Dnyandeep College of Science and Commerce
Morvande-Boraj, Khed
Department of Information Technology

PROGRAMME SPECIFIC OUTCOMES (PSO)

On completing the B. Sc.(Information Technology) at the University of Mumbai, the graduates shall be able to

Technical Proficiency:
- Demonstrate a comprehensive understanding of fundamental concepts, principles, and technologies in information technology.
- Apply programming and software development skills to design and implement IT solutions.

System Thinking and Analysis:
- Apply system analysis and design methodologies to analyze and address complex problems.
- Design and develop IT systems that meet user requirements and organizational needs.

Database Management:
- Design, implement, and manage relational databases to store and retrieve information effectively.
- Demonstrate proficiency in using database management systems and querying languages.

Networking and Security:
- Understand and implement computer networks, protocols, and security measures.
- Evaluate and implement security solutions to protect information systems.

Web Technologies:
- Develop web applications using a variety of technologies and programming languages.
- Design and create user interfaces that adhere to web design principles.

Project Management:
- Apply project management principles to plan, execute, and deliver IT projects.
- Demonstrate the ability to work effectively within project teams.

Emerging Technologies:
- Stay informed about and adapt to emerging technologies in the IT field.
- Apply concepts of artificial intelligence, machine learning, cloud computing, and
- IoT to solve real-world problems.

Critical Thinking and Problem-Solving:
- Analyze and solve complex IT problems using critical thinking skills.
- Apply problem-solving strategies to troubleshoot and resolve technical issues.

Communication Skills:
- Effectively communicate technical information to diverse audiences, both orally and in writing.
- Collaborate with team members and stakeholders to achieve common goals.

Ethics and Professionalism:
- Demonstrate ethical behavior and professionalism in all aspects of the IT profession.
- Adhere to ethical standards and legal considerations related to information technology.

Semester - I

Sr.No	Subject Name	Course Objectives(CO)	Course Outcomes (OC)
1	Programming with C	CO 1. To understand the concepts of computer programming. CO 2. To understand syntax and semantics of the C language CO 3. To understand loops and decision making in programming. CO 4. To understand the use of arrays, structures, union and pointers. CO 5. To understand functions for modular code and handle errors.	OC 1. Students can build flowcharts, pseudocode for C programs. OC 2. Students can use C language syntax and semantics in their programs. OC 3. Students can implement loops and decision making. OC 4. Students can use different types of data structures in their programs. OC 5. Students can write well-structured, readable, and maintainable C code and debug programs if there are any errors.
2	Database Management System	CO 1. To make students aware fundamentals of database system. CO 2. To give idea how ERD components helpful in database design and implementation. CO 3. To experience the students working with database using MySQL. CO 4. To familiarize the student with normalization, database protection and different DDL, DML, DQL, DCL Statements CO 5. To make students aware about importance of protecting data from unauthorized users.	OC 1. Define and describe the fundamental elements of relational database management system. OC 2. To relate the basic concepts of relational data model, entity-relationship model, relational database OC 3. Design ER-models to represent simple database application scenarios. OC 4. Understand the normalization and its role in the database design process OC 5. Transform the ER-model to relational tables, populate relational database and formulate SQL OC 6. Understand basic database storage structures and access techniques: file and page organizations, indexing methods and hashing.
3	Major Practical 1	CO 1. To provide exposure in developing algorithm, flowchart and to write efficient code. CO 2. To understand loops and decision making in programming. CO 3. To understand the arrays, structures, union. CO 4. To understand the use of function and pointers. CO 5. To Identify entities and its relationship with relational model structure. CO 6. To understand relational database 4using SQL and constraints i5mplementation using create table queries. CO 7. To Understand DML operations and backing of database CO 8. To understand how to retrieve data	OC 1. Students can demonstrate the concepts of datatypes, variables and operators in C. OC 2. Students can implement the concept of control statements and looping in C program. OC 3. Students can demonstrate the use of arrays, strings and structures in C OC 4. Students can implement modular C program using functions and pointers. OC 5. Students can demonstrate the use of arrays, strings and structures in C. OC 6. Students able to perform various operations such as insert, update delete and retrieve data from database using SQL queries. OC 7. Students able to perform alteration in tables and can restore and take backup of the database.

		from database and learn how to retrieve single value after performing calculations on group of values CO 9. To understand built-in functions to perform operations on data CO 10. To understand how to fetch data from two or more tables, which is joined to appear as single set of data CO 11. To understand nested and larger query as advanced fetching of data to understand concept of virtual table. CO 12. To understand how to control user access in a database.	OC 8. Students able to perform operations using simple SQL Queries to fetch data and learns various aggregate functions to get single value. OC 9. Students able to perform SQL Queries using JOIN keyword for joining two or more tables. OC 10. Students able to perform nested queries using in, exists operators. OC 11. Students able to create new table by joining one or more tables and learn how to hide attribute from end user. OC 12. Students able to restrict the user from accessing data in database. OC 13. Students should be able to create, manipulate the database management system to evaluate the business information problem
4	Combinational and Sequential Design	CO 1. To provide students with a comprehensive understanding of combinational and sequential circuit design principles and techniques. CO 2. To enable students to apply Boolean algebra, K-map simplification, and other design techniques to create optimized digital circuits. CO 3. To equip students with the necessary tools and skills to implement arithmetic circuits, data path circuits, and memory circuits. CO 4. To enable students to analyze and troubleshoot digital circuits to ensure optimal performance. CO 5. To provide students with hands-on practical experience in designing and implementing digital circuits using simulation software and real-world hardware.	OC 1. Students can explain the differences between combinational and sequential circuits, and identify their different applications. OC 2. Students can define the concept of Boolean algebra and its importance in digital circuit design. OC 3. Students can explain and apply the principles of K-map simplification and other design techniques. OC 4. Students can design and construct combinational circuits using Boolean algebra and K-maps. OC 5. Students can design and implement arithmetic circuits such as adders, subtractors, and multipliers. OC 6. Students can design and implement data path circuits such as registers, multiplexers, and decoders. OC 7. Students can implement digital circuits using breadboards, logic probes, and oscilloscopes. OC 8. Students can troubleshoot and verify the correctness of digital circuits using real-world hardware and measure their performance using various metrics.
5	Fundamentals of Telecommunication Systems	CO 1. Identify the fundamental concepts and terminologies of signals and systems theory through an introduction to sets, mappings, functions, and systems operators. CO 2. Demonstrate knowledge of the properties of continuous-time signals and systems, transformations of the independent variable, properties of functions, and	OC 1. Identify the fundamental concepts and terminologies of signals and systems theory through an introduction to sets, mappings, functions, and systems operators. OC 2. Demonstrate knowledge of the properties of continuous-time signals and systems, transformations of the independent variable, properties of functions, and

