

CARMEL VIDYA BHAVAN TRUST'S

CHRIST COLLEGE - PUNE

(Affiliated to the Savitribai Phule Pune University) ID-No. PU/PN/ASC/269/2007, College Code-829 26/4A, Sainikwadi, Vadgaon Sheri, Pune 411 014. Accredited by NAAC with 'B+' Grade

CRITERION – II	
KEY INDICATOR2.6 Student Performance and Learning	
	Outcomes
METRIC NO	2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes

CHRIST COLLEGE PUNE

DEPARTMENT OF ARTS

Programme Outcome

After the successful completion of three-year BA (Economics) Programme, the graduate will be able to:

PO1: Demonstrate disciplinary knowledge by defining, describing, and discussing major theories and concepts in Digital Humanities and literature through academic engagements. (Graduate Attributes: Academic Excellence, Domain Expertise)

PO2: Demonstrate critical thinking skills through analysing various texts and contexts and research skills by designing and executing independent research project/s with the aid of various digital tools. (Graduate Attributes: Academic Skills & Professional Excellence)

PO3: Display effective communication and social interaction skills in a multimodal manner and adapt to an ever-changing digital landscape through collaborative assignments, internships, and developing industry networks. (Graduate Attributes: Interpersonal skills/Leadership/Communication)

PO4: Cultivate responsible citizenship, display environmental awareness and ethical conduct to address local, regional, national, and global needs through community engagements. (Graduate Attributes: Societal/ Social and Environmental Sensitivity, Cross-Cultural Recognition, Civic Sense, Respecting Diversity, Personal skills)

Bachelor of Arts (Economics)

Semester I

Course Code	Course Title	Course Outcome
11001	Compulsory English	 Demonstrate reading, writing, speaking, and listening skills. Develop the rules of grammar. Discover personality by instilling core values and life skills. Adapt soft skills.
11371	Sociology: Introduction to Sociology	 Understand the social context of emergence of Sociology. Build basic sociological concepts and subject matter and perspectives of Sociology Estimate the new avenues in Sociology
11161A	Politics: Introduction to Indian Constitution	 Learn and discover the important features of the Constitution of India and with the basic framework of Indian Government. Discuss the working of the Constitution of India.
11171	Early India: From Prehistory to the Age of the Mauryas	 Compare the history of early India from the prehistoric times to the age of the Mauryas. Construct the factors and forces behind the rise, growth and spread of civilization and culture of India along with the dynastic history.

		 3. Acquaint the students about the contribution of Early Indians to polity, art, literature, philosophy, religion and science and technology. 4. Imagine the spirit of enquiry among the students by studying the major developments in early Indian history.
11151	Economics: G-1 Indian Economic Environment	 Ability to develop an understanding of the economic environment Interpret the various new developments in the different sectors of an economy – agriculture, industry, services, banking, etc Compare and contrast Indian Economy with other world economies. Discuss and debate on the 3 various issues and challenges facing the Indian Economic Environment.
11331	Optional English	 Identify the basics of English literature and language. Infer the minor forms of literature and use the language creatively. Improve the pronunciation skills. Build their communication skills.

Semester II

Course Code	Course Title	Course Outcome
12331 12171	Optional English History: Early India: Post Mauryan Age to the Rashtrakutas	 Identify the basics of English literature and language. Understand the minor forms of literature and use the language creatively. Improve their pronunciation skills. Enhance their communication skills. Illustrate the history of India after the Mauryas along with the developments which finally led to the transition to medieval India. Examine the developments in different parts of India through a brief study of regional kingdoms up to the tenth century C.E. Analyse the consequences of the foreign invasions, particularly on the polity, economy, society and art and architecture.
12161	Politics: Introduction to Indian Constitution	 Outline the important features and working of the Indian Constitution. Examine the relation between Rights, Duties and DPSP in the Constitution of India. Analyse the functioning of Legislature, Executive and Judiciary. Compare various constitutional provisions in the Indian Constitution.

12151	Economics: G-1 Indian Economic Environment	 Define the role and growth of service sector in Indian economy Classify the challenges faced by the Indian Service sector Examine the current business scenario, agricultural scenario and other sectorial growth in the Indian context. Compile the developments such as MSME's, Digital Economy, E-Banking, BPO, KPO etc.
12371	Sociology: Social Institutions and Change	 Understand the inter-relationship between Macroeconomic aggregates Acquaint themselves to various aggregates of national income and its inter-relationships and the dynamic functioning of an economy. Develop the critical view on the recent fiscal policy of Indian Economy and how that affect Employment and Output. Analyse and demonstrate knowledge of the theories in Macroeconomics Practically apply macroeconomic concepts, models and its use in real life situations.
12001	Compulsory English	 Classify reading, writing, speaking, and listening skills. Understand the rules of grammar. Develop personality by instilling core values and life skills. Adapt soft skills.

Semester III

Course Code	Course Title	Course Outcome
23152	Macro Economics	 Introduce students to the historical background of the emergence of macroeconomics Familiarize students with the differences between microeconomics and macroeconomics Elaborate with various concepts of national income Construct with Keynesian macroeconomic theoretical framework of consumption and investment functions Examine the role of money in an economy. Analyse the conceptual and theoretical frameworks of inflation, deflation and stagflation, Business Cycle.
23163	An Introduction to Political Science	 Learn and infer the important sub themes of Political Science as a discipline Outline the Approaches to study Political Science To relate with the Basic Concepts and Values in Political Science
23151	Micro Economics	 Develop an understanding about subject matter of Economics Impart knowledge of Micro Economics and clarify Micro Economics concepts Analyse and interpret charts, graphs and figures Design the application of basic economic theories.
		1. Demonstrate his/her understanding of sampling methods and the ability to use collection of data

	Basic Concepts of Research	2. Develop appropriate techniques for different research questions.
32154	Methodology	3. Discover the appropriate source of data in relation to collection of
		research data
		4. Assess and present the collected data in the form of graph, bar
		diagram, chart etc
		1. Build the fundamentals of modern financial system in our country
		as well as the international financial institutions operating in the global
		economy.
	Financial System	2. Discover the present Era is of huge opportunities, challenges and
23153	Financiai System	development in every sector.
		3. Formulate the important changes taking place in the Indian financial
		sector.
		1. Identify the various components of language.
	Advanced Study of English Language	2. Categorise their linguistic skills in their future prospects and
		research.
		3. Detect pronunciation errors and improve their pronunciation
233333		skills
		4. Analyse the phonological, morphological, semantic and
		syntactical areas of language study.
		5. Discuss the working of English language as a communicative
		medium and thereby enhance their communicative skills.
		1. Gain in depth knowledge on Natural processes to sustain life.
		2. Predict the consequences of human actions on the web of life.
22000	AEC Environmental	3. Develop Critical thinking for shaping strategies.
23999	Science	4. Acquire Value and Attitudes towards understanding.

		1. Examine knowledge of key concepts, theories, and facts relevant to
		the subject matter.
		2. Analyze and evaluate information and arguments critically.
23001	23001 Compulsory English	3. interpret areas of personal growth and development related to the
23001		course.
		4. Improve the creativity in problem-solving or project work.

Semester IV

Course Code	Course Title	Course Outcome
24333	Advanced Study of English Language	 Identify the various components of language. Display their linguistic skills in their future prospects and research. Detect pronunciation errors and improve their pronunciation skills Analyse the phonological, morphological, semantic and syntactical areas of language study. Formulate the working of English language as a communicative medium and thereby enhance their communicative skills.
24163	Politics: CC 1C Introduction to Political Science	 Demonstrate the important sub themes of Political Science as a discipline. Discuss the Approaches to study Political Science. Compare with the Basic Concepts, Values and Ideologies in Political Science. Adapt the role of various International Organizations in Political Science.

		1. Define the fundamentals of Modern Financial System
		2. Discover the structure and functioning of Commercial and Co-
		operative Banking in India
24153	Economics: CC-1C	3. Analyze Indian Financial System into Indian Money Market, Indian
	Financial System	
		Capital Market and Indian Foreign Exchange Market
		4. Evaluate the changing landscape of Banking sector in India
		1. Demonstrate the concept of revenue and its application
		2. Classify the various market structures prevalent in the economy and
		examine the pricing policies
		3. Examine the issues in the factor market both from demand and
		supply side and provide comprehensive solutions
24151	Micro Economics	4. Compare and analyse the factor incomes that accrue to factors of
		production
		5. Evaluate the criteria for welfare in an economy and interpret the
		welfare aspect in different economies
		1. Develop data analytics skills and meaningful interpretation to the
	Basic Concept of Research	data sets so as to solve the business/Research problem
24154	Methodology	2. To solve numerical questions using simple statistical tools
		3. Explain the basic concept of qualitative research techniques
		1. Apply critical thinking skills to solve complex problems within the
24001	Compulsory English	course's domain.
		2. Construct quantitative methods and analytical tools, as appropriate
		to the subject matter.
		1. Apply the basic concepts of macroeconomics, including GDP,
		inflation, unemployment, and economic growth.
		2. Contrast the significance of GDP as a measure of economic
24152	Mana Farmani	performance.
24152	Macro Economics	

		3. Examine the components of aggregate expenditure, including
		consumption, investment, government spending, and net exports.
		4. Analyze the relationship between inflation and unemployment.
		1. Develop the scope and importance of environmental science.
24999	Environmental Science	2. Discover the strategies for controlling pollution in air, water, and
		soil.
		3. Analyse the legal framework for environmental protection.
		4. Compare the different energy sources, including fossil fuels,
		renewable energy, and nuclear power.

Semester V

Course Code	Course Title	Course Outcome
		1. Demonstrate the study of Modern Political Analysis and power.
		2. Build the nature of power in modern societies- more in the form of
		organizations and social formations than as individual power.
		3. Compare the different forms of justifications of power and the role
35163	Modern Political Analysis	of ideology in this regard.
33103	Would in Fontical Analysis	4. Interpret the repository of power in society and how the nature of
		power is shaped by social factors.
		1. Determine and set personal financial goals.
		2. Discover the importance and implement the process of personal
		budgeting.
		3. Estimate the importance of and overcome barriers to successful
		savings strategies using Mutual fund investments.
GR9A	Financial Literacy	4. Formulate the basic concept of Mutual Funds and the types.

