

**Department of Humanities and Social Sciences
Department of Languages**

**PO, PSO AND CO of
BA & PGD Yoga**

Graduate Attributes and Programme Objectives: The graduate attributes and learning objectives of the Bachelor of Arts are given under, which a student is expected to demonstrate after study variety of courses in different disciplines:

- To Student must acquire broad and detailed knowledge in the courses they study in more than one area such as History & Geography, Sociology & Political Science and so on based on the chosen area of study creating multidisciplinary academic foundation;
- To offer students appropriate and basic knowledge in the humanities and Social Sciences which must be fairly sufficient to understand the concept of the courses they study and enough to expose them to numerous job & advanced study opportunities in related areas.
- To create the ability to analytical resolving the issues they are expected to face in their future career and the society.
- To learn the social and political development of the nation during past leading to development of the sense of social responsibilities and attraction for work for the society, community, nation and national programmes.
- To train graduates who are able to teach, participate in research and involve in non formal education of the people through social organization such as NGO, Social Clubs and Help Groups created by private and public enterprises.
- Make the graduates to demonstrate intellectual integrity, understanding of ethics and environmental responsibility.
- Be lifelong learner and demonstrating the academic standards in behavior & reports.

Learning Outcome: The graduate in Arts will demonstrate following qualities in his work and society:

- The graduate will be able to demonstrate a detailed knowledge and understanding of selected fields of study in core disciplines in the humanities, social sciences and languages;
- They will be able to critically apply critical and analytical skills and methods to the identification and resolution of problems within complex changing social contexts.
- Demonstrate a general understanding of the concepts and principles of selected areas of study outside core disciplines of the humanities, social sciences and languages;
- Apply an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values;
- Articulate the relationship between diverse forms of knowledge and the social, historical and cultural contexts that produced them;
- Communicate effectively and, in the case of those students undertaking a language major, read, write, listen to and speak another language with fluency and appreciate its cultural context;
- Act as informed and critically discerning participants within the community of scholars, as citizens and in the work force;
- Work effectively in groups to meet a shared goal with people whose disciplinary and cultural backgrounds differ from their own;
- Work with independence, self-reflection and creativity to meet goals and challenges in the workplace and personal life.

Programme Specific Objectives & Learning Outcomes: The Commerce graduates should be able to have knowledge and application of mathematics, Social science, accounting fundamentals, managerial skill and computer specialization to the solution of complex problems. The approach to investigation should begin with identify, analysis, formulation and research literature to arrive at substantiated conclusions using modern tools and principles of commerce, management and social sciences. Demonstrate knowledge and understanding of management & software engineering principles and apply these to one's own work, as a member and leader in a team.