		representation of arbitrary functions. CO 3. Demonstrate knowledge of the properties of discrete-time signals and systems, transformations of the independent variable, properties of sequences, and representation of arbitrary sequences. CO 4. Analyze the drivers for 5G technology, identify the 10 pillars of 5G, and describe the evolution of wireless communication from LTE technology to beyond 4G. CO 5. Discuss the 5G internet of things (IoT), explain networking reconfiguration and virtualization support, and identify the mobility and quality of service control in 5G networks. CO 6. Evaluate the challenges of small cells in 5G mobile networks and identify the capacity limits and achievable gains with densification.	representation of arbitrary functions. OC 3. Demonstrate knowledge of the properties of discrete-time signals and systems, transformations of the independent variable, properties of sequences, and representation of arbitrary sequences. OC 4. Analyze the drivers for 5G technology, identify the 10 pillars of 5G, and describe the evolution of wireless communication from LTE technology to beyond 4G. OC 5. Discuss the 5G internet of things (IoT), explain networking reconfiguration and virtualization support, and identify the mobility and quality of service control in 5G networks. OC 6. Evaluate the challenges of small cells in 5G mobile networks and identify the capacity limits and achievable gains with densification.

Semester- II

Sr.No	Subject Name	Course Objectives(CO)	Course Outcomes (OC)
1	Object Oriented Programming using C++	CO 1. To explain the difference between object oriented programming and procedural programming. CO 2. To understand OOP principles to create modular, reusable, and maintainable code. CO 3. To understand the concept of polymorphism ,virtual functions, inheritance and exception handling. CO 4. To understand file handling concepts using C++.	OC 1. Students can explain the key concept of OOP and their application in software development. OC 2. Students can Design and implement classes and objects to model real- world entities. OC 3. Students can apply the concepts of polymorphism, virtual functions, inheritance and exception handling in program. OC 4. Students can apply operator overloading, runtime polymorphism, generic Programming OC 5. Students can implement file handling concepts in program
2.	Web Designing	CO 1. To understand the fundamentals of Internet, and the principles of web design CO 2. To develop basic websites using HTML and Style Sheets. CO 3. To understand different style sheets used in web designing. CO 4. To implement JavaScript as a tool to add dynamism to static HTML pages.	OC 1. Learners will be able to use the HTML programming language OC 2. Learners will be able to execute web pages designed using HTML OC 3. Describe the concepts of World Wide Web, and the requirements of effective web design OC 4. List various tags in html and use these to create web page OC 5 : Gain necessary skills for designing and developing web applications
3	Major Practical II	CO 1. To explain the important characteristics of the C++ programming language. CO 2. To combine components of the C++ programming language to develop structured program.	OC 1. Utilize C++ characteristics in software design and development. OC 2. Explain object-oriented techniques and explain how C++ supports them.

		CO 3. To demonstrate the skills essential to compile, debug, and test C++ programs correctly. CO 4. To understand how to effectively implement HTML. CO 5. To develop the concept of basic and advanced text formatting. CO 6. To understand Hyper linking, Designing of webpage.	OC 3. Employ C++ to demonstrate practical skill developing object-oriented solutions. OC 4. Examine a problem statements and design and develop object-oriented software using good coding practices and procedures. OC 5. Design static web pages using Hyper Text Markup Language (HTML). OC 6. Use their learned skills, knowledge and abilities to develop web sites OC 7. Collect information from the user with HTML Forms. OC 8. Enhance the look of web pages by implementing audio and video
4	Assembly Language Programming	CO 1. To gain a thorough understanding of the 8085 microprocessor architecture and its associated instruction set. CO 2. To develop the ability to write and debug assembly language programs for the 8085 microprocessor. CO 3. To learn the principles of computer organization and how they relate to the 8085 microprocessor. CO 4. To become proficient in the use of 8085 assembly language programming tools, simulators, and debuggers. CO 5. To learn how to interface different input/output devices with the 8085 microprocessor. CO 6. To understand the concept of interrupts and how they are used in 8085 assembly language programming.	OC 1. Explain the architecture of the 8085 microprocessor and its associated instruction set. OC 2. Identify the different types of registers and their functions in the microprocessor. OC 3. Describe the memory organization and addressing modes of the 8085 microprocessor. OC 4. Write assembly language programs for the 8085 microprocessor using various instructions and addressing modes. OC 5. Debug and troubleshoot assembly language programs for the 8085 microprocessor using simulators and debuggers. OC 6. Implement conditional branching and looping constructs in assembly language programs. OC 7. Use 8085 assembly language programming tools, such as editors, assemblers, and emulators for developing and testing programs. OC 8. Simulate microprocessor operations using emulators and debuggers. OC 9. Connect input/output devices, such as LEDs, switches, and displays, to the 8085 microprocessor.
5	PLSQL Practical	CO 1. Comprehend the basics of PL/SQL and gain knowledge about control and conditional statement in PL/SQL. CO 2. Understand working with cursors,collections and composite data types in PL/SQL. CO 3. Develop expertise in creating stored procedures and functions. CO 4. Explore the use of triggers to automate responses to events within the database. CO 5. Understand the concept of Exception handling. CO 6. Design modular applications using packages.	OC 1. Use PL/SQL variables ,data types, control and conditional statement. OC 2. Apply sequences and cursor in PL/SQL. OC 3. Work with Collection and Composite Data Types. OC 4. Develop PL/SQL structures like functions, procedures and triggers for database applications. OC 5. Handle errors and exceptions in PL/SQL programs. OC 6. Develop PL/SQL packages.