		5. Explain the role and importance of risk management from a
		personal finance perspective
		6. Create the role and responsibilities associated with financial
		planning as a career
		1. Relate and recognize the nature and scope of Public Finance
		2. Compare and analyse the concept of Public Revenue and its
		components
35152	Public finance	3. Evaluate the types of Public Expenditure and reasons for its
55152	I ubic imance	increase
		4. Discuss the types of Public Debts and its effects
		1. Demonstrate the Role and Scope of International Economics, Role
		of Trade and its impact at the national and international level.
		2. Construct the concepts and role of international trade theories.
		3. Compare alternative theories of International Trade and apply them
	International Economics	in real world scenarios.
		4. Examine the terms of trade in international markets and factors
35151		affecting the terms of trade.
		5. Analyse nation's Balance of payments policies, Evaluate the
		impact of Tariff and non-Tariff barriers.
		6. Assess how a foreign exchange market operates, identify the
		validity and efficiency of protectionist policies.
		7. Create the opportunities and risks for India viz-a-viz global
		economies and also understand the different economic crisis and their
		global impacts.
		1. Demonstrate the differences between Economic growth and
		Development, Indicators of Economic Development.
		2. Compare the Characteristics of Developing Countries.
		3. Criticize the constraints on Development Process.

		4. Evaluate theories and Approaches of economic development.
		5. Analyse some growth models
		6. Formulate the macroeconomic policies, roll of foreign capital and
35153	Economic Development	economic planning etc. in developing countries.
		1. Infer and identify different career opportunities.
		2. Develop competence in using English for the career.
35001	Compulsory English	3. Discover skills required for placements and use them effectively.
		4.Design the verbal and non-verbal communication effectively.
		1. Demonstrate the theory and practice of management and its
		development phases till date.
	Business Management - I	2. Discover, nourish and nurture managerial traits and talents among
35154		the students.
35154		3. Classify the business management and its development through the
		functions of planning, organizing, staffing,
		leadership and control.
		4. Develop the insights about harmonizing individual and group goals
		with organisational goals by demonstrating organisational and
		professional
		leadership skills

Semester VI

Course Code	Course Title	Course Outcome
		1. Demonstrate the career opportunities available to them.
		2. Identify the career opportunities suitable to them.
		3. Develop the use of English in different careers.
		4. Examine the competence in using English for the career of their
	Enhancing Employability	choice.
36333	Skills	5. Evaluate the skills required for their placement.
		6. Formulate the verbal as well as nonverbal communication effectively
		for their career
		1. Define the Modern Political Analysis and Power.
		2. Demonstrate the dynamics of Political Systems and Political Culture.
		3. Examine the role of Political Socialization, Political Participation,
		Political Communication and Political Elite in different societies.
36163	Modern Political Analysis	4. Analyse state as a repository of power, influence in society and how
		the nature of power is shaped by various social factors.
		1. Explain and assess the components and instruments of Fiscal Policy
		2. Identify the objectives of fiscal policy.
		3. Relate to the concepts of Budget and its components
		3. Compare and analyze the concept of Deficit Financing and its effects
		4. Assess the Centre and State Financial Relationship
		5. Evaluate the items of current and capital account of government
36152	Public Finance II	budget.
		1. Compare pros and cons of different trade policies
		2. Discuss the different exchange rate regimes and cite the facts about
		India's Trade Policy in recent years

		3. Examine the changes in Import Export policies at national level and
		summarize the different steps taken towards promoting domestic exports
	International Economics - II	4. Outline the motive and role of different organizations working for
36151	11	international co-operation
		5. Develop a case study of trade patterns by collecting data sets and by
		referring in established models of small and large nations.
		1. Infer and explain the process of economic planning
		2. Discover the economic planning and developing goals
27472		3. Examine and describe the changing structure of the planning process
35153	Indian Economic	in India
	Development II	4. Estimate the relation between Economic Development and
		Environment
		1. Demonstrate and identify different career opportunities.
		2. Develop competence in using English for the career.
36001	Compulsory English	3. Analyse skills required for placements and use them effectively.
		4.Compare verbal and non-verbal communication effectively.
		1. Interpret and apply strategic planning concepts, including the
	36154 Business Management - II	development of mission statements, vision statements, and strategic
36154		goals for organizations.
		2. Adapt the fundamentals of project management, including project
		planning, scheduling, and execution.

CHRIST COLLEGE PUNE DEPARTMENT OF COMMERCE

Programme Outcome

After the successful completion of three-year BCOM Programme, the graduate will be able to:

PO1: Construct the solutions for business challenges by applying the knowledge of financial analytics. (Professional, Academic)

PO2: Design innovative investment and auditing strategies to meet specific financial goals of clients in the changing global financial markets. (Professional, Communication, Leadership)

PO3: Acquire necessary professional knowledge and skills in banking, insurance and taxation adhering to the necessary ethical standards. (Professional, Personality)

PO4: Develop subject-related and transferable skills that are relevant in, higher education, employment and overall personality development. (Personality)

PO4: Enhance constructive decision-making ability through critical thinking, effective communication and collaborative efforts in professional environment. (Professional, Communication, Leadership)

PO5: Compare and contrast the conventional and contemporary business trends to develop innovative business models synchronized with ethics and social responsibility. (Social sensitivity, professional)

Bachelor of Commerce

Semester I

Course Code	Course Title	Course Outcome
112	Financial Accounting- I	 Demonstrate the knowledge of basic accounting concepts Examine the awareness about application of these concepts in business world Assume the Knowledge about process of dissolution of partnership firm. Design and finalization of accounts of various establishments.
113	Business Economics (Micro) - I	 Infer knowledge of business economics Discover the micro economic concepts. Analyse and interpret charts and graphs. Develop the basic theories, concepts of micro economics and their application
114A	Business Mathematics & Statistics- I	 Apply the calculations in based on simple interest, compound interest, Percentages, ratio, proportion etc. Determine the different statistical tools in practical applications.
		 Understand evolution of banking. Outline structure of Indian Banking Possess in-depth understanding of primary and secondary functions of a bank.

	I	
		3. Illustrate the concepts related to lending and ratios.
		4. Examine the process of opening and operating procedure of
		bank accounts. Explain various types of bank accounts holders
	Popling & Finance I	5. Classify the conceptual clarity on various methods of
115B	Banking & Finance- I	remittance.
1150		6. Estimate and provide knowledge of fundamentals of Banking
		7. Create awareness about various banking concepts
		8. Design banking operations
		1. Illustrate the reading, Writing, Speaking and Listening Skills.
		2. Examine the certain rules of grammar
	~	3. Develop personality by instilling core values & life skills.
111	Compulsory English	
		1. Understand the exquisiteness and communicative power
		of English language
	Additional English	2. Instil universal human values through best pieces of literature
117A		in English
		3. Formulate the literary terms and enhance their English
		communication skills
116C		1. Construct the marketing concepts, principles, and
	Marketing & Salesmanship	theories.
		2. Determine the effective market research to gather
		consumer preferences and market trends.
		3. Design the digital marketing channels and tools (e.g.,
		social media, SEO).

Semester II

Course Code	Course Title	Course Outcome
		1. Identify literary techniques and creative uses of language in
		literary texts.
		2. Adapt their texts to particular audiences and purposes.
		3. Explain the relevance of themes found in literary texts to
		contemporary, personal, and cultural values.
		4. Discover genres and conventions and demonstrate the
	Compulsory English- II	awareness of the evolution theory of language by varied culture
121		5. Determine a platform to express creativity and talent, ignite
		critical thinking, and judge a work of art.
		6. Adapt relevant theoretical concepts to literary or other texts
		and practices.
		1. Demonstrate the Accounting Software Tally ERP 9.
100		2. Identify the business implications of financial statement
122	Financial Accounting- II	information of NGOs' and other nonprofit organizations.
		3. Elaborate the Intangible Assets and its valuation
		1. Demonstrate an understanding of advanced economic
		concepts such as market structures, production and cost analysis,
		business strategy, and macroeconomic factors.
		2. Ouline economic theory to solve business problems and make
		informed decisions.
123	Business Economics- II	

		3. Estimate their economic analysis effectively, both in writing
		and verbally.
		4. Develop and analyze complex business problems, evaluate
		different options, and
		make informed decisions
		1. Define the basics of business mathematics and statistics
		2. Predict the nature of growth in business world
	Business Mathematics and	3. Calculate the cost of living
124A	Statistics-II	4. Categorize various data
		1. Explain and define all the banking principles
		2. Compare traditional and modern banking
125B	Banking And Finance – II	3. Understand and use the various technologies in banking
		1. Remembering: Recall and recognize key concepts,
		terminology, and theories related to marketing and salesmanship.
		2. Explain and summarize the principles and strategies of
126 C		marketing and salesmanship.
	Marketing & Salesmanship – II	3. Apply marketing and salesmanship techniques and theories in
		practical situations.
		4. Analyze the effectiveness of various marketing and sales
		strategies and tactics.
		5. Assess and evaluate the impact and success of marketing and
		sales campaigns and strategies.
		6. Generate and design innovative marketing and sales plans and
		campaigns that meet the needs of specific target audiences.
		1. Understand the exquisiteness and communicative power of
		English language.
		2. Instil universal human values through best pieces of literature
		in English.

127A	Additional English - II	3. Assess the literary terms and enhance their English
		communication skills.
		4. Design the job potential of students by improving their
		language skills.

Semester III

Course Code	Course Title	Course Outcome
232	Corporate Accounting -I	 Construct the financial statements of company within the frame work of accounting standard Develop analytical skills in Trail balance, profit and loss account and balance sheets, stocks and debtors' system and final accounts system Acquire the basic knowledge of the terms such as, departmental accounts, inter departmental transfer, branch accounting, stock and debtors system, depreciation, Valuation of shares.
233	Business Economics (Macro)	 Understand the basic theories and concepts of Macro Economics and their application. Compare the relationship between broad aggregates. Interpret the knowledge of business economics. Evaluate the macro-economic concepts.

		5. Elaborate the various concepts of National Income.
234	Business Management -I	 Articulate the theory and practice of management and its development phases till date. Discover, nourish and nurture managerial traits and talents among the students. Design the business management and its development through the functions of planning, organizing, staffing, leadership and control.
235	Elements of Company Law	 Acquaint with knowledge and maturity to understand Company law 2013. Infer knowledge and application of formation and incorporation of Company. Evaluate the principal documents of the company. Discuss and inculcate skills and knowledge about the share capital of the company.
236E	Cost and Works Accounting -I (Basics Of Cost Accounting)	 Understand and explain the conceptual framework of Cost and Works Accounting. Equip to seek suitable career in Cost and Works Accounting and Entrepreneurship. Construct the communication and analytical skill among students through self-learning. Assess how to prepare a cost sheet, tenders and quotations. Develop the various methods of Material, Labour and overheads control Techniques.

299AECC1	Environmental Science	 Gain in depth knowledge on Natural processes to sustain life. Predict the consequences of human actions on the web of life. Develop Critical thinking for shaping strategies. Acquire Value and Attitudes towards understanding.
231	Business Communication - I	 Understand the basic principles of effective communication. Examine strong written communication skills for emails, reports, and memos. Evaluate the strategies for building positive workplace relationships. Develop the use of technology tools for virtual meetings, webinars, and remote collaboration.

