



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Master of Business Administration

Level: PG

Course / Subject Code: MB03095021

Course / Subject Name: Introduction to FINTECH and Financial Analytics

w. e. f. Academic Year:	2025-26
Semester:	3
Category of the Course:	Major Subject 3

Prerequisite:	Any Graduate
Rationale:	Financial technology (better known as FinTech) is used to describe new tech that seeks to improve and automate the delivery and use of financial services. At its core, FinTech is utilized to help companies, business owners, and consumers better manage their financial operations, processes, and lives by utilizing specialized software that are used on computers and, increasingly, smartphones. Financial analytics answer specific business questions and forecast possible future financial scenarios. The goal of financial analytics is to shape the strategy for business through reliable, factual insight rather than intuition.

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes	RBT Level
01	Relate and Infer the basic knowledge and need for FinTech in India and globally	Remember, Understand
02	Interpret and identify the Growth and history of FinTech	Understand, Apply
03	Analyse and explain the types of financial statements and its analysis	Analyze, Evaluate
04	Analyze the Financial technology in industry at local and global level	Evaluate, create
05	Determine and Create on Technological aspects / Digitalization of Financial Services or Industry.	Evaluate, create

*Revised Bloom's Taxonomy (RBT)

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial / Practical		
				ESE (E)	PA / CA (M)	PA/CA (I)	ESE (V)	
3	1	0	4	70	30	50	0	150



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Course Content:

Module No:	Module Content	No. of Sessions	70 Marks (External Evaluation)
I	What is FinTech? - FinTech Evolution - FinTech Typology - Functional aspects of FinTech applications - Trends in FinTech Industry and Opportunities provided by different areas of the FinTech ecosystem - FinTech: IT-enabled financial innovations and the current trend - The Future of Financial Services - FinTech Regulation in India	10	17
II	A brief History of Financial Innovation - Digitization of Financial Services - FinTech & Funds – Visualization using AI Cryptocurrencies - Block chain FinTech in banks and Insurance companies	11	18
III	Introduction to Financial Analytics- Importance of Financial Analytics – Types of Financial Analytics – Fundamental Analysis – Technical Analysis - Component of Financial Analytics – Features of Financial Analytics – Financial Analytics and Data Analysis. Introduction to Visualization	12	17
IV	Implementation of Financial Analytics – Corporate Financial Analytics – Investment Financial Analytics – Financial Analytics and Current Financial Challenges Fraud - Risk – Profitability – Portfolio Management Introduction to Python - Nature of Data in Finance and Source of Financial Data - Cleaning and Pre	12	18



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	Introduction to Python - Nature of Data in Finance and Source of Financial Data - Cleaning and Pre- processing Data - Exploratory Data Analysis in Python.		
V	Practical: Project on Technological aspects / Digitalization of Financial Services or Industry. Use of technologies in payments and new business model. Application of various tools and its uses A Study on digitization and online operating models of the financial services industry. Digital Transformation in finance / of finance. Use of Financial Analytics for better financial decisions	15	(30 marks CEC)
	Total	60	100

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks (in %)					
R Level	U Level	A Level	N Level	E Level	C Level
10%	20%	15%	20%	20%	15%

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

Suggested case studies: (More cases may be taken up in addition to these)

- India: Case Study on the Power of Fintech Innovation
- SoFi – Transforming Personal Finance
- From a Fintech startup to Unicorn -Razorpay

References/Suggested Learning Resources:

(a) Books:

No	Author	Name of the Book	Publisher	Year of Publication / Edition
1	Sanjay Phadke	FinTech Future The Digital DNA of Finance	Sage Publications	2020 / latest edition



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2	Pranay Gupta and T. Mandy Tham	FinTech: The New DNA of Financial Services	Gruyter	2019 / latest edition
3	Dr. Anuradha B	Financial Analytics and Control	Notion Press	2021 / latest edition

Note: Wherever the standard books are not available for the topic appropriate print and online resources, journals and books published by different authors may be prescribed.

(b) List of Journals /Periodicals /Magazines/Newspapers/Web resources etc.

- FinTech Magazine (<https://fintechmagazine.com>)
- The FinTech Times (<https://thefintechtimes.com>)
- Journal of Financial Technology (thejft.com)
- The Economic Times
- Financial Express

CO- PO Mapping:

Semester 3	Introduction to FinTech and Financial Analytics				
	POs				
Course Outcomes	PO1	PO2	PO3	PO4	PO5
CO1	3	1	-	-	-
CO2	2	1	1	-	-
CO3	2	3	-	2	1
CO4	1	1	2	2	3
CO5	-	-	1	2	3

Legend: '3' for high, '2' for medium, '1' for low and '-' for no correlation of each CO with PO.

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