Dnyandeep College of Science and Commerce

Morvande-Boraj, Khed

Department of Computer Science

PROGRAMME SPECIFIC OUTCOMES (PSO)

On completing the B. Sc. (Computer Science) at the University of Mumbai, the graduates shall be able to

- Formulate, model, and design solutions and procedures, utilizing software tools to address real-world problems effectively.
- Design and develop computer programs and computer-based systems in diverse areas such as networking, web design, security, cloud computing, IoT, data science, and other emerging technologies.
- Familiarize themselves with modern-day trends in industry and research-based settings, fostering the ability to innovate novel solutions to existing problems.
- Apply concepts, principles, and theories related to computer science to new and challenging situations.
- Demonstrate proficiency in using current techniques, skills, and tools essential for computing practice.
- Apply standard Software Engineering practices and strategies in real-time software project development.
- Pursue higher studies of specialization and confidently enter technical employment.
- Work independently or collaboratively as effective team members on substantial software projects, showcasing project management and teamwork skills.
- Communicate and present their work effectively and coherently, both in oral and written formats.
- Display ethical conduct in the usage of the Internet and Cyber systems, understanding and adhering to ethical standards in computing practices.
- Engage in independent and life-long learning, adapting to the rapidly changing IT industry and staying abreast of evolving technologies.

Semester - I

Sr.No	Subject Name	Course Objectives(CO)	Course Outcomes (OC)
1.	**Digital System and Architecture**	CO 1. To understand fundamentals of Logic gates, Number system and Flip Flops. CO 2. To have an understanding of Digital System and Operation of a Digital Computer. CO 3. To Learn Different Architecture & Organization of memory system, processor organization and control unit. CO 4. Basic understanding of 8085 microprocessor and its applications.	OC 1. Learn how number system and codes are useful in computer system design. OC 2. Learn how Flip Flops are useful in memory design and data communication through CPU and Memory and I/O devices. OC 3. Learn about basics of instruction sets and its types. OC 4. Learn about Processor Internal Architecture and Design.

2.	**Fundamentals of Database Systems**	CO 1. To make students aware fundamentals of database system. CO 2. To give idea how ERD components helpful in database design and implementation. CO 3. To experience the students working with database using MySQL. CO 4. To familiarize the student with normalization, database protection and different DCL Statements. CO 5. To make students aware about importance of protecting data from unauthorized users. CO 6. To make students aware of granting and revoking rights of data manipulation.	OC 1. To appreciate the importance of database design. OC 2. Analyze database requirements and determine the entities involved in the system and their relationship to one another. OC 3. Write simple queries to MySQL related to String, Math's and Date Functions. OC 4. Create tables and insert/update/delete data, and query data in a relational DBMS using MySQL commands. OC 5. Understand the normalization and its role in the database design process. OC 6. Handle data permissions. OC 7. Create indexes and understands the role of Indexes in optimization search.
3.	**Computer Science Practical 1**	CO 1. To verify the truth tables of various logic gates CO 2. Develop proficiency in designing and implementing digital circuits. CO 3. Explore various components of digital systems, including processors, memory units, and input/output interfaces. CO 4. Develop skills in designing and creating relational databases. CO 5. Explore the principles of database querying using SQL. CO 6. Gain practical knowledge of transaction management and data control in database systems.	OC 1. Verify truth tables of various logic gates OC 2. Simplify given Boolean expressions and implement them using Logisim. OC 3. Design and validate the operation of various combinational circuits using Logisim. OC 4. Understand the behavior and applications of flip-flops in digital systems. OC 5. Design and implement expressions using multiplexers/demultiplexers in Logisim. OC 6. Create and maintain relational databases, applying normalization principles. OC 7. Write simple queries to MySQL related to String, Maths and Date Functions. OC 8. Create tables and insert/update/delete data, and query data in a relational DBMS using MySQL commands. OC 9. Handle data permissions.
4.	**Introduction to Programming with Python**	CO 1. Master Python features, execution, and diverse data types. CO 2. Demonstrate expertise in if statements, loops, and control statements. CO 3. Efficiently create and manipulate arrays, strings, and data structures. CO 4. Apply functions, modules, and strings for versatile programming tasks. CO 5. Effectively manage files, utilize regular expressions, and work with date and time.	OC 1. Apply Python features for diverse programming tasks confidently. OC 2. Implement control flow statements for precise program execution. OC 3. Manipulate arrays, strings, and data structures with precision and ease. OC 4. Create modular, efficient code using functions, modules, and strings. OC 5. Skillfully manage files, utilize regular expressions, and work with date and time for program efficiency.
5.	**LINUX Operating System**	CO 1. To learn basic concepts of Linux in terms of operating system CO 2. To learn use of various shell commands with regular expressions CO 3. To set Linux Environment variables and	OC 1. Work with Linux file system structure, Linux Environment OC 2. Handle shell commands for scripting, with features of regular expressions, redirections OC 3. Implement file security permissions