Semester IV

Course Code	Course Title	Course Outcome
		1. Explain and summarize the principles of effective
		communication in business contexts, and demonstrate
		understanding of how they are applied in various situations.
		2. Apply effective communication techniques in practical business
		situations, such as writing emails, creating presentations, and
		participating in meetings.
241	Business Communication – II	3. Analyze and evaluate the effectiveness of various types of
		communication used in business, such as written and oral
		communication, and identify areas for improvement.

		4.Assess and evaluate the impact of communication on business
		outcomes, such as customer satisfaction, employee engagement,
		and organizational success
		1. Observation and recall of all basic accounting concepts,
		principles, and terminology related to corporate accounting, such
		as the holding company, absorption, liquidation and forensic .
		2. Explain the purpose and importance of corporate accounting, as
		well as the role of financial statements in providing information to
		stakeholders and comprehend how accounting transactions affect
		financial statements.
		3. Apply accounting principles and techniques to prepare and
		analyze financial statements for a corporation. They should also be
		able to use accounting software and other tools to process
	Corporate Accounting – II	accounting data and generate reports.
242		4. Analysis and evaluate the financial performance and position
		of a corporation using various ratios and other financial analysis
		techniques. They should also be able to identify and analyze
		accounting issues related to corporate transactions.
		5. Assess the impact of accounting policies and practices on
		financial statements and the decision-making process of
		stakeholders.
		1. Gain comprehensive understanding of key business concepts,
		including finance, marketing, operations management, and
		organizational behavior.
244		2. Develop the ability to think critically and make informed
244		decisions in a business setting. They will learn how to analyze
	Business Management- II	complex business problems and develop effective solutions

		 3. Outline leadership skills that will help them manage teams, motivate employees, and drive organizational success. They will also learn how to effectively manage change and navigate challenges in the workplace. 4. Formulate their communication skills, both written and verbal, which are essential for success in the business world. They will also learn how to present their ideas effectively to different audiences
245	Elements Of Company Law – II	 Describe what is management of company, board of directors, their selection, remuneration & retirement. Understand the KMP (key managerial personnel), how they arrive at decision. Learn & apply how meetings are conducted & agenda are prepared & how minutes are written. Analyze how E-governance works in practice & how company get winds up.
246E	Cost And Works Accounting – II	 Understand the concept of the valuation of closing and opening stock. Interpret the documents that are used in stores and how to calculate the issuing price of material. Describe the concepts of labor turnover and merit rating.

		4. Compare the traditional and recent trends in cost accounting.
243	Macro Economics	 1. Explain the inter-relationship between Macroeconomic aggregates 2. Understand the various aggregates of national income, its interrelationships and the dynamic functioning of an economy 3. Apply the Income, Employment and Output determination theories and its relevance in recent times and significance of fiscal policy 4. Analyse and demonstrate knowledge of the basic theories/laws in Macroeconomics 5. Evaluate macroeconomic concepts, models and its use in real life situations.
249AECC2	Environmental Science	 Gain in depth knowledge on Natural processes to sustain life. Predict the consequences of human actions on the web of life. Develop Critical thinking for shaping strategies.
		4. Design the Value and Attitudes towards understanding.

Semester V

Course Code	Course Title	Course Outcome
351	Business Regulatory Framework	 Demonstrate conceptual knowledge about the framework of business Law in India. Assess the legal aspect of business. Create awareness among the students about legal environment relating to the Contract Law, Partnership Act, Sale of Goods Act in India. Discover the emerging issues relating to e-commerce, e- transaction issues And E Contracts Determine the career opportunity in corporate sector relating to business law in India A dept the concepts terms provisions of Memoratile and Business
		6. Adapt the concepts, terms; provisions of Mercantile and Business Laws.
352	Advanced Accounting – I	 Demonstrate the various concepts, objectives, and applicability of some important accounting standards. Assess the reorganization of business regarding restructuring the capital. Inspect final accounts of a Banking Companies with the provisions of Banking Regulation Act 1949. Estimate the skills to prepare the investment account in simple and summarized manner.
353	International Economics-I	 Contrast the basic theories of International Trade and Economics. Evaluate the working and functions of International Organisations and Institutions. Develop a foundation in the subject that will help the students in their future academic and Professional Ventures

354	Auditing	 Outline with knowledge and maturity to understand the concept of Auditing, types of Audits and Audit Process. Apply Conceptual Clarity and Practical understanding of Vouching Verification and valuation and Types of Audit Report. Discover the Practical knowledge about appointment, reappointment and other related provision. Practical knowledge about Tax Audit as per I.T. Act 1961 (Form 3CA, 3CB & 3CD). Elaborate the new concepts under Audit of Computerized Systems & Forensic Audit.
355E	Cost and Works Accounting. Special Paper II	 Infer the concept Overheads. identify the Cost Accounting Standards. Interpret the accounting treatment for under and over absorption of overheads Discover the various methods of allocation of Overheads Estimate the Activity Based Costing and to create awareness about recent developments in Cost Accounting.
356E	Cost and Works Accounting. Special Paper III	 Understand the basic concepts and principles of cost accounting. Develop budgets for different departments and projects. Estimate the cost reduction and cost control techniques.

Semester VI

Course Code	Course Title	Course Outcome
361	Business Regulatory Framework- II	 Recall the key concepts and principles of business law and regulatory framework. Identify the main laws and regulations that apply to businesses. Explain the purpose and scope of different laws and regulations that impact businesses. Interpret legal texts and case laws to understand the legal implications of business transactions and operations. Apply business laws and regulations to analyze and solve legal issues that arise in business operations. Draft legal documents, such as contracts and agreements, that comply with relevant laws and regulations. Analyze the legal implications of different business models and structures, such as partnerships, corporations, and franchises. Evaluate the impact of regulatory changes on businesses and assess the compliance requirements for these changes. Elaborate the ethical implications of legal and regulatory compliance for businesses, and the impact of non-compliance on stakeholders. Recall the principles and concepts of advanced accounting and identify the accounting standards and regulatory requirements applicable to advanced accounting topics. Explain the purpose and significance of co-operative society operations their roles , branch accounting, forensic trends.

		3. Interpret financial statements that incorporate advanced
		accounting topics to assess a company's financial position and
		performance.
		4. Apply advanced accounting principles to prepare consolidated
362	Advanced Accounting - II	financial statements and Analyze the financial impact of
502	Auvanceu Accounting - II	transactions and the appropriate accounting treatment.
		5. Analyze the financial statements of a multinational company to
		evaluate performance of the company
		6. Identify and analyze the risks associated with complex financial
		transactions.
		7. Evaluate the effectiveness of accounting policies and procedures
		related to advanced accounting topics in ensuring accurate and
		reliable financial reporting.
		8. Elaborate the ethical implications of financial reporting decisions
		related to advanced accounting topics, ratio analysis
		1. Demonstrate the Various Concepts Of Income Tax.
	Auditing & Taxation – II	2. Understand & Apply to Calculate the Income Of Taxable
364		Salaried Employees
504		3. Summarize the Total Income and Solved Practical Problems
		Related to It
		4. Adapt the Working of Income Tax Website.
		1. Define different methods of costing.
	Cost And Works Accounting. Special Paper IV	2. Explain and describe the Job Cost Sheet.
365E		3. Solve the problems of contract costing, Process costing and
505E		Operating Costing.
		4. Elaborate the basic concept of CAS13: service cost centre.

366E	Cost And Works Accounting. Special Paper V	 Define & memorize the meaning and concepts of standard costing and the formulae to solve the practical questions. Discuss the pricing techniques and application of It. Relate the concept of cost accounting standards and how cost treatments can be prepared as per the CAS Estimate the procedure of preparation of cost records and how cost audit can be conducted
363	International Economics	 Contrast the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct the disequilibrium Discover and know the causes and effects of deficits in the balance of payments, measures adopted to correct the deficits Analyse the structure of BOP, disequilibrium in BOP, causes of disequilibrium Evaluate the concept of foreign exchange rate and determine its equilibrium exchange rate. Create a comparative analysis table for the working and functions of various International Organisations

CHRIST COLLEGE PUNE DEPARTMENT OF COMMERCE

Programme Outcome

After the successful completion of two-year MCOM Programme, the graduate will be able to:

Po1: Advanced knowledge of business and commerce: MCom graduates should have a strong understanding of business principles and concepts and be able to apply this knowledge to practical situations

Po2: Specialized skills: Depending on the electives chosen, MCom graduates should have specialized skills in areas like finance, accounting, taxation, or costing

Po3: Critical thinking and problem-solving skills: MCom graduates should be able to analyze complex business situations and develop creative solutions to problems

Po4: Research skills: MCom graduates should have the ability to conduct independent research using appropriate research methodologies

Po5: Ethical and professional behavior: MCom graduates should have a strong understanding of ethical issues in business and commerce and be able to behave professionally in all situations

Po6: Global perspective: MCom graduates should have a broad understanding of global business and commerce, including the challenges and opportunities of operating in an international environment

Master of Commerce

Semester I

Course Code	Course Title	Course Outcome
		1. Illustrate the Budget Preparation Process.
		2. Relate the impact of adverse and favourable variances on cost
	Costing Techniques and	of a product/service.
60111	Responsibility Accounting	3. Explain the industry specific cost ratios.
	yy	4. Create the importance of various tools to evaluate the
		business centre
		1. Relate the Scope of Cost Accounting in any business Activity.
		2. Infer Cost Accounting treatment in relation to Material Cost
		Accounting, Employee cost and overheads.
		3. Develop the learners to establish the interface between Cost
		Accounting Standards and the various elements of Cost.
60109	Advanced Cost Accounting	4. Build the different methods of costing in Manufacturing and
	8	Service industries
		1. Apply the concept of management accounting and its
		significance in the business.
		2. Analyze the financial statements.
60101	Management Accounting	3. Develop and apply the techniques of management accounting
	management Accounting	in the financial decision making in the business corporates.
		4. Improve the competence with their usage in managerial
		decision making and control.

		1. Demonstrate knowledge of research processes
		2. Compare the literature reviews using print and online
		databases (reading, evaluating, and developing
		3. Classify American Psychological Association (APA) formats
60127	Research Methodology and Analysis	for citations of print and electronic materials
	Research Meenouology and Mulysis	4. Identify, explain, compare, and prepare the key elements of a
		research proposal/report
		5. Elaborate the quantitative and qualitative research.
		1. Develop the factors that influence firm behavior and the
	Industrial Economics	strategic decisions firms make, including pricing,
60102		output, investment, and entry/exit decisions.
		2. Discover market concentration, assess the degree of
		competition, and evaluate market power to analyze the
		performance of industries and markets

Semester II

Course Code	Course Title	Course Outcome
		 Classify the need to integrate financial and Cost Accounts. Develop understanding about PLC and VCA Concepts.
60209	Application of cost accounting	 Assess the logic behind ABC technique. Solve cost formats under ABC & to compare such results with the Traditional Overhead Accounting. Develop the importance of Transfer Pricing & Target
		Costing in the changing scenario.