COURSE OBJECTIVES

Course Name & No	Course Objectives	Course Outcome
<p>Environmental Studies (1209)</p> <p>Note: Only passing the paper is required, marks will not be counted for award of division.</p>	<p>Recognize the inter relations of multiple factors in environmental challenges with diverse forms of knowledge and experience.</p> <p>Identify the multiple scales, actors, and stakes of environmental issues.</p> <p>Evaluate and interpret various forms of evidence about the environment.</p> <p>Develop and appreciate the environmental and cultural history of place they inhabit.</p>	<p>Demonstrate a general understanding of the breadth and interdisciplinary nature of environmental issues.</p> <p>Demonstrate a general understanding of the qualitative and quantitative empirical evidence bearing on evaluation of environment.</p>
General English	<p>Demonstrate the ability to approach writing as a recursive process that requires substantial revision of drafts for content, organization, and clarity.</p> <p>Be able to integrate their ideas with those of others using summary, paraphrase, quotation, analysis, and synthesis of relevant sources.</p>	<p>Learn communicative skills, to define, classify, and understand the methods of communication.</p> <p>Enable to practice those skills in their daily life and at work by identifying instances of communication in the circumstances.</p>
General Hindi	To enlighten students about the richness and value of the national language so that they develop the working knowledge of Hindi through Poetry, Stories and Grammar.	It will develop the better literary and linguistic skills and enhance creativity and communicative skills through use of Hindi.
<p>B.A. I, II, III</p> <p>English Literature I & II</p>	<p>To get necessary knowledge of English as Language and Literature to acquire fundamental comprehension of English Grammar, classify with literary genres.</p> <p>They will be make to understand the process of communicating and interpreting human experiences through literary representation using historical contexts and disciplinary methodologies, critical study of English Literary studies, demonstrate awareness of English Language and Literature in various contexts.</p> <p>They will be taught the changing trends in English language, literature and culture of modern times and relate with the important trends of the past period.</p> <p>They will be introduced to the thematic concerns, genre and trend of both Indian and American Literature, contemporary and post modernism literary movement.</p>	<p>They will develop knowledge and interpret various literary texts, poem, prose, essay, short stories and emotional development of human mind.</p> <p>The students will</p> <ul style="list-style-type: none"> - develop exceptional textual, visual, and verbal communication abilities. - be prepared for a wide range of writing-related careers or graduate. - have the ability to use, analyze, and learn communication technologies. - read and appreciate various form of English Literature and critically interact with them from different perspectives. - learn critical faculties necessary in an academic environment, on the job, and in an increasingly complex, interdependent world.
<p>B.A. I, II, III</p> <p>Economics I & II Paper</p>	<p>They will be taught the basic theoretical foundation of the micro economics variables like income, price level, employment, interest rates etc.</p> <p>They will develop the understanding of subject nature, basic concepts of economic growth and development, behavior of consumer and producer, commodity and factor market.</p> <p>They will gain the concepts of utility analysis, law of demand and elasticity,</p>	<p>They will develop the concepts of characteristics of Indian economics, trends in industrial development, NITI Aayog, five year planning, green accounting, and national income, theories of employment, interest, consumption and the business cycle & growth.</p> <p>They will learn the theory of money and capital market, fiscal theory, functions of Banking, GST,</p>

	<p>distribution Theories.</p> <p>The course is designed to enable the students to be familiar with issues of agriculture, industry, national & international agencies (NITI Aayog, IMF, World Bank, EXIM etc.) and highlights & basic problems of Indian and Rajasthan Economies.</p>	<p>importance of international economics. trade terms & foreign trade policy, World Banking System, IMF, Globalization, Indian EXIM, FDI etc.</p>
<p>B.A. I, II, III Geography I Geography II & Practical</p>	<p>They will learn and understand the inner formation of the earth, the significance of longitudes & latitudes, recognize concepts of continents and oceans.</p> <p>The course will taught them about the development of Rocks, acquiring the knowledge of demographic structure of India.</p> <p>The concepts of efficiency to maps & enhancing cartography skill and reorganization of the correlation of man, environment, human races, global climate systems, climate change and climatic statistics.</p> <p>The students will get an insight of natural resources and landscapes and explanation of above ground photographs, remote sensing and GIS.</p>	<p>The will be familiar with the application of geography to day to day life, earth, climate and environment. The will understand the universal issues with scientific mindset develop a thinking on the impact of human act on natural atmosphere and to know expectation of mankind towards environment.</p> <p>It will give them knowledge on population dynamics, political, cultural, economic elements & effect of green house gases, global warming and disturbance.</p> <p>The students will acquire an understanding of geographic population patterns, integration of physical – human geography for sustainable development, utility of cartographic tools, geographic information systems (GIS) and use the tools and methods of GIS.</p>
<p>B.A. I, II, III History I & II</p>	<p>It aims at creating knowledge about historical thoughts, model of Indian history- Indus valley civilization, vedic, Maurya – Ashoka, Gupta, Cholas, Arabic, Afghanistan, Mughal era.</p> <p>To educate the students on social development system, religious movement, economic and political pattern in the country.</p> <p>They will know the status of women in historic times in art, culture, social class system, advent of European power, mid eighteenth political, cultural, religious trends.</p> <p>To will get them acquainted with advent of European power, land revenue settlement, rise and spread of Industry and western education in addition to the Gandhian era and constitutional development.</p> <p>They will be studying the Rajasthan history, decline of feudalism and rise of modern era.</p>	<p>The knowledge they will develop includes the understanding of historical analysis; human society historical development and human civilizations.</p> <p>They will learn to interpret historical sources and evidence, research and fact based information of historic places and period in various regions and also learn about the widen secularism & equality of mankind.</p>
<p>B.A. I, II, III Political Science I & II</p>	<p>To provide the knowledge of the political science discipline, foundation and its interrelationships with the other social science fields, Civil Society, human rights etc.</p> <p>To give insight learning of basic details about the Indian Political & western political system & thoughts and</p>	<p>It will enable the students to relate theory and practice of political science to real world and Know about political system of the nation.</p> <p>They will gain the knowledge about the national and international political affairs; learn about the government mechanism, its</p>

