decision makers are also the ones who would benefit immensely from the courses. The course also enables a participant to gain the skills that would be necessary to lead an entrepreneurship effort in building an innovative and creative solution using the Blockchain technology.

Emphasising on hands-on training, the course aims to engage the participants learning from Deep Tech industry professionals providing them thought-provoking, innovative insights into business cases and current applications in the industry. This will help the students to relate to the application of their learnings in the organizations they would be appearing for. This micro-specialization course aims to create an industry-academia platform of knowledge sharing, opportunity identification, talent and skill assessment and relationship building for mutually beneficial future.

ABOUT SARDAR PATEL INSTITUTE OF TECHNOLOGY

Sardar Patel Institute of Technology (SPIT) is an autonomous un-aided Research and Engineering Institute affiliated to University of Mumbai. The college was established in 1995 as an extension of its sister institute, the Sardar Patel College of Engineering, before becoming an independent unaided institute in 2005. S.P.I.T is one of the premier technical institutions of Maharashtra, offering undergraduate, postgraduate, and doctoral programs in engineering and computer applications. Dr. Bhalchandra Chaudhari is the current principal of the institution. The National Institutional Ranking Framework (NIRF) ranked it 125 among engineering colleges in 2020.

The institute is recognized as Center of Excellence (CoE) by the IBM Academic Initiative. The institute has also signed MOU with IBM, Wipro, and has a continuing association with TCS. The institute is also one of the few Nvidia GPU Research Centers in India.The institute has signed an MOU with Texas Instruments for setting up a lab and an MOU with Sony Ericsson for training telecom students. The institute has signed an MOU with Gadhia Solar Systems for an R&D project on solar energy. Host lectures by UK universities under the British Council mission 2015

ABOUT 3.0 UNIVERSITY

3.0 University™ is a pioneering academic initiative for creating a comprehensive knowledge ecosystem for blockchain technology and virtual digital assets such as NFT's, cryptocurrency coins and tokens. We have developed an in-house suite of course offerings for retail, institutional market participants and industry-at-large. We extend job-ready training for budding professionals and students with interactive and immersive sessions via industry-academia linkage. Some of the learning methodologies adopted by us are at par with global standards which include and not limited to analysis/discussions/case studies/capstone projects 3.0 UniversityTM also provides best-in-class course offerings at par with global universities and institutes for its vast network of users / customers.

3.0 University™ integrates self-paced videos with live classroom training seamlessly providing multimedia presentations that make it easy for students to understand difficult topics on blockchain technology and virtual digital assets. It has also set-up a unique 3.0 Centre for ExcellenceTM for research in blockchain technology and virtual digital assets.

3.0 University™ enables innovative and industry relevant course structures enhancing students' understanding of core concepts and their applications in a live environment via our Blockchain Lab initiative. Our faculty resources comprise of a rich pool of diversified talent working in reputed companies across the blockchain industry.

MODULE DETAILS

1 Properties of Blockchain Based Systems which could be used in various Enterprise Applications
2 Application of Blockchain to Manufacturing
3 Application of Blockchain to Agriculture
4 Application of Blockchain to Government & Public Sector
5 Application of Blockchain to Supply Chain Management
6 Application of Blockchain to Legal & Security
7 Application of Blockchain to Healthcare & Life Sciences
8 Application of Blockchain to Media & Entertainment
9 Application of Blockchain to Shipping & Logistics
10 Application of Blockchain to Travel & Tourism
11 Application of Blockchain to Real Estate
12 Application of Blockchain to Education Sector

LEARNING OUTCOMES

Upon successful completion of this course, the students should be able to:

- Understand how blockchain has disrupted select industries and certain segments of Government working
- Gain knowledge about on cost efficiencies and operational efficiencies are brought in by the use of Blockchain in select industries
- Get a clear understanding on the impact of Blockchain on select industries based on successful a real-world case study for each segment

TARGET GROUP

Students / Business Professionals who are interested in acquiring skills required to manage blockchain in public and private enterprises so as to target a job role of Blockchain Project Manager, Blockchain Advisors or Consultants, and so on.