60201	Financial Analysis and Control	 Recall basic financial analysis concepts, such as financial ratios, valuation techniques, and financial statement analysis tools. Explain the purpose and importance of financial analysis, as well as the role of financial information in decision-making. And comprehend how financial analysis tools can be used to evaluate the financial performance and position of a business. Apply financial analysis techniques to evaluate the financial performance and position of a business entity. They should also be able to use financial analysis software and other tools to process financial data and generate reports. Analyse financial statements and other financial information using various financial analysis techniques to a business to identify strengths, weaknesses, opportunities, and threats of a business entity. Evaluate the financial performance and position of a business entity.
60202	Strategic Management	 Understand the ability to think strategically and analyze complex business problems from a strategic perspective. Explore how to conduct thorough internal and external environmental analyses, including SWOT analysis, PESTEL analysis, and industry analysis.

3. Develop the challenges and techniques involved in
implementing strategies throughout an organization,
including resource allocation and organizational change.

Semester III

Course Code	Course Title	Course Outcome
		1. Compare with corporate finance required for Indian
		Industries.
		2. Apply the latest developments in the field of corporate
		finance.
321	Business Finance	3. Discover the traditional theories of capitalization and
		dividend distribution practices.
		4. Design the working capital management practice of
		finance to students Skills to be developed.
		1. Infer the knowledge to the students on Cost Audit
		Practices.
	Cost Audit	2. Compare the role and responsibilities of Cost Auditor
327		3. Develop the students how Cost Audit Report is prepared.
328		1. Classify importance of management Audit.
		2. Explain the Procedure of Management Audit.
	Management Audit	3. Determine the Corporate Image in Management Audit.
		4. Interpret the different Areas of Management Audit.
		5. Design the Operational Audit

	Introduction to Constitution	 Explain the philosophy of Constitution of India to students. Discuss them with their freedoms and responsibilities.
395		
322	Research Methodology	 Demonstrate knowledge of research processes Create literature reviews using print and online databases (reading, evaluating, and developing Employ American Psychological Association (APA) formats for citations of print and electronic materials Identify, explain, compare, and prepare the key elements of
		 a research proposal/report 5. Compare and contrast quantitative and qualitative research. 1. Understand the basics of cybersecurity, including key terminology and principles.
392	Introduction to Cyber Security	 Analyse and gain exposure to cybersecurity tools and technologies. Develop hands-on labs and exercises to apply knowledge
		practically.
394	Skill Development	 Develop proficiency in the targeted skill, whether it's a technical, creative, or soft skill. Enhance critical thinking skills to adapt and innovate while using the skill.
		3. Create a portfolio or showcase of work to demonstrate proficiency in the skill.

Semester IV

Course Code	Course Title	Course Outcome
421	Capital Market and Financial Services	 Illustrate the concept of capital markets, types of securities traded, and how the capital market works. Identify and analyse the roles and functions of various financial institutions such as banks, investment banks, brokerage firms, and mutual fund companies Define the regulatory framework governing capital markets and financial services, including the role of regulatory bodies such as securities and exchange commissions and central banks. Develop analytical and critical thinking skills to evaluate financial data, assess risk, and make informed investment decisions.
427	Recent advances in cost auditing & cost system	 Understand the concept of Cost Accounting standard issued by icmai.in Assess & articulate the concept of Excise audit, VAT audit & Productivity audit Analyse how ERP system works in company through field visit. Evaluate the concept of six sigma & its utility
492	Introduction to Cyber Security IV	1. Classify advanced cyber threats, such as APTs (Advanced Persistent Threats), zero-day vulnerabilities, and sophisticated attack techniques.

		2. Develop advanced incident response skills, including rapid
		detection, containment, and recovery from cyber incidents.
422A	Industrial Economic Environment	 Recall and recognize key concepts, theories, and terminology related to industrial economics and its environment. Explain and summarize the principles of industrial economics and its environment, including market structures, pricing strategies, and regulations. Apply economic theories and principles to analyse and solve problems related to industrial economics and its environment, such as market competition and government policies. Analyse and evaluate the impact of various economic factors on industrial environment, such as supply and demand, market structure, and government intervention. Design and evaluate the effectiveness of economic policies and strategies in improving industrial environment and promoting economic growth.
428	Project Work/Case study	 Apply theoretical knowledge gained in previous coursework to practical, real-world situations. Formulate the problem-solving abilities by tackling complex issues or challenges presented by the project or case study.
494	Skill Development II	 1. Develop a higher level of proficiency in the targeted skill, building upon the basics learned in the prerequisite course. 2. Create critical thinking skills related to the skill, enabling students to analyze complex scenarios or challenges.

	3. Develop building a portfolio or showcase of work that
	demonstrates advanced proficiency in the skill.

CHRIST COLLEGE PUNE

DEPARTMENT OF MANAGEMENT

Programme Outcome

After the successful completion of three-year BBA Programme, the graduate will be able to:

PO1: Select effective communication skills in a variety of organizational settings

PO2: Develop comprehensive strategic and tactical plans for an organization

PO3: Understand the importance of independent and collaborative inter or multidisciplinary diverse work environment

PO4: Apply problem-solving and decision-making frameworks that propose defensible solutions to organizational opportunities, challenges, changes, and risks

PO5: Evaluate the dynamic of the Global Business Environment from a competitive and economic perspective

PO6: Create a business plan including business feasibility assessment and financial analysis projections for an innovative new business product or services

Bachelor of Business Administration

Semester I

Course Code	Course Title	Course Outcome
101	Principles of Management	 Recall fundamental concepts and principles of management, including the basic roles, skills, and functions of management; Conceptualize how organizations manages its activities and functions.
102	Business Communication Skills	 Explain the implications of effective communication Develop an appropriate understanding role and utility of written communication in life Build proficiency in writing business letters and other communication required in business Analyze proficiency in using various communication media effectively Classify effectively by using different forms of social media
103	Business Accounting	 Develop right understanding regarding role & importance of monetary and financial transactions in business. Cultivate right approach towards classifications and their implications. Evaluate proficiency in preparation of basic financial as to how to write basics accounting treatment- Trading & profit & Loss account statement

104	Business Economics-Micro	 Recall the role of economics as it influences society and business Develop how different decisions are taken in relation in relation to price, demand and supply Decide right understanding regarding, monopoly, perfect completions, revenue etc
105	Business Mathematics	 Develop appropriate understanding as how to use mathematics like computation interest, profit etc Cultivate right understanding regaining numerical aptitude Design logical approach towards analytical approach data
106	Business Demography	 Acquaint the Students with basic concept, Principles and functions of Management. Aware students about the recent trends in Management Examine the students with a comprehensive platform for career development, innovation and further study

Semester II

Course Code	Course Title	Course Outcome
202	Principles of Marketing	 1. Introduce to the student's how marketing plays in the successful operation of an organization 2. Demonstrate a clear understanding of the marketing concept 3. Evaluate the changes taking place in the macroeconomic environment and its impact on marketing program and accordingly create a marketing plan

		4. Understand key elements of Product Life Cycle along with the various concepts of Marketing Mix
203	Principles of Finance	 Understand the role and importance of Finance in business. Evaluate the sources of finance for raising capital. Analyse the capital structure of the business Compare and evaluate the types of mutual funds Investigate the reasons for under and over-capitalization to take remedial actions
204	Basics of Cost Accounting	 Understand the various concepts of cost accounting Differentiate between types of accounting Analyse the elements of cost and types of costs for cost reduction and cost control Prepare a comprehensive Cost sheet Review the process cost and contract cost of a company
205	Business Statistics	 Introduction to statistics and its objectives Understand the need for classification of raw data Modify raw data into tabulation or organized data Analyze the graphs and diagrams to provide solutions Evaluate the performance of an organization using statistical methods Formulate solutions for the growth and development

		1. Describe computer with its characteristics, usage, limitations, and
		benefits
207	Fundamentals of Computers	2. Use computer peripherals and memory efficiently
206		3. Develop programming concepts
		4. Compare between various operating systems and their functions
		5. Identify network fundamentals and various communication
		network
		1. Understand the various types of business organizations, including
		sole proprietorships, partnerships, corporations, and limited liability
		companies (LLCs).
201	Business Organisations and	2. Learn about corporate governance principles, including the roles
201	Systems	of boards of directors and executive management in decision-
		making and oversight.
		3. Explore marketing strategies, sales techniques, and customer
		relationship management (CRM).

Semester III

Course Code	Course Title	Course Outcome
		1. Remember the basic concepts of HRM and develop knowledge about its functions.
		2. Understand the role of HRP and job analysis in organizational fun
		toning.
	Principles of HRM	
301		

		3. Develop an understanding of Job evaluation, employee morale, job
		satisfaction and cultivate a right approach towards HRM & their role
		in business.
		4. Demonstrate climb up in career ladder through an understanding
		of career planning.
		5. Create awareness on changing trends in HRM
		1. Enable the students to have a comprehensive understanding of
		Supply Chain Management.
	Supply Chain Management	2. Understand key concepts and issues of Logistics and Inventory
		Management.
302		3. Evaluate Warehousing and its role in Space Management
		1. Remember the development issues related to rural society.
		2. Analyze the employment opportunities for rural youth.
304	Fundamental of Rural	3. Create interest among the rural youth to participate in rural
304	Development	development programmes and schemes for sustainable development
		1. Impart basic knowledge of management accounting.
		2. Understand the implications of various financial ratios in decision
	Management Accounting	making.
305	Management Accounting	3. Apply and use various tools of management accounting in the
		business
		1. Understand banking function and its operations
		2. Evaluate the functioning of Regulatory Authorities in India
306	Banking and Finance	3. Create recent technology in banking industry
		1. Describe the major theories, concepts, models and frameworks in
		the field of Organisational Behaviour.

305 HR	Organisational Behaviour	2. Explain determinants of Organisational Behaviour at Individual,
		Group and Organisational Level.
		3. Examine knowledge about approaches to line-up individual,
		groups & managerial behaviour in order to achieve organisational
		goals.
		1. Explain the rights of employees at the workplace.
	Legal aspects in HR	2. Understand the Applications of differ rent Legal Aspects in HR.
306		
		1. Develop an understanding of diverse cultures, traditions, and
		values to foster cultural sensitivity and respect.
303	Global Competencies and	2. Enhance communication skills, including verbal, non-verbal, and
	Personality Development	intercultural communication, to interact effectively in a global
		context.
		3. Learn to work collaboratively in cross-cultural teams, leveraging
		the strengths of diverse team members.