	<p>international relations. To educate the students in the history of classical and modern political thoughts; of the fundamental principles and standard concern.</p>	<p>functions, duties and responsibilities including getting knowledge of political law, constitution of India, rights and duties. It will impart knowledge about the world, other countries, their society, as well as awareness of ethical problems, social rights, values and responsibility to the self and to others.</p>
<p>B.A. I, II, III Sociology I & II</p>	<p>The curriculum designed to impart the knowledge on sociological issues and skills that will enable them to think critically and imaginatively about society and social issues, demonstrate global processes, shape, local social structures and the effects on individuals. They will learn how institutions interconnect in their effects on each other and on individuals. They will learn to demonstrate social change factors, such as population, urbanization, or technology affect social structure and individuals. The course aims at to understand reciprocal relationships between individual and society, changes in social structure; inequality and diversity; self develops sociologically and compare this to psychological, economic and other approaches. They will know & apply the basic theories or theoretical orientations in at last one of social reality.</p>	<p>Study of the course will give sufficient knowledge to analyze and interpret the diversity of social experience using a sociological perspective, assess competing theoretical approaches to societal problems of publics with differing and multiple interests; specify structural or institutional sources of these social problems; and, propose and assess policies, interventions and/or modes of advocacy that will enact positive change. The students can articulate the ethical and social justice implications of sociological inquiry, individual and society, changes in social structure; inequality and diversity; self develops sociologically and compare this to psychological, economic and other approaches.</p>
<p>B.A. I, II, III Psychology</p>	<p>It is aimed to develop a strong background and understanding of the scientific foundation of psychology, knowledge on base of human behavior across the broad areas and applications of psychology in the associated professions. This is to give skill to identify theoretical underpinnings of the major areas of psychology, including cognition (thought, memory, and perception), learning, personality, social and environmental influences, development, and physiology of behavior. The student will learn to explain different models of human behavior based on science versus intuition or general ways of knowing and recognize ways of pursuing questions in Psychology via discussion of theory and empirical research and link between knowledge gained in Psychology to everyday life. They will be taught to learn & apply psychological principles to personal, social, and organizational issues and recognize and demonstrate knowledge of the major fields of applied and professional psychology: a. clinical and abnormal</p>	<p>The students will be able to know the evolution of psychology, the major pioneers in the field and identify the various approaches, fields, and subfields of psychology along with their major concepts and important figures. They will develop skill of the value of psychology and key concepts, principles, and overarching themes in psychology. After the study of the course they can demonstrate knowledge of the major theoretical approaches and findings in psychology.</p>