SCOPE

Students who possess the skills and competences to proficiently assess blockchain use-case suitability and thereby support businesses by formulating justifiable solutions to problems across a range of business contexts.

WHY 3.0 UNIVERSITY

- Courses Designed and Prepared by Prominent Industry Members
- Curriculum is targeted to render the learner to be Industry Ready
- Practical training to provide hands-on training using real life examples in a lab environment
- Knowledge and Experience sharing by leading and globally recognized faculty
- Guidance on Exciting Career, Industry Connects and Placement Assistance
- Founding organization members have 22+ years of experience in the Technology Domain

HOW WOULD YOU BENEFIT WITH 3.0 UNIVERSITY PROGRAMS

- How Would You Benefit with 3.0 University Programs
- Engage with some of the best minds in the industry
- Learn from Leading and Globally recognized faculty
- Immersive learning by applying concepts to real life scenarios
- Network with current and future leaders
- Certificate by 3.0 University and its partners
- Become an Alumni of 3.0 University and enjoy its benefits
- Career Guidance and Placement Assistance

FACULTY CO-ORDINATORS

DR. PREETIDA VINAYAKRAY JANI

- M.Sc.Eng from UNSW and P.hd. from UTS Australia). At OPTUS (Aust.) she imparted industrial training in telecommunication
- Holds 5 International Patents and is also a Google Scholar
- Presently Professor in the Computer Department at SPIT, Mumbai
- Guided a number of Masters students in the field of Cyber Security, Blockchain, Wireless Technology, Secure Communication and AIML
- 30+ Publications in international journals / Books and International conferences and a member of Data Security Council of India (DSCI)

PROF. DAYANAND AMBAWADE

- Currently as Associate Professor, Electronics and Telecommunication Engineering Department, SPIT - Mumbai
- Received M.Tech in Communication Engineering from Indian Institute of Technology Bombay (IIT-B)
- More than 25+ years teaching experience in areas of Computer Networking, Cyber Security & Digital Forensics, Blockchain Technology, Network Monitoring & Infrastructre Management
- Authored two books- Linux Lab and Advanced Computer Networks. Published 50+ technical papers in International Conferences.
- Trained 1500+ students on Linux OS / Server / Network and Security Administration.

ABOUT THE FACULTY

MR. DEVI PRASAD CHOUDHURY

- Visiting Faculty - IIMC & IIIT Lucknow (Blockchain & Crypto Assets)
- Finance Shared Services
- Blockchain Futurist
- Ex-CEO Cryptoexchange
- Ex- Infosys, ICICI Bank
- IIMB Alumni

MR. PRASANNA LOHAR

- Founder & President – India Blockchain Forum
- CEO – Blockstack
- Director – Association of Emerging Technologies India
- Digital Transformation Consultant, Educator & Innovator

MR. AJOY PATHAK

- Digital Assets and Blockchain enthusiast who has been in the Cryptocurrency learning and education space since 2017.
- With a career in research into financial services, trading and risk management spanning over two decades, Ajoy adds value with his comprehensive experience of the financial markets while motivating new traders to understand, learn and manage trades in this space to become profitable traders.

MRS. SUJATA BIJWE

- Currently working as a blockchain educator with 3.0 University.
- 28 years of experience in the field of Economics, Financial Market Research, Emerging Economies Research and Market Research.
- Possesses Project Management expertise in Skill Development, Higher Education and Technical Education, and has worked in key roles in departments related to Technical Education.

MR. VENKAT GIRIDHAR

- Over 18 years of extensive industry experience in the Financial Services and IT industry.
- Worked on hedging using derivatives, valuations, analysis of asset price drivers, risk management, product development, analytics, and regulatory compliance across multi-asset classes.
- Worked extensively on blockchain technology with core focus on the trading ecosystem in the cryptocurrencies markets, as well as business applications of blockchain.
- Completed his MMS from BITS, Pilani, and MBA from Symbiosis, Pune, specialising in Finance and Systems.

