

**CAUVERY COLLEGE FOR WOMEN
(AUTONOMOUS)**

Nationally Accredited with 'A+' Grade by NAAC

TIRUCHIRAPPALLI

PG & RESEARCH DEPARTMENT OF COMMERCE



**LEARNING OUTCOME BASED CURRICULUM
FRAMEWORK
(CBCS - LOCF)**

B.Com. Business Analytics

2025 -2026 and Onwards

DEPARTMENT VISION

Commitment to pursue excellence in commerce education, while equipping students with knowledge and skills in commerce stream, inculcate values, identify hidden talents, provide opportunities for students to realize their full potential and thus shape them into national assets, and to pursue a real holistic development, integrity moral and ethical uprightness.

DEPARTMENT MISSION

- To promote excellent education in the changing environment of information and communication technology and commerce sectors.
- Creating an urge in students to take up entrepreneurship in order to be successful by standing on their feet instead of being dependent on others.
- Grooming youth to become a truly global personality well equipped to deal with the modern world and its challenges.

PROGRAMME OUTCOMES (PO)
(Commerce and Business Administration)

PO NO.	Programme Outcome On completion of B.Com. / B.Com. CA / M.Com. / B.B.A. Programme, The students will be able to
PO 1	Acquire a strong foundation in the areas of Commerce and Management that needs to respond to the constantly changing Business and Legal environment.
PO 2	Propose and implement appropriate decision in all areas of Business Management specially Finance, Marketing, Human Resources and Operations.
PO 3	Students will be an empowered individual who will emerge an entrepreneur or be employed in various positions in Industry, Academia and Government.
PO 4	Imbibe professionalism to embrace new opportunities of emerging technologies, leadership and team work in a dynamic ethical business scenario.
PO 5	Internalize the learned concept of Business and Commerce that will enable them to become skilled professionals and to enhance the career prospects.

PROGRAMME SPECIFIC OUTCOMES FOR B.Com. BUSINESS ANALYTICS
B.Com. BUSINESS ANALYTICS
CURRICULUM [2025–2026 Onwards]

PSO NO	Programme Specific Outcomes Students of B.Com. BUSINESS ANALYTICS will be able to	POs Addressed
PSO1	Comprehend and demonstrate the concepts relating to business, accounting, finance, economics, management, taxation and analytics.	PO1, PO2
PSO2	Understand the digital business practices, processes, design, strategies and attain a high degree of knowledge and application skills in the domain of commerce.	PO2
PSO3	Exhibit the perfect blend of analytical skills and business knowledge to excel as entrepreneur and business analyst.	PO3
PSO4	Adopt emerging technologies, critical thinking and problem solving skills to effectively navigate complex challenges.	PO4, PO5
PSO5	Assess ethical values to appreciate and promote social harmony and environmental sustainability through holistic skills obtained.	PO5



CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), TRICHY – 18
PG & RESEARCH DEPARTMENT OF COMMERCE
B.Com. Business Analytics – PROGRAMME STRUCTURE
LEARNING OUTCOME BASED CURRICULUM FRAMEWORK (CBCS - LOCF)
(For the candidates admitted from the academic year 2025 – 2026 onwards)

Semester	Part	Course	Title	Subject Code	Hours	Credit	Exam Hours	Marks		Total
								Internal	External	
I	I	Language Course - I (LC)	Tamil Ilakkiya Varalaru - I	25ULT1	6	3	3	25	75	100
			Hindi ka Samanya Gyan aur Nibandh	23ULH1						
			Poetry, Grammer and History of Sanskrit Literature	23ULS1						
			Foundation Course : Paper I – French - I	23ULF1						
	II	English Language Course - I (ELC)	General English - I	23UE1	6	3	3	25	75	100
	III	Core Course - I (CC)	Financial Accounting - I	25UCB1CC1	6	5	3	25	75	100
		Core Course - II (CC)	Fundamentals of Business Analytics	25UCB1CC2	6	5	3	25	75	100
		First Allied Course - I (AC)	Excel for Financial Decision (P)	25UCB1AC1P	4	3	3	40	60	100
	IV	Ability Enhancement Compulsory Course-I (AECC)	UGC Jeevan Kaushal - Universal Human Values	25UGVE	2	2	-	100	-	100
		Total			30	21				600