1.2 Develop psychology'
1.3 Describe psycholo

	<p>b. measurement and assessment c. industrial/ organizational d. health psychology e. forensic psychology</p>	
B.A. I, II, III HINDI literature	<p>This course is intended to impart knowledge on the history of the Hindi language, script & literature and its evolution to its current form. They are taught about the Hindi poetry, plays, story, essay, prose & novel through the ages and its development. They will be taught literary criticism, modern poetry, creative, scriptwriting and dialogue writing.</p>	<p>The student will broaden the outlook and raise the efficiency to perform competently in professional spheres related to the Hindi language through study of script & literature, poetry, plays, story and its evolution to its current form. They will develop creative writing abilities, so as to enable them to contribute to Indian Literature and serve adequately in the fields of journalism and media writing even as professional pursuits and enhance their communication skill.</p>
B.A. I, II, III Drawing	<p>The curriculum aims to give exercise and demonstrate use of the elements of design, use materials, tools and processes from a variety of media (printmaking, painting, sculpture, ceramic, photography). The student will learn to handle materials effectively, create original objects of art in a specific medium, select appropriate media relative to concepts and forms of art. They must study to produce creative works that demonstrate innovation in concepts, formal language and/or materials, describe, analyze and interpret created artwork, recognize elements of design in works of art, analyze, interpret and evaluate the form and content of works of art.</p>	<p>This will develop an understanding of</p> <ul style="list-style-type: none"> - Basic principles of design and color, concepts, media and formats, and the ability to apply them to a specific aesthetic intent. This includes functional knowledge of the traditions, conventions, and evolutions of the discipline as related to issues of representation, illusion, and meaning. - development of solutions to aesthetic and design problems should continue throughout the degree program. - Ability to synthesize the use of drawing, two-dimensional design, and colour, beginning with basic studies and continuing throughout the degree program toward the development of advanced capabilities. - Knowledge and skills in the use of basic tools, techniques, and processes sufficient to work from concept to finished product, including knowledge of paints and surfaces. - The ability to explore the expressive possibilities of various media, and the diverse conceptual modes available to the painter. This may deal with direct painting from nature or with alternative approaches to the making of traditional or innovative two- and, at times, three-dimensional images.

POST GRADUATION DIPLOMA IN YOGA or PGD IN YOGA

POST GRADUATION DIPLOMA IN YOGA or PGD IN YOGA programme prepares the desiring students in the various themes of Yoga, trains and prepares students for yoga aspects of life and dealing with the problems of integration of personality as an initial step to set one up for the higher exclusive practices. Yoga is one of the ancient spiritual forms of preventive therapy of alternative medicine that originated in India. Yoga practice helps in controlling the disorders of human system by yoga therapy. Yoga practice integrates the body, mind and the soul. Yoga has become one of the popular physical exercises across the world.

Programme Objectives: The programme aims at providing knowledge for conducting and guiding practice in Yoga. They will get scientific guidance and learn related issues regarding human body and usefulness of yoga in maintaining healthy life. They will be taught providing yogic therapy for curing various diseases.

Programme Outcomes: The student after study of this programme can disseminate the scientific information, research findings, contemporary application of Yoga and conduct workshop in society on regular basis teaching science of yoga and its usefulness. They will learn philosophy of the yoga and its diverse yogic perspectives on the structure, states, functions, and conditions of the human body and the mind. To undertake and promote the various aspects of Yogic Science for enhancing excellence in the field of Corporate management, Industries, Health managements by producing professional competence and human values.

For all Courses: Hours per week: 4 Total Teaching Hours: 75 Maximum mark of Paper: 100 Minimum Pass marks: 36		
Course Name & No	Course Objectives	Course Outcome
Patanjali Yog Sutra	Promoting positive health, prevention of stress related health problems and rehabilitation through Yoga.	The student will develop knowledge based on Patanjali Yoga Sutra, the philosophy of the yoga tradition, with diverse yogic perspectives on the structure, states, functions, and conditions of the body and the mind including the teachings of the Yoga Sutras and the Bhagavad Gita. They will be equipped with traditional understanding of yoga practices from different schools of yoga in general and from Hatha yogic and Patanjali yoga schools in particular.
Hath Yog	To give the students a basic understanding of Indian philosophy & psychology to help them gain the theoretical and scientific perspective on yoga so as to know Hatha yoga practices and meditation with a secular and scientific orientation.	Successful completion of the course will enable the students to teach Hatha yoga practices and meditation with a secular and scientific orientation.
Yog and Culture Synthesis	It aimed at imparting skills to introduce Yoga for health to general public and Yoga for total personality development and invoke scientific attitude and team spirit to channelize the energies in to creative and constructive endeavours.	To study of the course will enable them to establish Yoga culture and therapy centers to serve the society. They will learn the about the body, mind and soul their needs for health, knowledge and inner peace.

