

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

2026 -2027 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 2026 – 2027 onwards)
Semester I

Semester	Part	Course	CourseTitle	Course Code	Inst. Hrs. / week	Credits	Exam			Total
							Hrs.	Marks		
								Int	Ext	
I	I	Ability Enhancement Course – I (AEC - I)	Tamil/Other Languages	26ULTI	6	3	3	30	70	100
	II	Ability Enhancement Course – II (AEC - II)	English	26UE1	6	3	3	30	70	100
	III	Core Course –I (CC-I)	Financial Accounting -I	26UCB1CC1	4	4	3	30	70	100
		Core Course- II(CC-II)	Principles of Management	26UCB1CC2	4	4	3	30	70	100
		Allied Course-I (AC-I)	Python Programming	26UCB1AC1	3	3	3	30	70	100
		Allied Course Practical -II(ACP-I)	Python Programming (P)	26UCB1ACP1	3	3	3	40	60	100
	IV	Ability Enhancement Compulsory Course-I (AECC-I)	Value Education	26UGVE	2	2	-	100	-	100
		Ability Enhancement Compulsory Course-II (AECC-II)	Indian Knowledge System	26UGIKS	2	2	-	100	-	100
Total					30	24				800

Semester - I	Internal Marks: 30		External Marks: 70	
COURSE CODE	COURSE TITLE	CATEGORY	Hrs / Week	Credits
26UCB1CC1	FINANCIAL ACCOUNTING - I	CORE	4	4

Course Objective

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

S. No.	Course Features	Relevance Status
1.	Course emphasis on Employability/Entrepreneurship/Skill Development	Employability, Skill Development
2.	Course integrates cross cutting issues relevant to Professional Ethics/Gender sensitization/ Environment and Sustainability/ Human Values/Indian Knowledge System	Professional Ethics
3.	Course relevant to Local/Regional/National/ Global needs	Global needs
4.	Course focus on Sustainable Developmental Goals	SDG 8,9,17

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, students will be able to	
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	Analyze 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	Analyze 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 – Accounting Standards - Journal, Ledger, Trial Balance – Rectification of Errors - Classification of Errors.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Final Accounts and Bank Reconciliation Statement Final Accounts of Sole Trading Concern- Preparation of Trading, Profit and Loss Account and Balance Sheet with Adjustments. Bank Reconciliation Statement - Need – Importance and Preparation of Reconciliation Statement.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Depreciation and Accounts of Non-Profit Organisation Depreciation - Meaning – Objectives – Accounting Treatments - Types –Straight Line Method – Diminishing Balance method Accounts of Non-Profit Organization Receipt and Payment Accounts – Income and Expenditure Accounts	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Accounting from Incomplete Records Single Entry System – 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.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Royalty Royalty - Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self-Study for Enrichment (Not to be included for External Examination) Manufacturing Account, Capital and Revenue items, Difference methods of depreciation.	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Distribution of Marks: Theory 20% & Problem 80%

Text Books

1. S. P. Jain and K. L. Narang (2025). *Financial Accounting- I*, Kalyani Publishers, New Delhi.
2. S.N. Maheshwari & S.K. Mageswari (2024). *Financial Accounting*, Vikas Publications, Noida.
3. Cecil W. Jackson, *Financial Accounting*, Himalaya publications.
4. T. S. Reddy and A. Murthy (2024). *Financial Accounting*, Margham Publications.
5. R.L. Gupta & V.K. Gupta (2025). *Principles and Practice of Accounting*, Sultan Chand & sons publications, New Delhi.
6. Tulsian (2023). *Accountancy-I*, Tata McGraw Hill, Noida.

Reference Books

1. Charumathi and Vinayagam, *Financial Accounting*, S.Chand and Sons, New Delhi.
2. Goyal and Tiwari. (2024). *Financial Accounting*, Taxmann Publications, New Delhi.
3. Robert N Anthony, David Hawkins, Kenneth A. Merchant. (2018). *Accounting: Text and Cases*, McGraw-Hill Education, Noida.

Web Reference

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

Pedagogy

Lecture based teaching and learning, Individual learning /Self Study, Peer teaching, Expeditionary learning, Technology based learning and leaning through problem-solving.

Course Designer

Dr. R. Abirami

Semester: I	Internal Marks: 30	External Marks: 70		
COURSE CODE	COURSE TITLE	CATEGORY	Hrs / Week	Credits
26UCB1CC2	PRINCIPLES OF MANAGEMENT	CORE	4	4

Course Objective

- To understand the basic management concepts and functions.
- To know the various techniques of planning and decision making.
- To familiarize with the concepts of organization structure.
- To gain knowledge about significance of ethics in business and its implications.