Semester IV

Course Code	Course Title	Course Outcome
401	Entrepreneurship and Small Business Management	 Understand the role of entrepreneurs in growth and development Predict the business changes and identify the business opportunities the business environment Demonstrate various tools and techniques to solve the problems that occur in the organization

		4. Develop strategies to build the business
402	Productions And Operations Management Decision Making and Risk Management	1. Understand the various manufacturing systems and their applications.2. Evaluate the different tools to design and develop a product.3. Apply the various techniques of Quality management and Safety measures.4. Design a production plan and implement production control1. Define different concepts relating to decision making 2. Recommend the best alternative while deciding 3. Analyse an organization's decision-making system
		1. Understand the various concepts of international business and international theories.
		2. Differentiate between domestic and international business.
404	International Business Management	 Evaluate that how country can gain through international trade practices. Assess what to produce and what to outsource in to the trade. Compare currency exchange rate in the international market. Plan for own international business in future.
405-C-HRM	HRM Functions & Practices	 Integrate the perspective on role of HRM in modern business. Plan the various skills required in human resources and implement them Demonstrate an ability to recruit, train and appraise the employees according to their performance Develop employability skills of the students for the future industry and society requirements

		1. Understand the techniques of manpower forecasting, recruitment,
		and selection.
	Employee Recruitment & Record Management	2. Classify the new methods of re recruitment ie: e-recruitment and
406-C-HRM		talent acquisition.
		3. Differentiate between internal and external sources of recruitment.
		4. Application of new trends of record management in organisation.
		5. Develop Modules for collection and processing of information to
		generate reports.
		6. Designing of computer technologies and its applications in various
		field with learned concepts
		1. Understand the fundamentals of income tax
		2. Apply tax knowledge and calculate and evaluate individual income
		3. Develop strategies for text planning to mitigate the tax burden
405-B-FM	Business Taxation	4. Analyse the regulation relating to advance tax and tax refund
405-D-111		5. File income tax returns
		6. Calculate the gross income of an individual
		1. Understand the components of the Indian financial system
		2. Recognize the role of primary and secondary markets in economic
		development
		3. Compare and evaluate the types of mutual funds
406-B-FM	Financial Services	4. Analyse the functioning of the stock markets
		5. Examine various financial services provided by financial
		intermediaries
		6. Review the role of information technology in financial services

Semester V

Course Code	Course Title	Course Outcome
		1. Recall the DBMS concepts.
		2. Understanding of the working of the transaction management in the
		DBMS.
502	Database Administration and Data	3. Develop Data Warehousing and its scope and limitations.
502	Mining	4. Design Data Analytics and Mining and its scope and limitations
		1. Develop an understanding of the right approach of Research
		Methodology and its role in Business.
		2. Design an understanding of the basic framework of the identification
		of various sources of information for data collection.
501	Research Methodology	3. Evaluate various Designs, Tools, and Techniques of Research
		Study.
		4. Enable the students in conducting Research work and write Research
		Paper and Research Project Report
		1. Understanding of the concepts of Business Ethics
502	Business Ethics	2. Develop theoretical tools to understand current ethical issues and
503	Dusiness Ethics	their impacts on business.
		3. Analyze the role of ethics in business, Government and Society.
		4. Evaluate the Ethical scenario concerning to Environment and
		consumer protection.
		1. Understand the concept and process of CSR
		2. Compare the industrial contribution for CSR Policy
504	Management of Comparets social	3. Examine the context of CSR of present-day Management
504	Management of Corporate social Responsibility	4. Discuss the contribution of CSR for the development of Society

		1. Develop the conceptual framework of financial analysis and provide
		practical exposure to apply various tools of Financial Statement
		Analysis.
	Analysis of Finance Statement	2. Enable to use of various types of ratios for financial and investment
505-FM		decisions.
		3. Adapt knowledge about Cash Flow and Fund Flow Statements and
		their importance in financial analysis
		1. Identify overview of Indian Financial system
		2. Inspect in depth FMC, PFRDA
506-FM	Legal Aspects of Finance and	3. Examine ICDR, listing & delisting of various securities, ESOP,
	security Law	ESOS.
		4. Compare companies act 2013 and GST act 2017
	Cross Cultural HR and industrial Relations	1. Understand the relationship between Cross-Culture Management
505-HRM		and Human Resource Management.
		2. Develop Cultural Variables in Multinational Enterprises.
		3. Construct students with the fundamental knowledge of Industrial
		Relations.
		1. Understand the application of theory into practice.
		2. Design critical thinking by making judgments related to problems in
		Case Studies of Human Resource.
506-HRM	Cases in HRM	3. Develop critical thinking for solving Case Studies of Human
		Resource.
		4. Analyze the broad fundamental components of HRM.

Semester VI

Course Code	Course Title	Course Outcome
		1. Describe the business project management
		2. Understanding the difference between projects and programs and
	Business Project Management	categorizing different types of business projects
603		3. Identifying and managing the risk in business project
		4. Analyse the business project management techniques
		5. Evaluating a business project and determining the project cost
		6. Develop a business project plan using CPM tool
		1. Describe the concepts of electronic Data Interchange
		2. Develop strategies for conducting business through the internet
		3. Differentiate between the concepts – Internet, Intranet & Extranet.
601	E- Commerce	4. Explain the role of modern tools used in E-marketing
		1. Identify the role of innovation in creating better products, services
		and processes
		2. Describing the relationship of innovation and sustainability
	Management of Innovations and	3. Apply different approaches to solve the business problems
604	Sustainability	4. Explain various challenges that have recently spurred sustainability
004		innovation
		1. Understand the basic concept of MIS and the need for an information
		system.
602	Management Information System	2. Relate active participation in an understanding of Information
		Technology and MIS.
		3. Practical Knowledge Acquisition about System Analysis and
		Design.

		4. Apply a decision-making model on business.
		5. Design forms, reports of a system
		6. Develop flow charts and data flow diagrams of the system
		1. Understand the development and significance of global HRM,
		recruitment and selection.
		2. Differentiate between global HRM and Domestic HRM.
605-HRM	Global Human Resource	3. Employ the technology in global HRM
003-1111/14	Management	4. Evaluate the ethics related challenges for HR functions in
		multinational enterprises.
		5. Arrange training and development sessions for performance
		management.
		1. Integrate the perspective on role of HRM in modern business.
		2. Plan the various skills required in human resources and implement
		them
606-HRM	Recent Trends & HR Accounting + Project	3. Demonstrate an ability to recruit, train and appraise the employees
		according to their performance
		4. Develop entrepreneurial skills and employability of the students for
		the future industry and society requirements
		1. Evaluate the sources of finance for raising capital
		2.Understand the definition of financial management
605-FM	Finance-III Financial Management	3. Analyze the capital structure and cost of capital of a business
605-F M		4. Investigate the reasons for Under and over-capitalization to take
		remedial action
		5. Assess the different investment proposals to select the best
		investment alternative
		6. Design of financial structure for a business

606	Finance-IV Case in Finance/Project (Internship)	 Evaluate the source of finance for raising capital Analyse the capital structure and cost of capital of a business Assess the different investment proposals to select the best investment alternative Develop the skills to manage working capital
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CHRIST COLLEGE PUNE

Department of Management

Programme Outcome

After the successful completion of three-year BBA (CA) Programme, the graduate will be able to:

PO1: Understand the fundamental concepts of computers, software, hardware, and the evolution of computer technologies.

PO2: Emerge with competency in the subject of Business Administration and apply knowledge to cater to the needs of Society / Employer / Institution / Own Business Enterprise

PO3: Imbibe analytical/critical/logical/innovative thinking skills in the field of Business, Management, and Computer Applications

PO4: Analyze, design, implement, and evaluate computerized solutions to real-life problems, using appropriate computing methods including web applications.

PO5: Apply techniques of software validation and reliability analysis to the development of computer programs

PO6: Acquire technical skills to produce industry-ready resources and bring out the true spirit of entrepreneurship.

Bachelor of Business Administration (Computer Applications)

Semester I

Course Code	Course Title	Course Outcome
		1. Understand fundamental concepts and principles of management,
		including the basic roles, skills, and functions of management;
CA-102		2. Conceptualize how organizations manages its activities and
CA-102	Principles of Management	functions.
		1. Define the Database concepts
		2. Analyse the databases and various queries execution
		3. Assess and transform information into relational database and
CA-104	Database Management Systems	produce entity- relationship model for particular system.
CA-107		4. Design various operations on database
		1. Understand what is the role of communication in personal and
		business world
CA-101	Reasonable knowledge of the	2. Classify system and communication and their utility
CA-101	Business communication Skills	3. Develop proficiency in how to write business letters and other
		communications in required form
		1. Demonstrate and trace the execution of programs written in C
		language.
		2. Discover the C code for a given algorithm.
CA-103	C Language	3. Evaluate and to implement Programs with pointers and arrays,
CA-105		perform pointer arithmetic, and use the pre-processor.
		4. Develop and to perform operations using derived data types.

		1. Understand role and importance of statistics in various business
CA-105		situations
	Statistics	2. Assess the skills related with basic statistical technique
		3. Develop right understanding regarding regression, correlation and
		data interpretation

Semester II

Course Code	Course Title	Course Outcome
		1. Understand the concept of organizational behavior and Human
		Resource Management
CA 201	Organization Behavior & Human	2. Examine the scope of Human Resource Management
CA-201	Resource Management	3. Identify the role of human resources in helping an organization gain
		a competitive advantage
		4. Analyse the recent trends in training and development
		5. Evaluate the factors affecting the recruitment and selection
		procedure
		6. Develop Strategies for overcoming the challenge of cultural
		diversity in an organization
		1. Understand the role of accounting in business
		2. Record the financial transaction in books of accounts
		3. Prepare final accounts to summarise the financial position of a
		business
CA-202	Financial Accounting	4. Reconcile the cash book and passbook with the help of the bank
011-202		reconciliation statement

		5. Adapt the accounting software to record and prepare financial
		statements
		1. Demonstrate the appropriate understanding as how to use
		mathematics like computation interest, profit etc
		2. Construct right understanding regaining numerical aptitude
CA-203	Business Mathematics	3. Develop logical approach towards analytical approach data
		1. Understand and explain the database concepts like data types, operators and control statements.
		2. Apply the database concepts in writing PL/SQL programs.
CA-204	Relational Database	3. Distinguish between DBMS and RDBMS
		4. Select from various programming constructs like cursors, triggers,
		functions, and procedures and use them while creating programs.
		5. Create and organise data in tables and make modifications through
		PL/SQL programs
		1. Understand the Structure and implement HTML/CSS. (L2)
		2. Apply intermediate and advanced web development practices. (L3)
		3. Implement basic JavaScript. (L3)
		4. Create visualizations in accordance with UI/UX theories and create
CA-205	Web Technology HTML-JS-CSS	webpages that function using external data. (L6)
		5. Develop a fully functioning website and deploy on a web server.
		(L6)

Semester III

Course Code	Course Title	Course Outcome
		1. Determine the knowledge about using digital marketing in and as
		business.
CA-301	Digital Marketing	2. Formulate the SWOT analysis, SEO optimization and use of various
CA-301		digital marketing tools.
		1. Understand the concepts of ADTs
		2. Illustrate the need for data structures while building applications.
		3. Analyse the efficiency and optimize the algorithms
		4. Apply advanced linear and non-linear data structures for real world
		problems
CA-302	Data Structure	5. Design the Tree and Graph structures
		1. Demonstrate the System concepts.
		2. Assess the Software Engineering concepts.
CA-303	Software Engineering	3.Formulate the software engineering concepts and Design in Software
		1. Understand Client Side MVC and SPA
		2. Explore AngularJS Component
CA-304	Angular JS	3. Develop an AngularJS Single Page Application
		4. Create and bind controllers with JavaScript
		5. Elaborate the filter in AngularJS application
		1. Infer the expert knowledge and analytical skills in current and
		developing areas of analysis statistics, and machine learning
CA-305	Big data / Block chain	2. Identify, develop and apply detailed analytical, creative, problem-
CA-305		solving skills.