		learn setting file permissions to maintain Linux security implementation CO 4. To learn various editors available in Linux OS and learn shell scripting. CO 5. To learn installation of compilers and programming using C and Python languages on Linux platform.	OC 4. Work with vi, sed and awk editors for shell scripting using various control structures OC 5. Install software like compilers and develop programs in C & Python programming languages on Linux Platform

Semester - II

Sr.No	Subject Name	Course Objectives(CO)	Course Outcomes (OC)
1.	**Design and Analysis of Algorithms**	CO 1. To make students understand the basic principles of algorithm design. CO 2. To give idea to students about the theoretical background of the basic data structures. CO 3. To familiarize the students with fundamental problem-solving strategies like searching, sorting, selection, & recursion & help them to evaluate efficiencies of various algorithms. CO 4. To teach students the important algorithm design paradigms and how they can be used to solve various real world problems.	OC 1. Students should be able to understand and evaluate efficiency of the programs that they write based on performance of the algorithms used. OC 2. Students should be able to appreciate the use of various data structures as per need. OC 3. To select, decide and apply appropriate design principle by understanding the requirements of any real life problems.
2.	**Introduction to OOP using C++**	CO 1. To make learner understand the concepts of OOP. CO 2. To make learner understand the design of OOP through UML. CO 3. To make learner familiar with the syntax of C++. CO 4. To make learner Analyze and implement concepts of OOP. CO 5. To make learner create programs relating to OOP concepts.	OC 1. The learner will be able to understand, remember, demonstrate, explain and describe concept of OOP. OC 2. The learner will be able to design UML based diagrams. OC 3. The learner will be able to illustrate the different types of control statements in C++. OC 4. The learner will be able to analyze and implement concept of OOP. OC 5. The learner will be able to write and create programs relating to OOP concepts.
3.	**Computer Science Practical 2**	CO 1. Analyze and implement algorithms for common computational problems. CO 2. Implement algorithms using divide and conquer strategies. CO 3. Apply dynamic programming techniques to solve optimization problems. CO 4. Implement and analyze algorithms based on greedy strategies. CO 5. Comprehend the principles of object-oriented programming. CO 6. Design and implement classes and objects in C++. CO 7. Implement single, multiple, and hierarchical	OC 1. Design and implement algorithms for various problem domains. OC 2. Evaluate and compare the time and space complexities of algorithms. OC 3. Apply divide and conquer strategies to solve computational problems. OC 4. Utilize dynamic programming techniques for optimization problems. OC 5. Implement and analyze algorithms based on greedy strategies. OC 6. Design and implement classes and objects in C++. OC 7. Apply inheritance and polymorphism

		inheritance. CO 8. Implement operator overloading for user-defined types. CO 9. Understand the impact of access specifiers on class members.	concepts in program development. OC 8. Implement operator overloading for enhanced class functionality. OC 9. Utilize advanced features like friend functions, inline functions, and this pointer. OC 10. Understand the impact of scope specifiers on class members.
4.	**Web Designing**	CO 1. To understand the concept of Web Technologies. CO 2. To understand the concepts of Hyper Text Markup Language and Cascading Style Sheets. CO 3. To learn JavaScript for creating dynamic websites. CO 4. To learn various operations performed on data among web applications using XML. CO 5. To learn Server-Side Programming using PHP.	OC 1. Design valid, well-formed, scalable, and meaningful pages using emerging technologies. OC 2. Understand the various platforms, devices, display resolutions,viewports, and browsers that render websites OC 3. Develop and implement client-side and server-side scripting language programs. OC 4. Develop and implement Database Driven Websites. OC 5. Design and apply XML to create a markup language for data and document centric applications.
5.	**Advanced Python Programming**	CO 1. Master OOPs principles, solving real-world problems. CO 2. Create robust Python classes, transfer members efficiently. CO 3. Understand and implement inheritance, utilize advanced polymorphism. CO 4. Implement abstract classes, leverage interfaces for flexible code. CO 5. Create and synchronize threads, mitigate deadlock issues.	OC 1. Demonstrate comprehensive OOPs proficiency, apply principles effectively. OC 2. Develop efficient, reusable classes, successfully transfer members. OC 3. Ability to implement inheritance and apply advanced polymorphism. OC 4. Ability to implement abstract classes, demonstrate flexibility through interfaces. OC 5. Ability to thread creation, synchronization, and effective deadlock resolution.

PROGRAMME SPECIFIC OUTCOMES (PSO)

On completing the Bachelor in Commerce (B. Com.) at the University of Mumbai, the graduates shall be able to

Major I : Accountancy

PO1: Learners would be able to demonstrate a comprehensive understanding of core accounting, finance, cost and management concepts, principles, and practices and critically analyze financial statements of various entities.
PO2: Demonstrate a comprehensive understanding of the taxation laws, regulations, and policies in India, including direct and indirect taxes, and international taxation.
PO3: Learners would be able to explain the importance of integrity, transparency, and ethical responsibility in financial reporting.
PO4: Learners would be able to demonstrate the ability to break down complex financial challenges into component parts and prepare its statement/ reports for stakeholders.
PO5: Learners will gain knowledge of international accounting standards and practices, including IFRS and GAAP and analyze its differences.