Semester I	Internal Marks: 25	External Marks: 75		
COURSE CODE	COURSE TITLE	CATAGORY	Hrs/ Week	CREDITS
25UCB1CC1	FINANCIAL ACCOUNTING – I	CORE	6	5

Course Objective

- To understand the basic accounting concepts and standards.
- To know the basis for calculating business profits.
- To familiarize with the accounting treatment of depreciation.
- To learn the methods of calculating profit for single entry system.
- To gain knowledge on the accounting treatment of insurance claims.

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement On the successful completion of the course, students will be able to	Cognitive Level
CO1	Define and outline the accounting concepts, rectification of errors and Bank Reconciliation Statement.	K1
CO2	Explain the purpose of financial accounting and Non-Profit Organisation	K2
CO3	Apply the accounting procedures for recording various financial transactions.	K3
CO4	Analyse the various methods of providing depreciation and Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.	K4, K5
CO5	Analyse and evaluate financial statements in any given context or situation	K4, K5

Mapping of CO with PO and PSO

COs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	2	2	3
CO2	3	3	3	3	3	3	3	2	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	2	2	3	3	2	2	2	2	2
CO5	3	3	3	3	3	3	3	3	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation

“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	CO'S	COGNITIVE LEVEL
I	Fundamentals of Financial Accounting Financial Accounting – Meaning, Definition, Objectives, Basic Accounting Concepts and Conventions - Journal, Ledger Accounts– Subsidiary Books — Trial Balance - Classification of Errors – Rectification of Errors – Preparation of Suspense Account – Bank Reconciliation Statement - Need and Preparation.	18	CO1,CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Final Accounts Final Accounts of Sole Trading Concern- Capital and Revenue Expenditure and Receipts – Preparation of Trading, Profit and Loss Account and Balance Sheet with Adjustments. Accounts of Non-Profit Organisation Receipt & Payment Accounts – Income &Expenditure Accounts – Balance Sheet – Adjustments.	21	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Depreciation and Bills of Exchange Depreciation - Meaning – Objectives – Accounting Treatments - Types - Straight Line Method – Diminishing Balance method – Conversion method. Units of Production Method – Cost Model vs. Revaluation Bills of Exchange – Definition – Specimens – Discounting of Bills – Endorsement of Bill – Collection – Noting – Renewal – Retirement of Bill under rebate	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Accounting from Incomplete Records – Single Entry System Incomplete Records – Meaning and Features – Limitations – Difference between Incomplete Records and Double Entry System – Methods of Calculation of Profit – Statement of Affairs Method – Preparation of final statements by Conversion method.	18	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Royalty and Insurance Claims Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment. Insurance Claims – Calculation of Claim Amount-Average clause (Loss of Stock only)	15	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

VI	Self Study for Enrichment (Not to be included for External Examination) Difference between Balance Sheet and Trial Balance, Adjustment and Closing Entries – Negotiable Instrument, Difference between Promissory note and Bills of Exchange.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
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Distribution of Marks: Theory 20% & Problem 80%

Text Books

1. S. P. Jain and K. L. Narang Financial Accounting- I, Kalyani Publishers, New Delhi.
2. S.N. Maheshwari, Financial Accounting, Vikas Publications, Noida.
3. ShuklaGrewal and Gupta, “Advanced Accounts”, volume 1, S.Chand and Sons, New Delhi.
4. Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi.
5. R.L. Gupta and V.K. Gupta, “Financial Accounting”, Sultan Chand, New Delhi.

Reference Books

1. Dr.Arulanandan and Raman: Advanced Accountancy, Himalaya Publications, Mumbai.
2. Tulsian , Advanced Accounting, Tata McGraw Hills, Noida.
3. Charumathi and Vinayagam, Financial Accounting, S.Chand and Sons, New Delhi.
4. Goyal and Tiwari, Financial Accounting, Taxmann Publications, New Delhi.
5. Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Textand Cases. McGraw-Hill Education, Noida.