Physiology and Anatomy	To impart knowledge of human anatomy, physiology and biomechanics, and the interrelationships between systems of the body, knowledge of common pathologies and disorders of systems of the body, including familiarity with symptoms, condition management, illness trajectories, and related contraindications.	The students will gain full knowledge of human anatomy & physiology and linkage with the Yoga practice to control disorders of systems of the body through practicing yoga.
Swastha Vrata	The course will provide knowledge of various ailments with its link to body physique.	The knowledge gained will include the practice of the postures (Asanas) in strengthening the body and creates a feeling of wellbeing and how the yoga sharpens the intellect and aids in concentration; it steadies the emotions and encourages giving relief from countless stresses.
Practical – Lesson Plan, Aasan, Pranyam, Bandh, Mudra, Kriyaye, 30 Minute Prayer & Medication, Om Chant & Oral.	Teach how to perform various kriyas and Asanas which benefits the body.	The students will develop perfection various activities related to kriyas and Asanas and their specific benefits.

Faculty of Commerce & Management
PO, PSO AND CO of
Various Programmes & Courses

Programme	Three Years B. Com.	
PO	To prepare the students in commercial and accounting practices through the courses offered in OM, taxes, marketing, business etc. The degree in Commerce is very relevant to the opportunities available in commerce, office, accounting and banking sectors. The students will be prepared for opting advance certification such as Tax practitioner, CA & CS. Must aware of and understand the impact of the professional accounting solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development working individually and in team. Communicate effectively with the accounting professional & IT community and manage project in multidisciplinary environments. Recognize the need for and have the preparation and ability to engage in independent and life – long learning in the broadest context of technological change.	
PSO	The Commerce graduates should be able to have knowledge and application of mathematics, Social science, accounting fundamentals, managerial skill and computer specialization to the solution of complex problems. The approach to investigation should begin with identify, analysis, formulation and re-search literature to arrive at substantiated conclusions using modern tools and principles of commerce, management and social sciences. Demonstrate knowledge and understanding of management & software engineering principles and apply these to one's own work, as a member and leader in a team.	
Course Name	Course Objectives	Course Outcome
Environmental Studies (1209) Note: Only passing the paper is required, marks will not be counted for award of division.	Recognize the inter relations of multiple factors in environmental challenges with diverse forms of knowledge and experience. Identify the multiple scales, actors, and stakes of environmental issues. Evaluate and interpret various forms of evidence about the environment. Develop and appreciate the environmental and cultural history of place they inhabit.	Demonstrate a general understanding of the breadth and interdisciplinary nature of environmental issues. Demonstrate a general understanding of the qualitative and quantitative empirical evidence bearing on evaluation of environment.
General English (1704)	Demonstrate the ability to approach writing as a recursive process that requires substantial revision of drafts for content, organization, and clarity. Be able to integrate their ideas with those of others using summary, paraphrase, quotation, analysis, and synthesis of relevant sources.	Learn communicative skills, to define, classify, and understand the methods of communication. Enable to practice those skills in their daily life and at work by identifying instances of communication in the circumstances.
Financial Accounting (1802)	Understand the meaning accounting and accountancy and those used in accounting system including those form part of the accounting entries posted in books.	Able to record the basic journal entries, memorize how to calculate depreciation by applying various methods. Maintain the financial statements of a business entity and can rectify errors in accounts.
Business Statistics (1803)	To Estimate and apply the mean and standard deviation	Will able to independently calculate basic statistical parameters (mean, measures of