MR. RAGHAVAN SUNDARARAJAN

- Over 15 years of industry experience in global commodities research, training, product design and development.
- Serves as a Visiting Faculty in graduate and post graduate colleges in Mumbai teaching Blockchain, Finance and Management.
- Instrumental in Blockchain Learning and Development initiatives for Faculty Development and Management Development Programs and delivery of the same in 3.0 University.

MR. TUSHIT VERMA

- More than three years of experience in Web3 and Ethereum development.
- Areas of interest include coding & being updated with new technology in Web3.
- Involved with blockchain since 2018 and now enjoys teaching about this amazing disruptive technology.

MS. SIDDHI JAIN

- Currently working in Research and Training Blockchain and its Application.
- Income Tax Department Trainer and has 2+ years experience in Portfolio Management, Wealth Management, Financial Analysis, and Modelling.

MR. VIVEK SINGH

- Passionate crypto entrepreneur and a strong believer in blockchain technology.
- Started blockchain journey in 2017 working on cryptocurrency development and providing blockchain training.
- In terms of Blockchain education, Vivek has mentored and taught more than 500 students in India and UAE.
- Likes to share his technical knowledge through his books published on Amazon, "How to create your cryptocurrency" and "Understand Blockchain in a day". Vivek has also designed and developed blockchain courses for few organisations in Canada and UK.
- Holds CTO position in Iotexpad (https://iotexpad.network) and is also a founder of GalaxSea, a next generation NFT marketplace

COURSE CURRICULUM

COURSE CODE	COURSE NAME	TEACHING SCHEME			CREDITS ASSIGNED			TOTAL CREDITS
		THEORY	PRACTICAL	ASSIGNMENT	THEORY	PRACTICAL	ASSIGNMENT	
3SBC01	Fundamentals of Blockchain Technology	60 Hours	30 Hours	30 Hours	1	1	1	3
3SBC02	Ethereum Developer Course	70 Hours	70 Hours	40 Hours	1	1	1	3
3SBC03	Blockchain in Finance (Fintech)	60 Hours	30 Hours	30 Hours	1	1	1	3
3SBC04	Business Applications of Blockchain Technology	60 Hours	30 Hours	30 Hours	1	1	1	3

COURSE DETAILS

3SBC01 FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY

COURSE OBJECTIVE

- To understand what Blockchain is and how it works?
- To be able to explain the different components involved within Blockchain
- To know when and why you may want to use Blockchain within your ecosystem.
- To understand what is DLT and its need.
- To understand Bitcoin, how it works and it's prominence.
- To understand functioning of Cryptocurrencies.
- To understand smart contracts and their implementation in business.
- To understand interrelation between blockchain and other technology and its current state and evolution.

PRE - REQUISITES FOR LEARNERS

To understand interrelation between blockchain and other technology and its current state and evolution

MODULES

1 Basics of Blockchain
2 Working and Function
3 Bitcoin White Paper
4 Ethereum White Paper and Smart Contracts
5 Evolution and Some Current Applications

LEARNING OUTCOMES

- Explain the basic components of a blockchain, its operations, underlying algorithms, and essentials of trust
- Understand the workings of a blockchain, its transactions, blocks, and mining.
- Understand DLT, types of DLT and use cases.
- Understanding digital payment system and stature of Bitcoin.
- Master a higher level on cryptocurrencies.
- Learning basics of smart contract and their implementation.
- Analyze the blockchain applications in a structured manner.

TARGET GROUP

Anyone interested in obtaining a broad overview of blockchain technology

BENEFITS TO CERTIFIED PARTICIPANTS

Equipped with a Functional Knowledge of the Technology, the incumbent can participate in the other modules to build on the strong conceptual foundation gained in this course. Further skilling depending on the interest and role sought by the candidate would be necessary to progress further in career. This knowledge acquired can enable the incumbent to seek out roles as Trainer, Content Creator (In Education and Social Media), Editor (Journalism) and any such roles which might require a clear understanding of the Technology.