Web References

1. <https://www.slideshare.net/mcsharma1/accounting-for-depreciation-1>
2. <https://www.slideshare.net/ramusakha/basics-of-financial-accounting>
3. <https://www.accountingtools.com/articles/what-is-a-single-entry-system.html>

Pedagogy

Chalk and Talk, PPT, Discussion, Assignment, Demo, Quiz and Seminar.

Course Designer

Dr. J. Lalithambigai

Semester I	Internal Marks: 25		External Marks: 75	
COURSE CODE	COURSE TITLE	CATEGORY	HRS./ WEEK	CREDITS
25UCB1CC2	FUNDAMENTALS OF BUSINESS ANALYTICS	CORE	4	3

Course Objective

- To achieve and establish vital understanding of big data application in business intelligence
- To institute the concept of systematic transformation of process-oriented data into information of the underlying business process
- To exhibit knowledge of data analysis techniques and to apply principles of data sciences integrating enterprise reporting

Course Outcome with Cognitive Level

On the successful completion of the course, students will be able to

CO Number	CO Statement	Cognitive Level
CO1	Remember and Understand the importance of Analytics in Decision Making and Problem Solving	K1, K2
CO2	Identify business opportunities for data-driven solutions	K3
CO3	Apply the Knowledge of Business Intelligence	K3
CO4	Examine the Business view of Information technology applications	K4
CO5	Recommend data-driven solutions to support decision-making in real-world business situations.	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	2	3	2	3	3	3	2	3	3
CO4	3	3	2	3	3	3	2	3	2	3
CO5	3	3	3	2	3	3	2	2	3	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

UNIT	CONTENT	HOURS	COs	COGNITIVE LEVEL
I	Introduction to Business Analytics: Analytics Landscape – Need for Analytics – Business Analytics: The Science of Data-Driven Decision Making – Descriptive Analytics – Predictive Analytics – Prescriptive Analytics – Big Data Analytics – Machine Learning Algorithms – Framework for Data Driven Decision Making – Analytics Capability Building – Roadmap for Analytics Capability Building – Challenges in Data Driven Decision making and Future – Business Analytics in Practice.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Business view of Information Technology Applications: Core business process – Baldrige Business Excellence framework - Key purpose of using IT in business – Characteristics - Enterprise Applications - Information users and their requirements – Foundation of Data Science: Descriptive Analytics: Introduction – Data Types and Scales of Variable Measurement – Types of Variable Measurement Scales – Population and Sample – Measures of Central Tendency – Percentile, Decile and Quartile – Measures of Variation – Measures of Shape.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Introduction to OLTP and OLAP: OLTP – OLAP – Different OLAP Architectures – OLTP and OLAP – Data models for OLTP and OLAP – Role of OLAP Tools in BI Architecture. Business Intelligence: Business Intelligence defined – Evolution of BI and Role of DSS, EIS, MIS and Digital Dashboards – Need for BI – BI value chain. BI Definitions and Concepts: BI Component Framework – BI Users – Business Intelligence applications – BI roles and responsibilities – BI tools.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Basics of Data Integration: Need for Data Warehouse – Goals – Data Mart – Extract, Transform and Load –Data Integration - Technologies – Data Quality– Data profiling. Data Modeling: Basics – Types – Techniques – Fact table – Dimension Table – Typical Dimensional Models – Dimensional modeling life cycle – Designing the Dimensional Model. BI in Real world: BI and mobility – BI and cloud computing – BI for ERP systems –Social CRM and BI.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Data Visualization: Overview – Tables – Charts – Advanced Data Visualization – Data Dashboards. Spreadsheet Models: Building Good Spreadsheet Models – If-Analysis – Some Useful Excel Functions for Modeling – Auditing Spreadsheet Models – Predictive and Prescriptive Spreadsheet Models	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self Study for Enrichment (Not to be included for External Examination) Probability Theory - Analysis of Variance – Forecasting Techniques – Skills required for Industry 4.0	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. U. Dinesh Kumar (2022). Business Analytics: The Science of Data Driven Decision Making, 2nd Edition, Wiley India Pvt. Ltd.
2. R.N.Prasad and Seema Acharya(2016). Fundamentals of Business Analytics, 2nd Edition, Wiley India Pvt. Ltd.
3. Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann (2020). Business Analytics, 3rd Edition, Cengage.