S. No.	Course Features	Relevance Status
1.	Course emphasis on Employability/Entrepreneurship/Skill Development	Employability, Entrepreneurship, Skill Development
2.	Course integrates cross cutting issues relevant to Professional Ethics/Gender sensitization/ Environment and Sustainability/ Human Values/Indian Knowledge System	Professional Ethics and Human Values
3.	Course relevant to Local/Regional/National/ Global needs	Global needs
4.	Course focus on Sustainable Developmental Goals	SDG 8,9,17

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement	Cognitive Level
	On the successful completion of the course, students will be able to	
CO1	Recall the basic concepts, principles and functions of management.	K1
CO2	Explain the management process, planning and decision-making.	K2
CO3	Summarize the organizational structure and identify the levels of management.	K2 & K3
CO4	Apply principles of organizing and controlling in business operations and analyze ethical issues and business responsibilities in organizational contexts.	K3 & K4
CO5	Analyze authority and responsibility relationships and span of control in organizations.	K4

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	3	2	2
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	2	3	3	3	3	3
CO5	3	3	3	3	2	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	Management: Definition – Nature and Importance - Scope of Management - Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Planning: Nature – Importance – Forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision – making – Process of Decision – making – Types of Decision.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
III	Organizing: Types of Organizations – Organization Structure – Span of Control and Committees – Departmentalization – Informal Organization- Authority – Delegation – Decentralization – Difference between Authority and Power – Responsibility.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
IV	Direction: Nature and Purpose. Co-ordination – Need, Type and Techniques and requisites for excellent Co-ordination. Controlling: Meaning and Importance – Control Process – Management by Exception.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Business Ethics: Definition - Types of Ethical issues -Role and importance of Business Ethics and Values in Business - Ethics internal - External - Environment Protection - Responsibilities of Business.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self-Study for Enrichment (Not to be included for External Examination) Trends and challenges of management Managers – Qualification, duties and responsibilities. Requisites of effective control and controlling techniques.		CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5

Text Books

1. Gupta. C. B,(2023), *Principles of Management*, S. Chand & Sons Co. Ltd, New Delhi.
2. Dinkar Pagare. (2020). *Principles of Management*, Sultan Chand & Sons Publications, New Delhi.
3. Prasad L.M. (2025). *Principles of Management*, S. Chand & Sons Co. Ltd, New Delhi.

Reference Books

1. Robbins De Cenzo & Coulter. (2019). *Fundamentals of Management*, Pearson Education Ltd.
2. Tripathi P.C. & Reddy P.N.(2020), *Principles of Management*, Tata McGraw, Hill, Noida.
3. Sharma R.K.& Shashi K. Gupta, Rahul Sharma. (2021). *Business Management*, Kalyani Publications, New Delhi.

Web Reference

1. <https://openstax.org/books/principles-management/pages/1-introduction>
2. <https://www.toolshero.com/management/14-principles-of-management/>
3. <https://open.umn.edu/opentextbooks/textbooks/34>
4. <https://blog.hubspot.com/marketing/management-principles>

Pedagogy

Lecture based teaching and learning, Individual learning / Self Study, Peer teaching, Expeditionary learning, Technology based learning and leaning through problem-solving.

Course Designer

Dr. J. Lalithambigai.

Semester III	Internal Marks: 30			External Marks:70	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS/ WEEK	CREDITS	
26UCB1AC1	PYTHON PROGRAMMING	ALLIED COURSE -I	3	3	

Course Objective

- To Understand the basics of Python
- To learn about various operators and its control structures
- To learn about NumPy and pandas

S. No.	Course Features	Relevance Status
1	Course emphasis on Employability/Entrepreneurship/Skill Development	Employability / Skill Development
2	Course integrates cross cutting issues relevant to Professional Ethics/Gender Sensitization/Environment and Sustainability/Human Values	Professional Ethics/ Sustainability
3	Course relevant to Local/Regional/National/Global need	Global
4	Course focus on Sustainable Development Goal	SDG 4, 9, 8

Course Outcome and Cognitive Level Mapping

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

CO Number	CO Statement	Cognitive Level
CO1	Identify and describe the fundamental concepts of Python programming language	K1,K2
CO2	Summarize and apply functional programming paradigms to manipulate the data	K2,K3
CO3	Examine the methods and its functionalities of Python Constructs	K4
CO4	Analyze and Assess the logical understanding visualization skills in Python	K4, K5
CO5	Recommend Python programming concepts in there real-world applications	K5