3. Determi	ine the learner with a comprehensive platform for career
developme	ent, innovation, and further study.
4. Estimate	e the architecture of R and WEKA with practical's.

Semester IV

Course Code	Course Title	Course Outcome
		1. Discuss the basic of networking concepts.
		2. Analyse in detail and understood the basic idea of different protocol.
		3. Compare the routing, packet switching and routing algorithms
CA401	Networking	concepts.
		4. Interpret the services of connectionless and connection-oriented
		protocols.
		5. Formulate the internet domains and its services
		1. Understand various object-oriented concepts.
		2. Analyse the different OOPs concepts and apply them to write
CA-402	Object Oriented Concept	programs.
	ThroughCPP	3. Compare various dynamic memory management techniques like
		pointers, constructors, destructors.
		4. Interpret the appropriate concepts and use them in writing CPP
		programs.
		5. Create classes and objects which implements all the OOPs features.
		1. Understand the services provided by operating systems.
		2. Examine to some details of major OS concepts.

		3. Evaluate the issues related to memory management and various
		related algorithms.
CA-403	Operating System	4. Design issues related to file management and various related
		algorithms
		5. Discuss with an operating system via system calls
		6. Combine the different types of memory used in OS
		1. Understand Node JS and REPL terminal.
		2. Experiment with Node JS Modules and Node Package Manager.
		3. Find and use code packages based on their documentation to produce
		working results in a project.
CA-404	Node JS	4. Develop applications to handle events in Node JS

Semester V

Course Code	Course Title	Course Outcome
CA-501	Cyber Security	 Understand the Cyber Security and the Tools. Identify the different types of Cyber Crimes. Develop Cyber forensics awareness. Estimate the attacks, security policies and credit card frauds in mobile and Wireless Computing Era
		 Understand the fundamentals of object modelling Classify and differentiate Unified Process from other approaches. Design with static UML diagrams. Improve with the UML dynamic and implementation diagrams.

	Object Oriented Software	5. Improve the software design with design patterns.
CA-502	Engineering (OOSE)	6. Develop the software against its requirements specification
		1. Relate the real-world problems using OOP techniques.
		2. Solve problems using java collection framework and I/o classes.
G.4. 502		3. Develop multithreaded applications with synchronization.
CA-503	Core Java	4. Design GUI based applications
		1. Understand the need and importance of Python language.
		2. Examine how to design and implement Python applications.
CA-504	Python	3. Design and implement a program to solve a real-world problem
		4. Formulate the knowledge of handling the concepts of exceptions and
		files
		1.Illustrate the role of IoT protocols for efficient network communication.
CA 507		3. Identify IoT platform such as Arduino Uno.
CA-507	ΙΟΤ	4. Relate about real time IOT Devices
		5. Design the key technologies, smart objects, IoT Architecture and
		security in Internet of Things.

Semester VI

Course Code	Course Title	Course Outcome
		1. Understand the basic concepts AI.
		2. Apply basic, intermediate and advanced techniques to mine the data.
		3. Compare the concept of Spark programming and to Analysis of
CA-601	Recent Trends in Information	emergent research data
	Technology	4. Determine and familiarity with emergent technologies/resources
		5. Formulate and integrate principles.
		1. Define the approaches to software testing and identify different
		testing tools for appropriate environments.
		2. Apply the various testing strategies on specialized environments.
		3. Evaluate different software metrics using the various measures of
CA-602	Software Testing	complexity
		4. Design Test Cases and Create Test Plans based on various
		requirements under various test scenarios.
		1. Understand concepts of JDBC Programming, Multithreading and
CA-603		Socket Programming, Spring and Hibernate.
	Advanced Java	2. Differentiate between servlet-JSP and Spring-Hibernate
		3. Develop application by using JDBC,Servlet- JSP and Spring-
		Hibernate framework
		1. Define app requirements for digital devices.
		2. Classify the constraints in developing real time app.
CA-604	Android Programming	3. Apply skill on real time applications.
		4. Evaluate the logic and challenges of Android programming.
		5. Develop and Integrate Java and android to develop game and applications for different Industries.
		applications for different industries.

CHRIST COLLEGE PUNE

DEPARTMENT OF MANAGEMENT

Programme Outcome

After the successful completion of three-year BBA (IB) Programme, the graduate will be able to:

- **PO1:** Understand Management discipline with a global emphasis.
- PO2: Evaluate and present market research to support an organization's business decision-making.
- **PO3:** Describe and list the documents and the application required in foreign trade.
- PO4: Evaluate the impact of the legal environment on an organization's business initiatives.
- **PO5:** Identify and interpret relevant international financial documents, and evaluate the financial strategies of the corporation.
- PO6: Develop and present an international business plan

Bachelor of Business Administration (International Business)

Semester I

Course Code	Course Title	Course Outcome
		1. Understand fundamental concepts and principles of management, including the basic roles, skills, and functions of
101 GC	Principles of Management	management;
	-	2. Conceptualize how organizations manages its activities and functions.
		1. Understand the implications of effective communication
		2. Develop an appropriate understanding role and utility of written communication in life
	Business Communication Skills	3. Develop business letters and other communication required in
102 SC		business
		1. To develop right understanding regarding role & importance of monetary and financial transactions in business.
		2. Cultivate right approach towards classifications and their
103 GC	Business Accounting	implications.
	Business Accounting	3. Evaluate proficiency in preparation of basic financial as to how
		to how to write basics accounting treatment- Trading & profit &
		Loss account statement

		1. Understand role of economics as it influences society and
		business
104 GC		2. Study how different decisions are taken in relation in relation to
104 00	Business Economics-Micro	price, demand and supply
		3. Demonstrate right understanding regarding, monopoly, perfect
		completions, revenue etc
		1. Develop appropriate understanding as how to use mathematics
		like computation interest, profit etc
105 GC	Dursinger Mothermoties	2. Cultivate right understanding regaining numerical aptitude
	Business Mathematics	3. Evaluate logical approach towards analytical approach data
		1. Recall the students with basic concept, Principles and functions
		of Management.
		2. Aware about the recent trends in Management
106 SC	106 SC Business Democratic	3. Assess students with a comprehensive platform for career
	Business Demography	development, innovation and further study

Semester II

Course Code	Course Title	Course Outcome
		 Introduce to the student's how marketing plays in the successful operation of an organization Demonstrate a clear understanding of the marketing concept

204	Principles of Marketing	3. Evaluate the changes taking place in the macroeconomic environment and its impact on marketing program and accordingly create a marketing plan
		4. Understand key elements of Product Life Cycle along with the various concepts of Marketing Mix
203	Commercial Geography	 Recognize the difference between GI and trade mark and its applicability in commercial Activity Understand the commercial Activities in different Geographical features and environment referring to domestic as well as world resources. Analyzing on already believed patterns with facts of present times. Application of their knowledge about commercial Geography to the home trade and international business. Create the plan/ presentation of their own product or business with the given resources and Geographical features.
201	Basics of Cost Accounting	 Understand the various concepts of cost accounting Differentiate between types of accounting Analyze the elements of cost and types of costs for cost reduction and cost control Prepare a comprehensive Cost sheet Review the process cost and contract cost of a company

		1. Understand the need for classification of raw data
		2. Modify raw data into tabulation or organized data
		3. Analyze the graphs and diagrams to provide solutions
		4. Evaluate the performance of an organization using statistical
205	Business Statistics	methods
205		5. Formulate solutions for the growth and development
		1. Describe computer with its characteristics, usage, limitations,
		and benefits
207	Fundamentals of Computers	2. Examine computer peripherals and memory efficiently
206		3. Develop programming concepts
		4. Compare between various operating systems and their functions
		5. Identify network fundamentals and various communication
		network
		1. Understand the historical evolution of global business,
		including early trade routes, colonialism, and the development of
		multinational corporations.
202	Origin and Development of Global	2. Comprehend key concepts and theories related to globalization,
202	Business	such as the stages of globalization and the impact on economies
		and societies.
		3. Examine cultural diversity and ethical issues that arise in
		international business interactions, including cultural sensitivity
		and corporate social responsibility.

Semester III

Course Code	Course Title	Course Outcome
		1. Understand the basic concepts of HRM and develop knowledge
		about its functions.
		2. Evaluate the role of HRP and job analysis in organizational fun
		toning.
		3. Develop an understanding of Job evaluation, employee morale,
301	Elements of HRM	job satisfaction and cultivate a right approach towards HRM
		&their role in business.
		4. Motivate to climb up in career ladder thru n understanding of
		career planning.
		5. Create awareness on changing trends in HRM
		1. Enable the students to have a comprehensive understanding of
		Supply Chain Management.
A 306	Supply Chain Management	2. Understand key concepts and issues of Logistics and Inventory
A 500		Management.
		3. Develop Warehousing and its role in Space Management
		1. Understand key concepts and issues of Production and
		Operations Management
304	Production and Operation	2. Appreciate the concepts of Plant layouts, material handlings &
	Management	production planning
		3. Comprehend key decision areas of operations and analyse data
		for effective decision making in operations management
	Global Competencies and Personality	1. Develop an understanding of diverse cultures, traditions, and
302	Development	values to foster cultural sensitivity and respect.

2. Enhance communication skills, including verbal, non-verbal,
and intercultural communication, to interact effectively in a global
context.
3. Develop leadership qualities, including the ability to inspire and
lead diverse teams, promote inclusivity, and make ethical
decisions.