Reference Books

1. Haydn Thomas – Demonoid (2015). Business Analysis Fundamentals, Revised Edition, Pearson Education.
2. Sharada, R. Delen,D. & Turban, E (2017). Business Analytics: The Science of Data Driven Decision Making, 2nd Edition, Pearson Education.

Web References

1. https://books.google.co.in/books?id=dlvjDwAAQBAJ&printsec=frontcover&source=gbp_book_other_versions_r&redir_esc=y#v=onepage&q&f=false
2. <https://pearson.com/en-au/media/2628253/9781292339061-toc.pdf>
3. https://www.pearson.com/en-au/media/anafajmp/9781292339061.pdf?srsid=AfmBOoqhOrZCJMkw0jLyLJjp2tCChhCcFKbX6PJ91CFH7CNF__EkeioO

Pedagogy

Chalk and talk, Power point Presentation, Demonstration, E-content

Course Designer

Dr. K. Reka

Dr. P. Muthulakshmi

Semester I	Internal Mark: 40		External Mark: 60	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
25UCB1AC1P	EXCEL FOR FINANCIAL DECISION (P)	ALLIED -1(P)	4	3

Course Objectives

- To Understand and apply advanced formatting techniques, conditional formatting, and data validation to maintain data accuracy and visual appeal.
- To Explore the financial functions for performing calculations, analyzing data, and solving financial problems effectively
- To Create and implement macros to automate repetitive tasks, develop dynamic tools, and perform complex financial statement analysis.

Course Outcomes and Cognitive Level Mapping

CO Number	Course Outcome	Cognitive Level
CO1	Able to efficiently use Excel's sorting, filtering, conditional formatting, and data validation tools to organize and ensure data accuracy.	K1
CO2	Analyze and apply financial functions to solve financial problems in Excel.	K2, K3
CO3	Apply statistical techniques to interpret and analyze financial data.	K3
CO4	Integrate Excel functions and automation to streamline processes and enhance productivity.	K4
CO5	Evaluate financial data to make informed decisions regarding portfolio management and investment strategies.	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3	3	2	2	2	3
CO2	3	3	3	2	3	3	3	3	2	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	2	3

“1” – Slight (Low) Correlation “2” – Moderate (Medium) Correlation
“3” – Substantial (High) Correlation “-” Indicates there is no Correlation.

Syllabus

Perform the following in Excel to explore and implement various financial functions, formulas, and macros

1. Formatting and Validation option for Excel
 - a. Sorting
 - b. Filtering
 - c. Conditional formatting
 - d. Data validation
2. Formulas and Functions
 - a. Arithmetic and Logical Operator
 - b. Math Function
 - c. Depreciation Functions
 - d. What-If the Analysis Tool
3. Financial Function
 - a. Loan Calculator (PMT, RATE, NPER)
 - b. Interest Calculator (IPMT, PPMT)
 - c. Explore Capital Budgeting Functions (NPV, XNPV, IRR, XIRR)
 - d. Implement Bond Pricing and Yield Analysis
4. Statistical Function
 - a. Compute Average and Standard Deviation
 - b. Perform Variance Analysis
 - c. Explore Correlation and Covariance
 - d. Conduct Trend Analysis and Forecasting
 - e. Construct a Simple Portfolio Analysis
5. Macros
 - a. Record and Write Macro
 - b. Develop a Dynamic Macro
 - c. Create a Financial statement Analyzer

Web References

1. <https://www.youtube.com/watch?v=SPF6r7M9BLQ>
2. <https://www.geeksforgeeks.org/basic-math-formulas/>
3. <https://indiafreenotes.com/financial-functions-npv-pmt-pv-fv-rate-irr-db-sln-syd/>
4. <https://www.youtube.com/watch?v=GkqQoMYPFxU>
5. <https://www.geeksforgeeks.org/macros-in-excel/>

Course Designer

Ms. R.Rita Jenifer, Associate Professor, Department of computer Science
Dr. R.Sangeetha, Assistant Professor, Department of computer Science
Ms.R.Ramya, Assistant Professor, Department of computer Science