	<p>of the marginal distribution of the response variable and use this information to inform a business decision.</p> <p>To make them aware about an interval estimates for the mean of the conditional distribution of the response variable and use this information to a business decision.</p> <p>Students will learn to Fit a simple linear regressions model and interpret the slope and intercept.</p>	<p>dispersion, correlation coefficient, indexes) and interpret the meaning of the calculated statistical indicators.</p> <p>Will able to choose a statistical method for solving practical problems and to explain probability theory and probability distributions in relation to general statistical analysis and techniques.</p>
Principles of Business Management (1821)	<p>To develop the knowledge of business principles and sense of responsibility and a capacity for business management.</p> <p>To study effective Organization and Organization structure and global environment in which business operate.</p>	<p>Will able to use business terms and concepts when communicating and explain the financial concepts used in making business decision.</p> <p>Utilize information by applying a variety of business and industry software and hardware to major business function.</p> <p>Demonstrate a basic understanding of business management.</p>
Business Regulatory Framework (1822)	<p>To understand the meaning and the importance of contingent contracts and the consequences of breach of contract and know about the Indian contract act and its essential provisions.</p> <p>To know the consumer protection act 1982.</p>	<p>Will learn the difference between valid void and voidable contract and memorize difference between contract of guarantee and indemnity.</p> <p>Able to analyze the rights and duties under contract regulations.</p> <p>Learn how to pursue the consumer rights under consumer protection act 1982.</p>
Economic Environment in India (1842)	<p>Acquainting the students with the emerging issues in economic environment of Indian economy in the context of national and international level with special reference to policy of liberalization, and globalization and the factor in planning and carrying out global marketing.</p> <p>To describe and give an understanding of the major world regional economic blocs with particular emphasis on developing countries.</p>	<p>Will learn approach to the study of the Economic Environment in India and can analyze the present status of the Indian Economy.</p> <p>Will able to understand the process of integration of the Indian Economy with other economics of the world and learn about the emerging issues in policies of India's foreign trade</p>
Business Economics (1843)	<p>Develop the knowledge of the fundamental and technical concepts of economics and apply the basic theories of economics in critical thinking and problem solving. To learn market needs demand and supply relations.</p> <p>To teach personal interests, abilities, strengths, and</p>	<p>Will be able to identify and use economics, make decisions wisely using cost-benefit analysis and use terminologies business.</p> <p>Understand how households (demand) and businesses (supply) interact in various market structures.</p> <p>Apply the concept of opportunity cost and operations of markets under varying competitive conditions</p>

	weaknesses pertain to professional career fields.	
2801 Income Tax	This course will lead to development of knowledge of Income tax and related laws besides its importance in national growth.	It will lead to the knowledge of income tax law and various sources of income and allowable deduction besides the role of income tax in nation building.
2802 Corporate Accounting	Develop the foundation in corporate accounting with the comprehensive understanding of the issues for assets, liabilities and owner's equity, dividends, bonus shares etc.	It will enable students to understand financial statement analysis of corporate accounts, profit & loss, rate of earnings per share besides the holding company accounts, accounting methods and Accounting Standard-21 (ICAI).
2803 Cost Accounting	Understand the concept and meaning cost accounting differentiating it with accountancy. Acquire knowledge about its principle and applications.	The student will develop knowledge of the costing principles and elements of costing and learn practical use of the subject.
2821 Company Law & Secretarial Practice	To provide knowledge in the various areas of Corporate Secretary ship and laws relating to companies so as to develop the skills of analyzing, evaluating problems and taking decisions keeping pace with dynamic industry changes and management practices.	The students will be able to work with company code of conduct, policies, ethics & conventions so as to maintain the organizational working as per corporate laws in business throughout its working.
2822 Marketing Management	The students will learn how to differentiate between market, marketing management and strategies. It will lead to get knowledge of the customer segmentation, target marketing, and sales promotion techniques.	The learner can understand the concept of market, its management and other issues such as recent marketing trends, E-business, types of marketing - green, tele relationship and retail. Become aware of market strategies.
2842 Money & Finance System	The course has been designed with aim of learning the concept of money and finance. The course includes the concept of financial institutions and merchant banking.	The students will learn the financial institutions including various banks and merchant banking and their role in money and finance.
2843 Banking Law & Practice in India	The knowledge of banking laws and related documents for credit and consumer services are the aim of teaching this course.	The students will acquire knowledge of banking law, consumer relationship and credit rules with concept of negotiation.
1705 General Hindi	To enlighten students about the richness and value of the national language so that they develop the working knowledge of Hindi through Poetry, Stories and Grammar.	It will develop the better literary and linguistic skills and enhance creativity and communicative skills through use of Hindi.
1207 Elementary Computer Application	The students will be taught the ITC and various operating systems useful for	They will learn computer communication system and use of the computer and ITC in their programme related applications.