Semester IV

Course Code	Course Title	Course Outcome
		1. Describe the basics of Import and Export
		2. Explain the details concepts of Import and Export
		3.: List the procedure to be followed for import and export of
401	Import Export Procedure	goods
		4. Introduce various schemes related to foreign trade
		1. Remember the nature and classification of research design and
		the types of research
		2. Understand history of research, types of research and research
		design
		3. Apply research methods in social and business sciences
402	Research Methodology	4. Identify and discuss the complex issues inherent in selecting a
		research problem, selecting an appropriate research design, and
		implementing a research project.
		5. Develop an appropriate framework for research studies

		1. Define business ethics and its types
		2. Understanding the role of stakeholders
403	Business Ethics	3. Differentiate between ethics and laws
-05	Dusiness Etines	
		4. Analyze the impact of Business ethics in its stakeholders
		5. Evaluate the unethical practices in business
		6. Formulate the solutions to ethical problems
		7. Compare the case study of two organizations
		1. Understand the basic concept of MIS and the need for an
		information system.
		2. Relate active participation in an understanding of Information
		Technology and MIS.
404	Management Information System	3. Practical Knowledge Acquisition about System Analysis and
		Design.
		4. Apply a decision-making model on business.
		5. Design forms, reports of a system
		6. Develop flow charts and data flow diagrams of the system
		1. Define the role of warehouses in modern supply chains
	International Warehouse and Supply	2. Outline ways to improve warehouse layout
406	Chain Management	3. Compare the types of technological equipment and robotics
		used in warehouses

Semester V

Course Code	Course Title	Course Outcome
		1. Understand foreign affairs global issues with international business system.

GC 501	International Relations	 Develop various regional groupings their contributions to strengthening of international relations. Compare the various dispute settlement machineries involved in international relations.
		4. Evaluate the socio-cultural and trade relations
		1. Understand international law & define evolution of
		International economic & trade law
		2. Develop Transnational corporation (TNC)
		3. Compare UNCITRAL & Business Conventions.
GC 504	International Business Law	4. Explain significance of international dispute settlement
		machinery in era of globalization
		5. Examine international trade & Indian laws related to it.
		1. Develop student's abilities to analyse & interpret various
		Economic
GC 503	Business Reporting and Analysis	2. Examine Business decision making.
GC 505		3. Design reporting pattern followed in corporate sector as a part
		of MIS.
		1. Understand various financial terminologies and transactions
		involved in the FOREX market.
504	Foreign Exchange Management	2. Decide the operations of foreign markets.
		3. Demonstrate the principles of currency values
		1. Develop Disciplinary Knowledge in International Marketing
		2. Encourage entrepreneurial spirit in students; to make them
505	International Marketing	effective in International Business
	Management	3. Acquire Analytical reasoning necessary to understand
		International Marketing.
		1. Examine marketing concepts and phenomenon to current
		business events In the Industry

506	Legal Aspects in Marketing	2.	Understand	ethical	challenges	related	to	responsible
	Management	ma	inagement of a	dvertising	g			

Semester VI

Course Code	Course Title	Course Outcome
GC 601	New Venture Creation and StartUps	 Understand the fundamentals of how to manage a new venture. Discuss the process of creation of start-ups. Compare various types of feasibility analysis required in new venture creation Design a business plan
602	International Project Management	 Remember the basic concepts of project management Understand organization structure by applying flow of authority and responsibility. Analyse earned value by evaluating a project financially to revise estimates of cost and time Evaluate risks in project management by making resource chart by finding probability of completion of project. Create new project proposals with help of network diagram, critical path and concepts of crashing network
604		 Understand the structure and strategies of Agribusiness and Agriculture marketing. Recognise the concept and types of contract farming. Assess the role of banks and cooperative institutions in agribusiness.

	Management of agribusiness and agri	4. Analyze the job of marketing cooperatives.
	export	5. Create the marketing plan and required documents for Agri
	_	export
		1. Define the concept related to service
	International Service Management	2. Illustrate the concept of Servicer Marketing Triangle
605		3. Analyze different service sectors & identify the phase of life
		cycle.
		4. Compare quality of services and analyse the gap
		1. Understanding the comprehensive knowledge of brand, theories
		and concepts, such as brand equity, identity, personality
		2. Analysing the Brand Positioning Strategy and how to tackle the
		competitors.
		3. Measuring the impact of Brand Dimensions and Brand Audit
606	Brand Management	4 Appraise and summarise the various brand strategies used
		Globally.
		5. Collect and design the skills to build a winning brand strategy
		and activate the brand in a competitive marketplace
		1. Understand various decision-making models, such as rational
(02)		decision-making, behavioral decision theory, and bounded
603	Decision Making and Risk	rationality.
	Management	2. Learn how to identify and categorize different types of risks,
		including financial, operational, strategic, and reputational risks.
		3. Develop strategies for making decisions when faced with
		uncertain or incomplete information

CHRIST COLLEGE PUNE

DEPARTMENT OF SCIENCE

Programme Outcome

After the successful completion of three-year BSC (CS) Programme, the graduate will be able to:

- **PO1:** To develop problem solving abilities using computer
- PO2: To build the necessary skill set and analytical abilities for developing computer-based solutions
- PO3: To create awareness about process and product standards
- PO4: To train students in professional skills related to software industry

Bachelor of Science (Computer Science)

Semester I

Course Code	Course Title	Course Outcome
	Problem Solving using Computer	1. Explore algorithmic approaches to problem solving.
CS-111	and 'C' Programming	2. Develop modular programs using control structures and arrays in
		'C'.
		1.Solve real world problems using appropriate set, function, and
	Database Management Systems	relational models.
CS-112		2. Design E-R Model for given requirements and convert the same
		into database tables.
		3. Adapt SQL
		1. Organize large amount of data in the form of matrices
		2. Perform basic matrix operations
MTC-111	Matrix Algebra	3. Solve simple linear equations using matrices
		1. Identify certain parameters and properties of the given graphs.
	Discrete Mathematics	2. Design certain algorithms based on Boolean Algebra
MTC-112		
		1. Define and explain electronics components
	Semiconductor Devices and Basic	2. Relate working of semiconductor devices
ELC-111	Electronic Systems	3. Develop working of Power supply

		4. Examine working of OSCILLATORS5. Choose appropriate and advanced techniques for data conversion
		1. Assess interconversion of various number systems.
	Principles of Digital Electronics	2. Design and simplify K-maps
ELC-112		3. Evaluate and design encoders and decoders.
		1. Solve counting problems related to permutations and combinations
		using counting principles
		2. Assess probability theory in modelling and understanding modern
CSST-112	Mathematical Statistics	definition of probability.
0.001-112		3. Identify various probability models.
		4. Discover numerical problems related to real life situation
		1. Learn to describe and summarize data using appropriate measures
CSST-111	Descriptive Statistics	of central tendency, such as mean, median, and mode.
		2. Understand measures of data variability, including range, variance,
		and standard deviation, to assess the spread of data points.
		3. Calculate and interpret percentiles and quartiles to understand data
		distribution and identify outliers.

Semester II

Course Code	Course Title	Course Outcome
CS-121	Advanced 'C' Programming	 Recall the basic concepts of 'C' Programming Understand code organization with complex data types and structures.

		3. Develop modular programs using control structures, pointers,
		arrays, strings and structures.
		4. Differentiate various types of outputs.
		1. Classify and explain the database concepts like data types,
		operators and control statements.
		2. Apply the database concepts in writing PL/SQL programs.
		3. Distinguish between DBMS and RDBMS
CS-122	Relational Database Management	4. Select from various programming constructs like cursors, triggers,
	Systems	functions and procedures and use them while creating programs.
		5. Create and organise data in tables and make modifications through
		PL/SQL programs
		1. Recall the concept of Vector Spaces .
	Linear Algebra	2. Compute basis of given vector spaces.
MTC-121		2. Compute basis of given vector spaces.
WII C-121		3. Solve the system of linear equations using the gaussian elimination
		method.
		4. Represent different isomorphisms of vector spaces using linear
		transformation.
		5. Apply Rank-Nullity Theorem for computations of dimension of
		vector spaces
		1. Understand the concept of Vector Spaces.
		2. Compute basis of given vector spaces.
		2. Compute basis of given vector spaces.
	l	I

MTC-122	Graph Theory	 Solve the system of linear equations using the gaussian elimination method. Represent different isomorphisms of vector spaces using linear transformation. Apply Rank-Nullity Theorem for computations of dimension of vector spaces.
ELC-122	Basics of Computer Organisation	 Expalin the working of sequential circuits. Compare and identify the basics of computers. Develop the understanding and identifying the memory architecture. Design their own model using basic knowledge of digital electronic
CSST-121	Methods Of Applied Statistics	 Explain the basic concepts of applied statistics. Analyse the data using correlation and regression Demonstrate the method for solving real life problems using multiple regression and multiple, partial correlation. Formulate real life problems as relevant statistical problems and find the solution using methods of time series

		1. Understand standard continuous probability distributions.
		2. Compute probabilities, expected values and variance of standard
	Continuous Probability	continuous probability distributions.
CSST-122	Distributions and Testing of	3. Apply standard continuous probability distributions to solve real
	Hypothesis	life problems based on given data.
		4. Implement testing of hypothesis in decision making situation.
		5. Create optimum model against which given data needs to be tested.
		1. Infer the fundamental principles of measurement, including
		accuracy, precision, sensitivity, and linearity.
FL C 121	Instrumentation System	2. Familiarize yourself with common measurement instruments, such
ELC-121		as voltmeters, ammeters, and oscilloscopes
		3. Explore digital communication protocols used in instrumentation
		systems, such as Modbus and HART.

Semester III

Course Code	Course Title	Course Outcome
	Data Structures and Algorithms –	1. Interpret organized data structures in PS.
	I	2. Differentiate the usage of various structure in PS.
CS-231		3. Implementing algorithms to solve problems using DS.
		1. Compare and chose a process model for a software project
		development.
	Software Engineering	2. Identify requirements analyze and prepare models.
CS-232		3. Prepare the SRS, Design document, Project plan of a given
		software system

		1. Differentiate between equivalence relation and congruence relation
	Group Theory	on Z
MTC-231		2. Identify groups and its elementary properties
		3. Explore the properties of finite groups and subgroups
		1. Develop methods like Newton-Raphson, false position while
		solving algebraic and transcendental equations.
		2. Apply methods like Newton's interpolation, LaGrange's
		interpolation while solving interpolation problem.
MTC-232	Numerical Analysis	3 Implement methods like Trapezoidal Rule, Simpson's One-Third
		Rule, Simpson's Three-Eight Rule while finding numerical values of
		integration
		4. Examine methods like Euler's Method, Modified Euler's Method,
		Runge-Kutta Method while solving ordinary differential equations
		1. Classify programs for 8051 microcontroller
	Microcontroller Architecture and	2. Interface I/O peripherals to 8051 microcontroller
ELC-231	programming	3. Design small microcontroller based projects
		1. Define and explain terminologies of data communication
		2. Understand the impact and limitations of various digital
		modulation techniques
		3. Acknowledge the need of spread spectrum schemes
ELC-232	Digital Communication and	4. Identify functions of data link layer and network layer while
	Networking	accessing communication link
		5. Choose appropriate and advanced techniques to build the computer
		network
		1. Expalin the importance of preserving and protecting our Mother
23921	Environment Science –I	Earth.
		2. Guide the next generation.

23922	Language Communication – I	 Develop Reading, Writing, Speaking and Listening Skills. Compare certain rules of grammar
		 3. Develop personality by instilling core values; life skills. 4. Identify soft skills.