3SBC02 ETHEREUM DEVELOPER COURSE

COURSE OBJECTIVE

- To initiate the students to the concepts and construct of Smart Contracts
- To provide a hands-on training of the Smart Contract Creation Language - Solidity
- To expose the students to the Development and Deployment environment of Smart Contracts To initiate the students to the process involved in a Dapp creation
- To make students web3 ready.

PRE-REQUISITES

Certificate course of Fundamentals of Blockchain Technology.
OR have to pass the technical aptitude admission test conducted by university 3.0 Exposure to any high-level coding language environment.

MODULE DETAILS

1 Introduction to Ethereum
2 Learning Solidity (Programing Language)
3 Writing & Deploying Smart Contracts
4 Use Cases of Smart Contracts - Tokens & NFT creation
5 Testing and Development Environments
6 Dapp Projects

LEARNING OUTCOMES

- Students interested in learning Smart Contract Development to seek a Blockchain Developer Job Role. Working Professionals interested in developing skills in web3 space
- Should be able to write and deploy smart contracts using Solidity, create a Dapp and deploy the same using Solidity, Truffle - Ganache and Hardhat.

TARGET GROUP

- Engineering Graduates and Undergraduates with an exposure to high level coding language
- Working Professionals who want to enhance web3 capabilities as a Blockchain Developer and other similar roles.
- Entrepreneurs who want to launch a decentralized enterprise using the Ethereum Smart Contract Platform

BENEFITS TO CERTIFIED PARTICIPANTS

On successful completion of the course the participant will be able to write smart contracts, create dApps and DAO's. Web 3 development is a fast emerging field and one of the key drivers leading the development of Web 3 is smart contracts. Enterprises across multiple industries namely FinTech, IT, Supply Chain, Retail Management, Education, Governance, Agriculture, Capital Markets, Startups in Web 3 are working on multiple projects for the development of Web 3 infrastructure and for bringing their processes on the Blockchain. Hence this course will enable the participant to be job ready for the following roles: Blockchain Developer, Blockchain Trainer, Smart Contract Engineers, Smart Contract Developer, Web 3 Project Managers etc.

3SBC03 BLOCKCHAIN APPLICATIONS IN FINANCE CAPITAL MARKETS, FINANCIAL MARKETS & PRODUCTS (FINTECH)

COURSE OBJECTIVE

- This course aims to equip the participant with a deep understanding of the Financial Markets and Financial Products and overlays the concept of Blockchain on the traditional centralized Markets and Products.
- To expose the participants to new-age Financial Marketplace concepts aided with Digital Technological transformation of business processes.
- To introduce Fintech and its various structural and functional forms and compare them with the traditional Centralized Financial systems.
- To expose the participants to various aspects of the Financial Marketplace and re-define the same with the application of Blockchain Technology and evaluating the efficiencies drawn from them
- To sensitize the participants to the web3 systems and evaluate the various benefits that can be drawn on it and the challenges that needs to be met in its implementation.

PRE-REQUISITES FOR LEARNERS

The participant should be familiar with the Blockchain Technology, its construct and functioning. In order to be selected for this course, an admission test to evaluate the incumbent's knowledge of the relevant technology will be conducted. Admission would be granted on the basis of the Test Score and subsequent interview.

Or must have successfully completed the Certificate course on Fundamentals of Blockchain Technology by University 3.0 with a score of 70% or higher.