Major II : Commerce

Learning Outcomes

1. The Graduates will demonstrate a profound understanding of essential commerce subjects, enabling them to apply their knowledge effectively in real-world situations.
2. The Students will acquire practical skills in specialized areas, empowering them to implement strategies and solve complex problems in fields like Startups, Marketing, and Quality Management.
3. The learner will develop strong critical thinking skills and ethical decision-making abilities, essential for navigating the business world with integrity and foresight.
4. The program will instill a global perspective, preparing students to understand and engage in the international business environment.
5. The Program will enhance communication skills, enabling students to convey ideas and concepts clearly and professionally.
6. The Graduates will gain leadership and management skills, positioning them for leadership roles in various business and organizational settings.
7. The program will equip students with the knowledge and skills necessary for diverse career opportunities, fostering their preparedness for roles in entrepreneurship, marketing, finance, and the service sector.
8. The students will develop the ability to adapt to evolving business dynamics and industry trends, ensuring their continued relevance in the competitive job market.
9. The program will cultivate research and analytical skills, enabling graduates to gather and interpret data for informed decision-making.
10. The learners will adopt a customer-centric mindset, critical for success in fields such as Sensory Marketing and Social Media Marketing.
11. Graduates will be proficient in applying Quality Management principles to enhance business processes and product quality, contributing to operational efficiency and customer satisfaction.
12. The program allows students to specialize in specific fields like Mall Management or Tourism Management, positioning them for unique and fulfilling career paths.
13. Students will be well-versed in ethical business practices and corporate social responsibility, aligning with contemporary values in the business world.

Major III : Business Economics
Learning Outcomes

Comprehensive Economic Understanding: Graduates will possess a thorough comprehension of economic principles, theories, and their practical applications in the business context, demonstrating a holistic understanding of the economic landscape.

Analytical Proficiency: Students will acquire the ability to analyze and interpret economic phenomena, applying economic concepts to evaluate business decisions, assess market conditions, and formulate effective strategies, showcasing analytical prowess in diverse business scenarios.

Historical Perspective: Through an exploration of the history of economic thought, students will gain insights into the evolution of economic ideas, understanding different schools of thought, and appreciating the intellectual foundations of modern economics, fostering a historical context for economic analyses.

Macroeconomic Insight: Graduates will be well-versed in macroeconomic concepts such as aggregate demand and supply, inflation, unemployment, and fiscal and monetary policies, allowing them to comprehend the implications of these factors for business operations and decision-making.

Global Economic Awareness: Students will explore the factors driving economic growth and development at both national and international levels, studying the roles of institutions, policies, technological advancements, and human capital in promoting sustainable economic progress, fostering a global perspective.

Specialized Knowledge: The curriculum's diverse range of specialized subjects, including demographic economics, behavioral economics, urban economics, agricultural economics, and environmental economics, ensures that graduates develop a versatile skill set and a nuanced understanding of various economic domains.

Research Insight: Graduates will have honed research skills, equipped with the tools and methodologies necessary to conduct economic research, analyze data, and derive meaningful conclusions for practical applications, demonstrating proficiency in empirical economic analysis.

Financial System Understanding: Through an in-depth exploration of the Indian financial system, students will understand the functioning of financial markets and analyze the impact of monetary and fiscal policies on economic stability, investment decisions, and capital allocation, showcasing a practical understanding of financial systems.

International Economic Competence: The program aims to enhance students' understanding of international economics, covering trade theories, exchange rates, trade policies, and the impact of globalization on businesses and economies, preparing graduates for the complexities of the global economic landscape.

Critical Thinking and Decision-Making: Through a well-rounded approach involving theoretical learning, case studies, and practical applications, the program aims to develop students' critical thinking skills. Graduates will be capable of analyzing complex economic problems, proposing effective solutions, and making informed decisions in the dynamic and challenging business environment, demonstrating leadership and strategic thinking qualities.

Semester I

Sr. No.	Course Name	Course Objectives	Course/ Learning Objectives
1.	**Accountancy and Financial Management I**	CO1: To recognize the fundamental accounting concepts and conventions in financial reporting and understand its applicability. CO2: To articulate the applicability and valuation of selected Accounting Standards.	LO1: The learner will be able to identify and explain the various accounting concepts and conventions applicable to the accounting system. LO2: The learner will be able to identify, summarize, distinguish the purpose of policies and commute the valuation of inventory as per Accounting Standards 2 LO3: The learner will be able to calculate the profit/loss of the manufacturing firm and prepare its final accounts.
2.	**Commerce I – Introduction To Business**	This course provides an overview of the business, understanding and significance of the Business Environment, Project Planning and Business Strategy.	CO1: Learners will recognize the fundamental components of the business. CO2: Learners will be able to apply theoretical knowledge to real world scenarios within the Business Environment. CO3: Learners would understand the concept and importance of project planning and would get hands on through case studies. CO4: To create comprehensive understanding among the learners about Business Strategies
3.	**Economics for Professional Careers I**	To establish a comprehensive understanding of Business Economics. To demonstrate and understand the various concept in the principles of demand. To compare and contrast the theories of consumer behavior. To develop expertise in the concept of supply and related concepts.	CO1:Rememberingthe meaning,scopeandimportanceofconceptsusedintheeconomics. CO2:Understandingtherole, problems andtypesofconcepts used intheeconomics. CO3:Applyingthedeterminantsofdemand,supply. CO4:Analysingthe consumer'sbehaviour.
4.	**VSC I Recent Trends in Accounting I**	CO 1: To articulate the significance and necessity of farm accounting in modern agricultural practices. CO 2: To summarize and interpret the principal requirements of Ind AS 41. CO 3: To demonstrate the preparation and maintenance of different types of farm records through specimen examples. CO 4: To demonstrate the application of various	LO 1: The learner will be able to summarize the role and importance of farm accounting and discuss the application of technology in context of farm accounting. LO 2: The learner will be able to evaluate the scope, objectives and accounting treatment of Ind AS 41. LO 3: The learner will be able to identify, prepare and create specimen examples of different farm records to illustrate their proper maintenance. LO 4: The learner will be able to distinguish between income and expenditure and prepare farm trial balance, trading account, profit and loss account and its balance sheet.