Semester IV

Course Code	Course Title	Course Outcome
CS-242	Computer Networks - I	 Recall the basic concept of Networking(LAN,MAN,WAN, Protocols) Develop the OSI and TCP/IP Reference Models and in particular have a good knowledge of lower Layers vs Upper layers and also working of various protocols. Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies.
		 Understand 2 and 3 dimensional transformations. Compute matrices of two and three dimensional transformations. Apply transformations and projections in computer science.

MTC-241	Computational Geometry	4. Represent different equations of planes and curves in three dimensions.5. Create animation videos using transformations and curves in three dimensions.
MTC-242	Operations Research	 Explain the basic concepts of operations research. Solve LPP using various methods. Demonstrate the method for solving assignment problems and transportation problems. Formulate real life problems as relevant LPP and find the solution using appropriate method.
ELC-241	Embedded System Design	 Differentiate between general computing and embedded systems. Relate the fundamentals of embedded systems. Develop familiarity with tools used to develop in an embedded environment Design their own model using a Single board Computer (Such as Raspberry Pi) for an embedded system application. Design embedded systems and their interfaces with peripheral devices.

ELC-242	Wireless Communication and Internet of Things	 Understand working of wireless technologies such as Mobile communication, GSM, GPRS ,3G and 4G Cellular Network Technologies Apply short-range communication in various applications Experiment above knowledge for data communication Evaluate the concept of Internet of Things Design new IoT based application
24921AECC1	Environment Science – II	 Make use of awareness in the society about the protection of the environment. Create awareness about natural resources, ecosystem, biodiversity and its conservation in urban, rural, industrial, agricultural areas. Discuss issues related to society, human population, environmental pollution etc. Investigate scope of renewable energy
CS-241	Data Structures & Algorithms - II	 Learn about advanced data structures such as heaps, hash tables, balanced trees (e.g., AVL trees, Red-Black trees), and graphs. Understand the principles of dynamic programming and apply it to solve complex problems, including optimization problems and sequence alignment.
24922	Language Communication II	 Develop a higher level of proficiency in the target language, including improved speaking, listening, reading, and writing skills. Achieve greater fluency in spoken language through practice in real-life situations and discussions.

	3. Enhance reading comprehension skills to understand more
	complex texts and literature.

Semester V

Course Code	Course Title	Course Outcome
CS-351	Operating Systems - I	 Assess concept of operating system and its principle Analyze processes and Thread Scheduling by operating system Create synchronization in process and threads by operating system Design memory management by operating system using with the help of various schemes
CS-352	Computer Networks – II	 Understand the different protocols of Application layer. Develop understanding of technical aspect of Multimedia Systems. Relate various Multimedia Systems applicable in real time. Identify information security goals. Compare and apply cryptographic techniques for data security
CS-353	Web Technologies – I	 How to develop dynamic and interactive Web Page Create well-structured web pages using HTML. Implement user authentication and authorization mechanisms Perform Exploratory Data Analysis

		2 Obtain alaan/process and transform data
		2. Obtain, clean/process, and transform data.
		3. Detect and diagnose common data issues, such as missing values,
		special values, outliers, inconsistencies, and localization.
		4. Demonstrate proficiency with statistical analysis of data.
CS-354		5. Present results using data visualization techniques.
05-334	Foundations of Data Science	
		1. Understand the concept of Object-Oriented Programming such as
	Object Oriented Programming - I	classes, objects, Packages, and Collections.
	(Core Java)	2. Develop Web-based applications and GUI-based Applications.
CS-355		3. Design event-driven Applications.
		1. Recall the Finite Automata, Pushdown Automata and Turing
	Theoretical Computer Science and	Machine.
09.256	Compiler Construction - I	2. Evaluate the Regular Language, Context Free Language, Context
CS-356		Sensitive Language and Unrestricted Language.
		3. Explain the relation between Automaton and Language
		1. Develop logic of problem-solving using python
		2. Evaluate various Data Structures like List
CS-3510	Python Programming	3. Familiarize with Basic control structures, loops & tune?
		4. Develop small Application Project.
		1. Learn Fundamentals of Blockchain Technology.
CS-3511	Blockchain Technology	2. Learn Blockchain Programming.
		3. Demonstrate basic knowledge of smart contracts & how they
		function

Semester VI

Course Code	Course Title	Course Outcome
CS-361 CS-362	Operating Systems – II Software Testing	 Compare deadlock concepts and file handling techniques. Apply disk scheduling algorithms in process management Analyse the working of distributed and mobile O.S. Define various software testing methods and strategies. Compare a variety of software metrics and latest testing methods used in the software industries. Identify defects and manage those defects for improvement in quality for given software. Design test cases and test plans, review reports of testing for qualitative software.
CS-363	Web Technologies – II	 Recall the basic concepts of HTML, CSS, PHP Remember basic concepts of JavaScript, XML, jQuery, cookies, session, Ajax, CodeIgniter Analyse the difference between server-side Application and client-side Application

		4. Create dynamic website. Using MVC based framework, students will make design and handle the errors in dynamic Website
CS-364	Data Analytics	 Utilize knowledge and skills to continue learning and adapting to new data science technologies. Acquire the fundamental understanding of the analytical techniques and software tools necessary to effectively generate useful information from structured and unstructured datasets of any size. Demonstrates the ability to technical skills in predictive and prescriptive modelling to support decision making based on data analytics. Evaluate to the basics of programming and analytics software used to the solution of real-world business problems.
CS-365	Object Oriented Programming using Java – II	 Recall basic concepts of Database programming, Collection Framework, Multithreading, and dynamic web pages using Servlets and JSP and also basics Spring Framework. Analyze the difference between Java Application and Web Application Create application using Multithreading concepts, database application using JDBC and web application using Servlets and Spring Framework.

CS-3610	Software Testing Tools	 Define various software testing methods and strategies. Evaluate a variety of software metrics and latest testing methods used in the software industries. Identify defects and manage those defects for improvement in quality for given software. Design test cases and test plans, review reports of testing for qualitative software
CS-366	Compiler Construction	 1. Remember of the overall structure and components of a compiler, including lexical analysis, parsing, semantic analysis, optimization, and code generation. 2. Explore semantic analysis to check and enforce the correctness of program semantics, including type checking and error handling. 3. Develop techniques for managing symbol tables, which store information about variables, functions, and other program entities. 4. Design and implement test cases and techniques for thoroughly testing the compiler to ensure its correctness and robustness.

CHRIST COLLEGE PUNE DEPARTMENT OF SCIENCE

Programme Outcome

After the successful completion of two-year MSC (CS) Programme, the graduate will be able to:

PO1: Recognize the characteristics of patterns that make it useful to solve real-world problems.

PO2: Process available data using python libraries and predict outcomes using Machine Learning algorithms to solve given problem.

PO3: Able to use specific frameworks as per applications need.

PO4: Design java application using design pattern techniques.

Master of Science (Computer Science)

Semester I

Course Code	Course Title	Course Outcome
CSUT111	Paradigm of Programming Language	 Analyze syntax from semantics Compare programming language designs Criticize their strengths and weaknesses Combine new languages more quickly
		 Distinguish types of NoSQL databases (Document oriented, key Value pairs, Column-oriented and Graph) Evaluate detailed architecture, define objects, load data, guerry data and performance type NoSQL databases
CSUT113	Database Technologies	query data and performance tune NoSQL databases.3. Create large volumes of structured, semi-structured, and unstructured data using database technologies.
CSDT114B	Artificial Intelligence	 Examine various types of algorithms in AI. Convey the ideas in AI research & program. Modify numerous applications & huge possibilities in the field of AI that goes Beyond normal human imagination.
CSUT112	Design and Analysis of Algorithms	 Develop the ability to solve complex computational problems using efficient algorithms. Measure various algorithm design paradigms, such as divide and conquer, dynamic programming, greedy algorithms, and backtracking.

	3. Predict various data structures and understand how to
	choose the most appropriate ones for different algorithmic
	problems.

Semester II

Course Code	Course Title	Course Outcome
CSUT121	Advanced Operating System	 Identify and use UNIX/Linux utilities to create and manage simple file processing operations, organize directory structures with appropriate security, and develop shell scripts to perform more complex tasks. Create processes background and foreground by process fork and signals system calls. Analyze a given problem and apply requisite facets of SHELL programming in order to devise a SHELL script to solve the problem Demonstrates shared memory segments, pipes, message queues and can exercise inter process communication.

CSUT122	Mobile Technologies	 Understand basic concepts of mobile OS. Deduct simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more. Demonstrate their understanding of the fundamentals of Android operating systems Explain their skills of using Android software development tools Differentiate between Android OS and Ios Create an Ios user interfaces and application.
CSUT123	Software Project Management	 Understand different components of IT projects. Apply project Management practices to develop strategies to calculate risk factors, to control the design implementation and evaluation of IT Projects, to launch new products, services and events relative to the needs of stakeholders. Develop project plan, Estimate and adjust Project Variables.
CSDT124	Soft Computing	1. Gain an understanding of the fundamental concepts and principles of soft computing paradigms, including fuzzy logic, neural networks, genetic algorithms, and swarm intelligence.

	2. Explore artificial neural networks, including feedforward and recurrent architectures, and understand their applications
	in pattern recognition, classification, and regression.3. Design and analyze fuzzy logic-based control systems for applications in robotics, automation, and process control.
	applications in robotics, automation, and process control.

Semester III

Course Code	Course Title	Course Outcome
Course Code Course Title Software Architecture and Design Patterns	 Recognize major Software Architectural styles, Designs and Frameworks to create reusable and flexible software applications and systems. Comapre the characteristics of patterns that make it useful to solve real-world problems. Apply Software Architectural styles, Design Pattern and Frameworks to create reusable and flexible software applications and systems. 	
		 4. Perform software verification and validation using inspections, design and execution of system. 5. Compare case study to take a framework and find patterns in the frames. 6. Design java applications using design pattern techniques.

CSUT232	Machine Learning	 Recognize the characteristics of machine learning that make it useful to real-world problems. 2. Process available data using python libraries and predict outcomes using Machine Learning algorithms to solve given problem. Estimate Machine Learning models efficiency using suitable metrics. Design application using machine learning techniques.
CSUT233	Web Frameworks	 Relate with the technology which is used widely in Industry as a part of full stack developer. Develop the web application in Python. Assess what really the asynchronous programming. Build and deploy robust Django Web App. Formulate with Restful web services

Semester IV

Course Code	Course Title	Course Outcome
CSUIT241	Industrial Training / Institutional	1. Compare real-world industrial or institutional setting,
	Project	applying theoretical knowledge to practical situations.
		2. Develop and enhance a range of professional skills,
		including problem-solving, communication, teamwork, time
		management, and adaptability.

	3. Acquire an in-depth understanding of the industry or sector
	in which the training or project is conducted, including its
	challenges, trends, and best practices.