MODULE DETAILS

1 Evolution of CeFi
2 CeFi v/s OpenFi v/s DeFi
3 Capital Markets and Asset Life Cycle Management
4 Asset Tokenization, Monetization and Utilization
5 Application of Blockchain Technology in Capital Market Operations and efficiency enhancement
6 Web3 Applications in Finance

LEARNING OUTCOMES

- The participant will learn various aspects of Financial Markets and various Financial products and how innovative use of the Blockchain technology is poised to bring about digital transformation based disruption the Financial industry
- The participant will develop a clear concept about the workings of Traditional Centralized Finance (CeFi), Open Finance Models (OpenFi) and Decentralized Financial (DeFi) protocols.
- The participant can assess how the technologies applications have introduced cost efficiencies, eased process flows and increased the width and depth of the markets, how the asset lifecycle management can be now automated with the use of smart contracts, how utilization of asset is enhanced with Tokenization and NFTs and such concepts.
- Get a clear understanding on Life Cycle of Capital Market Assets and the increased efficiencies introduced by Blockchain Technology and Smart Contracts in their management
- Able to use innovative tools like tokenization for creating new markets for individuals and enterprises and new models for revenue generation
- Should be able to understand how regulation, monitoring and auditing can be automated with the use of this technology.
- Understand the role of Web 3.0 and data ownership on digital financial products, and the use of digital identity to transact efficiently in the digital marketplace.

TARGET GROUP

Students/ Working Professionals who intend to build their career in Finance, Analytics, Capital Markets, Asset Management, Fund Management, Banking, Insurance, Mutual Funds, etc.

SCOPE

The skill set acquired by completing this course is useful for all verticals in the Finance Industry, namely, FinTech, Banking, Analytics, Capital Markets, Asset Management, Risk Management, Fund Management, Insurance, Mutual Funds, etc. Thus the learner gets exposure to one of the pillars of the modern economy and on Completion of the Certificate Course in Applications of Blockchain for Finance and would be job ready for corresponding roles like Business Analyst, Project Manager, Fund Manager, Product Manager and similar in the Banking & Financial Sector, Non-Banking Financial Companies, Multi-Asset Exchanges, Issuance related Companies like investment banking companies and such.

3SBC04 BUSINESS APPLICATIONS OF BLOCKCHAIN TECHNOLOGY

COURSE OBJECTIVE

Blockchain has its applications much wider than financial transactions. In fact, any industry that makes use of an intermediary to verify transactions could in principle make use of blockchain technology. This course aims to provide the participants with a deep understanding of the disruptive potential of blockchains in Private as well as Public Sector.

To expose the participants with the application of blockchain technology to select industries and Government and also assessing the efficiencies and impact which could be drawn from them

To enable the participants to evaluate the various benefits that can be drawn from it by the select industries and Government and the challenges that needs to be tacked in its implementation.

Lastly, to enable the student to analyze a real-world case study for each segment covered in this course.

PRE- REQUISITES FOR LEARNERS

The participant should be familiar with the Blockchain Technology, its construct and functioning. In order to be selected for this course, an admission test to evaluate the incumbent's knowledge of the relevant technology will be conducted. Admission would be granted on the basis of the Test Score and subsequent interview.

Or must have successfully completed the two Certificate course on:
• Fundamentals of Blockchain Technology by University 3.0 and
• Application of Blockchain Technology in Finance by University 3.0

With a score of 70% or higher.

ENROLMENT PROCESS

STEP 1: Take the Admission Test conducted by 3.0 University. Fees for Admission Test: Rs.200 + GST
OR
Must have successfully completed Two Certificate course on:
• Fundamentals of Blockchain Technology by University 3.0 and
• Application of Blockchain Technology in Finance by University 3.0
With a score of 70% or higher

STEP 2: Complete registration formalities

STEP 3: Enroll for Micro Certificate Specialization that participant is eligible for

Micro Certificate Code	Micro Certificate Name	Fees
3SBC01	Fundamentals of Blockchain Technology	Rs.15000 +GST
3SBC02	Ethereum Developer Course	Rs.25000 + GST
3SBC03	Blockchain in Finance (FinTech)	Rs.25000 + GST
3SBC04	Business Applications of Blockchain Technology	Rs.25000 + GST

Enrolling for 2 or 3 Micro Certifications will entail a discount of 20%

Fees for Enrolling for all Micro Certifications at once will be Rs.50000 + GST

All fees need to be paid in advance

FEE PAID IS NON-REFUNDABLE AND NON-TRANSFERABLE

EMI Facility Available

CONTACT FOR ADMISSIONS

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