	the programme.	
3801 Management Accounting	Student will study the tools available for planning, control and decision making using Investment appraisal, break-even analysis and profit maximizing in both long and short-term decision making. They will study the cost variance analysis and understand the use of standard costs in flexible budgeting including calculating various accounting ratios, reports and relevant data.	They will be able to apply management accounting and its objectives in facilitating decision making and analyze different types of activity-based management tools through the preparation of estimates, analyze cost-volume-profit techniques to determine optimal managerial decisions.
3802 Auditing	Learning of the steps needed to prepare an audit plan, general audit terminology, and concepts of evidence, risk and materiality.	It will familiarize on the concept of audit for various types of holding and preparation of audit report. The student will know the various relevant internal control and check under Companies Act 2013.
3803 Indirect Taxes	This course will lead to development of knowledge of corporate Income wealth and other taxes and related laws besides its importance in national growth.	It will lead to the knowledge of laws related to corporate & other taxes.
3821 Human Resource Management	To make student learn the manpower contribute to the development, implementation, and evaluation of company and also processes of the employee recruitment, selection, retention plans and welfare. Must learn the methods, to implement, and evaluate employee orientation, training, and development programs.	The students will be able to acquire the full knowledge on HRM including framing HR policies including selection training and career development.
3822 Business Communication and Soft Skills	The course will provide an overview of prerequisites to Business & organizational Communication and use of the basic mechanics of Grammar. Additionally it is meant to impart the correct practices of the strategies of Effective Business writing.	On completion of this course, the students will be able to learn the concepts in business communication and the principle of communication including in the foreign trade.
3841 Financial Management	To educate the learner in understanding the link between company decision-making and the operation of capital markets in global market and financial environment. To study the tools in working capital management for operation of firms and managers.	The student will gain knowledge on source of finance, factors affecting capital structure formation, and concept of ethical accounting & reporting.
3842a	The course will give the	The students will gain the knowledge of