		accounting principles in preparation of final accounts of a farm.	
5.	**VSC 2: Vocational Skills in Accounting**	CO 1: To enable the learners to understand the concepts of business start-ups. CO 2: To enable the learners to develop the skill required for registration of business start-ups under various statutes.	LO 1: Acquire the basic knowledge of the concept of person under various statutes and Digital Signature. LO 2: Familarise and understand the basic concepts of business registrations under various statutes. LO 3: Develop the application skill required for registration under various statutes. LO 4: Develop the analytical skill required to understand the various conditions required for registration under various statutes. LO 5: Evaluate in practically restricted situation the knowledge gained related to registration under various statutes.

Semester II

Sr. No.	Course Name	Course Objectives	Course/ Learning Objectives
1.	**Accountancy and Financial Management II**	CO1: To employ the principles of departmental accounting involving expenses and inter- departmental transactions while preparing the final accounts of the departmental store. CO2: To understand the characteristics of dependent branches and apply specific accounting methods for the preparation of the books of accounts.	LO1: The learner will be able to figure out the impact of inter-departmental transfers and prepare the final accounts of the departmental store. LO2: The learner will be able to define and articulate the characteristics that distinguish a dependent branch within a business structure and solve practical problems related to the preparation of accounts of the dependent branch in the books of the head office, demonstrating proficiency in implementing the Debtor's method and Stock & Debtor's method.
2.	**Commerce II – Introduction To Service Sector**	This course provides an overview of the business, understanding and significance of the Business Environment, Project Planning and Business Strategy.	CO1: Learners will recognize the fundamental components of the business. CO2: Learners will be able to apply theoretical knowledge to real world scenarios within the Business Environment. CO3: Learners would understand the concept and importance of project planning and would get hands on through case studies. CO4: To create comprehensive understanding among the learners about Business Strategies
3.	**Economics for**		CO1: Demonstrate a

	Professional Careers II	To understand the fundamental concepts of costs, revenue, and production and the laws governing production in both variable proportions and returns to scale. To explore the intricacies of market structures, incorporating a study of game theory and its application to market dynamics. To examine the mechanisms of price determination in various market structures, analyze market equilibrium, and evaluate the concept of social efficiency in the context of different market forms. To demonstrate proficiency in determining price and output levels under different market structures.	comprehensive understanding of cost, revenue, and production concepts, including short-run and long-run costs, average and marginal costs, and the laws of production. CO2: Analyze and compare different market structures incorporating the principles of game theory to understand competitive dynamics. CO3: Apply knowledge to determine prices in various market structures, evaluate market equilibrium, and assess social efficiency, showcasing the ability to analyze and predict economic outcomes under different competitive scenarios. CO4: Develop proficiency in determining price and output levels under diverse market forms, demonstrating a practical understanding of how market forces influence economic decisions and outcomes.
4.	**VSC 1** **Tourism Management**	The course aims at making the students aware about the different basic concepts of travel and tourism.	Imparting basic knowledge about tourism and its types
5.	**VSC 2:** **Vocational Skills in Accounting III**	CO 1: To enable the learners to understand the concepts of documents in business organisations.. CO 2: To enable the learners to develop the skill required for preparation of various documents required in business organisations.	LO 1: Acquire the basic knowledge of the concept of person under various statutes and Digital Signature. LO 2: Familarise and understand the basic concepts of business registrations under various statutes. LO 3: Develop the application skill required for registration under various statutes. LO 4: Develop the analytical skill required to understand the various conditions required for registration under various statutes. LO 5: Evaluate in practically restricted situation the knowledge gained related to registration under various statutes.

Master of Commerce (M.com)

PROGRAMME OUTCOME FOR M.COM. (ADVANCED ACCOUNTANCY):

Students are expected to achieve the following objectives by the end of the program.

PO1: To make students more proficient in areas like Costing, Taxation, G.S.T., and Accountancy.

PO2: To learn the practical aspects of above subjects through project work, viva practical written exams.

PO3: To prepare students for further out- country professional courses.

PO4: To develop job skills among students and make them confident to face interview

PO5 :Acquire advanced knowledge and skills in financial reporting standards, frameworks, and practices to prepare accurate, transparent, and informative financial statements that meet regulatory requirements and facilitate informed decision-making for stakeholders

PO6: Demonstrate the ability to conduct independent research, critically analyze information, and effectively communicate findings through a comprehensive research project, contributing to the advancement of knowledge in a specific area of study.