Mapping of CO with PO and PSO

Cos	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	2
CO3	3	3	3	2	2	3	3	3	3	3
CO4	3	2	3	3	3	3	3	2	3	3
CO5	3	3	3	3	3	2	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	COs	COGNITIVE LEVEL
I	Computer systems – Python Programming Language Computational Thinking – Python Data Types: Expressions, Operator, Variables, and Assignments – Strings – Lists Python standard library.	9	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
II	Imperative programming: Python modules – Built-in-function: print () function –eval() function – user-defined function & assignments -parameter passing.	9	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4,K5
III	Text Data, Files & Exceptions: Strings, revisited – formatted output – files – errors & Exceptions – Execution control Structures: decision control & the IF statement. For LOOP & Iteration Patterns – two-dimensional list- while loop – more loop patterns – Dictionaries – other built-in container types – character encodings & strings.	9	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4,K5
IV	NumPy Basics: Array and Vectorized Computation – A Multidimensional Array Object – Data Processing using Arrays	9	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	Pandas – Data Structure – Essential Functionality – Handling Missing Data – Hierarchical Indexing - Plotting and Visualization - Financial and Economic Data applications.	9	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
VI	Self-Study for Enrichment: (Not included for End Semester Examination) Object-Oriented Programming: Class Definition - Creating Objects - Built-in Attribute Methods - Built-in Class Attributes Destructors in Python – Encapsulation - Data Hiding – Inheritance - Method Overriding- Polymorphism	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4,K5

TEXT BOOKS

1. Wes McKinney, Python for Data Analysis, O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol.
2. Kenneth A. Lambert – Fundamentals of Python First Programs - Cengage, New Delhi
3. Ch Satyanarayana, M Radhika Mani, BN Jagadesh - Python Programming- Cengage, New Delhi.

REFERENCE BOOKS

1. Jake Vander Plas, “Python Data Science Handbook: Essential Tools for Working with Data”, O'Reilly Media, 2016.
2. Allen B. Downey, ``Think Python: How to Think Like a Computer Scientist, 2nd edition, Updated for Python 3, Shroff/O Reilly Publishers, 2016

WEB REFERENCES

1. <https://www.youtube.com/watch?v=rfscVS0vtbw>
2. <https://www.youtube.com/watch?v=jcQnTwjttXM>
3. <https://www.youtube.com/watch?v=DmHSwTiD5Tk>
4. https://www.youtube.com/watch?v=-_uNayxaQoU

PEDAGOGY

Chalk and Talk, Power Point Presentation, Discussion, Assignment, Demo, Quiz and Seminar.

COURSE DESIGNER

Dr.S.Suguna Devi, Associate Professor, Department of Information Technology

Semester I	Internal Marks: 40		External Marks:60	
COURSE CODE	COURSE TITLE	CATEGORY	HOURS/ WEEK	CREDITS
26UCB1ACP1	PYTHON PROGRAMMING(P)	ALLIED COURSE PRACTICAL II (ACP -I)	3	3

Course Objectives

- Write simple programs using control structures, functions and strings
- Develop programs using tuples, lists, sets and dictionary
- Write simple programs using Constructors, Method overloading and inheritance
- Develop programs using files and regular expressions
- Write simple programs using packages and exception handling

S. No.	Course Features	Relevance Status
1	Course emphasis on Employability/Entrepreneurship/Skill Development	Employability / Skill Development
2	Course integrates cross cutting issues relevant to Professional Ethics/Gender Sensitization / Environment and Sustainability / Human Values / Indian Knowledge System	Professional Ethics
3	Course relevant to Local/Regional/National/Global needs	Global
4	Course focus on Sustainable Development Goals	SDG 4, 8, 9

LAB EXERCISES

1. Simple programs in Python
2. Data types and Operations
3. Array Manipulations
4. Programs using various Functions (Arithmetic financial, Statistical)
5. Handling Strings
6. Programs using Lists, Tuples and Dictionaries
7. Executing Regular Expressions in Python
8. Write a python program to print the checkboard pattern of nxn using numpy
9. Write a python program to create a grouped bar chart in Python using Matplotlib to compare the number of students who passed in BCOM, BCA, and BBA streams over the years 2022 to 2025?

WEB REFERENCES

1. <https://www.geeksforgeeks.org/linux-unix/shell-script-to-perform-operations-on-afile/>
2. <https://dokumen.pub/open-source-web-development-with-lamp-using-linux-apachemysql-perl-and-php-020177061x-9780201770612.html>
3. <https://www.sourcecodester.com/srms-makumbusho>

PEDAGOGY

Chalk and Talk, Power Point Presentation, Discussion, Assignment, Demo, Quiz and Seminar.

COURSE DESIGNER

Dr.S.Suguna Devi, Associate Professor, Department of Information Technology