SEMESTER - I

Course (Paper) Name and No.: Advanced Financial Accounting

COURSE OUTCOME:

Students will understand & develop the concept of financial accounting
Students will understand foreign currency conversion, banking companies, insurance companies and cooperative society
Employable by preparing and presenting financial statement
Employability skills analyzing balance sheet statements of companies

Course (Paper) Name and No: Advanced Cost & management Accounting

COURSE OUTCOME:

CO1: Studentsunderstand how cost are charged to particular product or service
CO2: Students learn to identify and evaluate difference between Actual and Targeted Cost.
CO3: Students understand management decision making.
CO4: Students get to know about profit maximization and cost minimization concepts.

Course (Paper) Name and No: Direct & Indirect Taxation-I

COURSE OUTCOME:

CO1 Student will able to understand the basic concept of taxation
CO2 Student will able to understand the legal status of persons
CO3 Student will able to understand the concept of salaries, Income from properties, profit & gain from business, capital gain etc
CO4 Student will able to understand deduction from gross total income (S.80A,80C,80CCC,80D,80DD, 80E, 80U,80TT)
CO5 Student will able to understand total income for individual

Course (Paper) Name and No.: Advanced Trends in Accounting-I

COURSE OUTCOME:

CO 1: Typically focus on developing a comprehensive understanding of advanced accounting standards, an ability to analyze complex financial data, and a practical application of modern accounting technologies and methods
CO2: Gain practical experience with accounting software and tools (such as Tally ERP 9) for efficient data management, recording transactions, and generating reports.
CO 3:Enhance critical thinking and analytical reasoning skills to address complex financial challenges in real-world business scenarios.
CO4 Develop an understanding of recent trends shaping the accounting profession, such as data analytics, artificial intelligence (AI) in finance, cloud-based accounting, and sustainability reporting (ESG).

Course (Paper) Name and No: Fundamental Analysis of Corporate

COURSE OUTCOME:

CO: Student will able to understand Economic analysis, understanding GDP, inflation, interest rates, exchange rates, IIP index
CO2: Gain practical experience with Balance of Payment, application of macroeconomic indicators in stock market.
CO3: Student will able to understand Role of portfolio management in fundamental analysis.

Course (Paper) Name and No.: Research Methodology

COURSE OUTCOME:

CO1: The students understand the basics of Research, its formulation and also get the knowledge about formation of hypothesis and sampling.

CO2: Students learn about, how to collect primary and secondary data with the help of questionnaire.
CO3: Students understand the importance of data analysis and learn hypotheses through various Parametric & Non-Parametric test.
CO4: Students learn about the Research Reporting and Modern Practices in Research through the reference and citation methods.

SEMESTER – II

Course (Paper) Name and No . Corporate Finance

COURSE OUTCOME:

CO1. The learners will be able to identify the scope of financial management in practice.
CO2. The learners will be able to conceptualize the concept of valuation of securities.
CO3. The learners will be able to explain the concepts of financial accounting in general.
CO4. The learners will be able to identify and undertake various managerial decisions required in day-to-day business practices.

Course (Paper) Name and No. Advanced cost Accounting

COURSE OUTCOME:

To enhance the abilities of learners to develop the concept of cost accounting and its significance in businesses
To enable the learners to understand, develop and apply the techniques of cost accounting in process costing, overhead allocation, Activity Based costing, transfer pricing and Inflation accounting
Understand the concept and the significance of Cost accounting in business
apply the techniques and application of cost accounting to control and reduce the cost of product like Process costing, Target costing etc.

Course (Paper) Name and No: Indirect Taxation

COURSE OUTCOME:

CO1. Learners will get an overview of GST, its need and applicability in India and Learners will understand the concept like Scope of Supply, Non-taxable Supply, Composition Scheme etc.
CO2. Learners will understand in detail about Time, Place and Value of Supply for computation of GST
CO3. Learners will have be able to calculate ITC, manner of utilization, assessment of tax liability and payment of GST
CO4. Learners will understand the provisions of GST registration, its procedure, documents needed for registration, cancellation of registration, deemed registration

Course (Paper) Name and No.: .Advanced Trends in Accounting-II

Course outcomes:

CO1. Learners will be able to prepare Financial report and do its analysis.
CO2. Learners will be able to activate GST masters in Tally and set up GST rate, Update Party GSTIN and updating GST in service ledgers.

Course (Paper) Name and No: Risk management

Course outcomes:

CO1. Learners will be able to identify risk and uncertainty in business and learn to compare them, review ERM , and various financial crisis
CO2. Learners would be able to summarise various capital markets operating in India and Associate relation to Derivatives Markets and risk associated with it.
CO3. Learners would be able to use credit risk management process, review Basel Norms and calculate CAR
CO4. Learners would gain practical approach on calculation of Beta and Linear VaR.

Course (Paper) Name and No.: OJT

COURSE OUTCOME:

After the completion of the OJT programme, the student will be able to;

● apply concepts learned in classrooms to real-world work environments, enhancing their understanding and skills.

● show insights into the challenges, opportunities, and culture of different workplaces, preparing them for future employment.

● navigate through various learning modalities effectively through exposure to hybrid learning models.

● show evidence of research aptitude and skills of critical thinking, analytical skills, and ethical research conduct in the conduct, and communication of their work

use and appreciate the use of emerging technologies and their applications, enhancing their technological literacy and adaptability.

● display problem-solving abilities in making informed decisions in complex scenarios through practical situations.

● work in teams and collaborate to achieve common goals in diverse work environments through collaborative projects.

give examples and cite ways of contributing to the field of work in a manner that displays social responsibility and sustainability.

SEMESTER – III

Course (Paper) Name and No . Corporate Financial Accounting

Course outcomes:

CO1. The learners will be able to identify and apply various Ind-AS in the financial reporting systems.
CO2. The learners will be able to prepare and analyze statement showing the total value of human capital.
CO3. The learners will be able to prepare and analyze statement illustrating valuation of goodwill and shares under various situations of business

Course (Paper) Name and No. Advanced Auditing

Course outcomes:

CO1. Learners will be able to apply auditing procedures to a simulated financial statement audit, ensuring compliance with relevant Standards on Auditing.
CO2. Learners will be able to prepare an audit working papers and conduct variance analysis to a simulated financial statement.
CO3. Learners will be able to distinguish between different types of audit evidence (physical, documentary, analytical) and explain the procedures used to gather evidence for specific audit objectives, justifying the choice of procedures based on the nature of the assertion being tested.
CO4. Learners will be able to identify, analyze an audit report and explain the auditor's opinion on the financial statements, including the rationale for any modifications made to the opinion.

Course (Paper) Name and No: Financial Services

Course Outcomes:

CO1. The learners will be able to critically evaluate and interpret financial attributes of leasing.
CO2. The learners will be able to calculate the effective costs of factoring.
CO3. The learners will be able to categorize and evaluate various alternate investments funds.
CO4. The learners will be able to compare and contrast various investment avenues considering its risk-return.

Course (Paper) Name and No.: .Advanced Trends in Accounting-III

Course Outcomes:

CO1. The learners will be able to register and prepare various documents required under GST law.
CO2. The learners will be able to file various GST returns.

Course (Paper) Name and No: Accounting & taxation of E-Commerce

Course Outcomes:

CO1. The learners will be able to summarize and analyze the E-commerce landscape in India.
CO2. Learners will be able to record and reconcile digital transactions, understanding the nuances of different payment methods.
CO3. Learners will be able to demonstrate the ability to prepare financial statements for e-commerce businesses.
CO4. Learners will be able to identify and implement compliance requirements for operating an e-commerce business in India.

Course (Paper) Name and No.: Research Project

COURSE OUTCOME:

CO1: Conduct basic research, data collection on primary data and interpret and conclude on some hypothesis and prepare a project on the same.
CO2: Apply suitable research design suitable for the topic.
Execute independent research projects on various topics relevant to the study
CO3: Evaluate research-based and scholarly literature of the topic, develop a detailed study on it
CO 4:Compose the research report and bibliography in the most effective way

SEMESTER – IV

Course (Paper) Name and No . Advanced Financial Management

Course Outcomes

The learners will be able to:
1. Calculate investment viability using techniques like NPV, IRR, and Payback Period.
2. Apply various techniques to investment scenarios and select the projects.
3. Demonstrate the use of capital budgeting techniques in international market.
4. Solve practical problems related to bilateral and multilateral netting in multinational cash flow operations.

Course (Paper) Name and No. International Financial Reporting

COURSE OUTCOME:

The learners will be able to
1. Explain, summarize and identify the principles for recognizing and measuring elements in financial statements.
2. Apply the conceptual framework to identify financial elements and implement disclosure principles while solving case studies.
3. Evaluate accounting policies for their compliance with Ind AS and IFRS standards using case study method.
4. Prepare comprehensive financial statements, including SOFP, SOPL, SOCE, and SOCF, adhering to Ind AS and IAS standards.

Course (Paper) Name and No: Personal Financial Planning

COURSE OUTCOME:

The learners will be able to

1. Evaluate financing options for major purchases, including housing and vehicles, based on affordability.
2. Evaluate and Design appropriate insurance plans for specific financial goals and risks.
3. Evaluate retirement needs and create comprehensive retirement plans.
4. Create and evaluate an optimized investment portfolio based on individual goals

Course (Paper) Name and No.: Auditing and Assurance (Accounting Ethics and Corporate Governance

COURSE OUTCOME:

The learners will be able to

1. Defines and summarize key terms and concepts related to professional ethics, independence, and auditing standards.
2. To apply relevant auditing standards while solving case studies.
3. To compare and draw implications of corporate governance codes across jurisdictions like the U.S. SEC and OECD principles.
4. To develop a governance framework for a mid-sized corporation aligning with Indian corporate governance codes.

Course (Paper) Name and No: Research Project

- The student is expected to gain expertise in research methodologies, critical thinking, data analysis, and problem-solving, equipping them with skills essential for further academic or professional endeavors .
- The research contributes new knowledge, insights, or innovations in the chosen field, pushing the boundaries of understanding and addressing current challenges or gaps in the literature.
- Completing the research project enhances the student's academic credibility and professional skills, positioning them for leadership roles, higher positions in academia, or specialized careers in their field.
- The research might lead to published papers, conference presentations, or recognition within academic communities, establishing the student as a contributor to scholarly discourse and increasing visibility in their field.
- The project often has practical applications in solving real-world problems, influencing policies, technologies, or practices within industries, healthcare, social services, or public administration.

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- Through the research process, students may collaborate with faculty, industry professionals, or other researchers, broadening their academic and professional network and gaining exposure to interdisciplinary work.

- The research outcomes can contribute to societal progress by addressing pressing global issues, such as sustainability, health, education, or technology, potentially influencing public policy, industry standards, and community practices.
- The postgraduate research project fosters self-reliance, perseverance, and the ability to manage complex tasks, helping students develop critical personal attributes like time management, resilience, and intellectual independence.