International Trade & Finance	concept of International Trade including its need and importance in national finance system linked to international aid and international finance and financing institutions.	international cooperation through trade and finance and international monetary rules and organizations.
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Programme	Two Years M. Com. Accountancy and Business Statistics	
PO	The objective of this Programme is to provide a systematic and rigorous learning and exposure to related disciplines by educating the students to develop conceptual, applied and research skills as well as competencies required for effective problem solving and decision making.	
PSO	The specific objectives of the Programmes includes imparting the higher level knowledge and understanding of contemporary trends in accountancy and business finance so as to equip the students to evaluate environmental factors that influence business operation with the conceptual requirements and skills on preparation and interpretation of financial statements. It will also prepare the students to apply Statistical methods and proficient use of tools for modeling and analysis of business data. The study will also equip the students with concept of risk mitigation in financial sectors and their role in investment decisions of individuals and business enterprises besides guiding them to plan and undertake independent research in a chosen discipline. It will train the students on teamwork, lifelong learning and continuous professional development.	
Course Name	Course Objectives	Course Outcome
4801 Advanced Accounting	The study of the course aimed at learning the techniques of recent changes in accounting, restructuring & liquidating the corporate entities. They will also read the requirements of corporate reporting.	They will gain knowledge of preparing financial statements of corporate houses, related activities and recording transaction. Also learn to calculate income from investment such as shares and debentures, prepare financial statements as per current cost method and the rules of liquidation of companies as per Companies Act - 2013.
4802 Advanced Cost & Management Accounting	It objects teaching of the concepts and processes of costing and interpret cost accounting statements. The student must learn management accounting and must know and evaluate information for cost ascertainment, planning, control and decision making.	The output of the reading will learning of costing methods, and management systems including skill of analysis and suggesting required changes in the company accounting processes to control schedule costs as per unit cost of production and stock consumption.
4803 Advanced Auditing	The aim of teaching of the course is develop strategic goals and objectives, policy guidelines for advance audit and apply techniques to source efficient and effective staff for the audit organization.	After learning, the student will demonstrate skills in audit practices and research in selected areas and critical auditing.
4804 Tax Laws And Planning	To develop ability to identify the difference between tax evasion, tax plans and tax avoidance by understanding of various deductions, rebates and reliefs to reduce the taxable income and tax liability in view the Income Tax Rules including rules of double Taxation.	This will make the students aware of the Income Tax laws prevalent in the country related to Corporate Sector and role of tax planning in managerial decision making by familiarize with the relevant provisions and procedure to compute total income of a company.
4805 Research Methodology and Quantitative Techniques	It aimed at read, interpret, and critically evaluate social research and the ethical issues involved in research, and practice ethical research standards. Learn how to apply quantitative, qualitative, and mixed	It will develop understanding of research, objectives of doing research in corporate, research process, research designs and sampling including the applications of the qualitative, scaling techniques as well as the quantitative data analysis.

	<p>techniques in research and solving problems by constructing a research proposal that includes an abstract, introduction, literature review, research questions, ethical considerations, and methodology.</p>	
<p>5801 International Financial Reporting Standards</p>	<p>To train the students in global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting including the world's capital markets and other users make economic decisions.</p>	<p>The student will be able to work in the framework of international standards to the financial reports, explain and apply the IASB's conceptual framework. Will learn the disclosure requirements for companies and prepare group financial statements for subsidiaries, associates and joint ventures.</p>
<p>5802 Goods & Service Tax</p>	<p>To make the student understand the key elements of GST, its mechanism, implications on business. Will learn how to identify and review business activities implementation, compliance and enforcement issues in line with GST.</p>	<p>On completing this course student will be able to compute GST liabilities as per rules, filing of returns and maintaining records for audit purpose and fill the form and register under GST.</p>
<p><u>Choose Any Three</u> 5803 A Government Accounting 5803 B Ethics in Accounting 5803 C IFRS For Small and Medium- sized Entities (SMES) 5803 D Computer Applications in Accountancy and Statistics 5803 E Practical Taxation 5803 F Advanced Financial Management 5803 G Security Analysis and Portfolio Management 5803 H Advanced Statistical Analysis 5803 I Operations Research 5803 J Dissertation</p>	<p>To learn the specific knowledge of the chosen areas of specialization.</p>	<p>The student will develop higher skill in the specialized field of study and can undertake research in the chosen area.</p>

Programme	Two Years M. Com. Business Administration	
PO	The programme aims at developing competency in the students about the laws and regulations which are based on the company profile including the policies for administration such as recruitment, HR, manpower planning and management in commercial, private, government and public sector units. The students to will learn to analyze needs and prepare logical plan. It will develop higher level knowledge of the management and understanding, so that they work with conceptual, applied and research skills as well as competencies for effective problem solving and decision making in routine and special activities relevant to management. It will make the students to plan and undertake independent research in the chosen discipline and inculcate the art working in a team, lifelong learning and continuous professional development.	
PSO	The intended learning outcomes will be the development of skills of administration and management in business and in similar circumstances. The student attending the programme will be able to work upon the principles management & organization explaining its policies and regulations. The students will able to analyze and interpret the influence of manpower management in business and use software tools to carry out specified tasks. It will impart the knowledge to learn the rationale to analyze a decision and substantiate the decision making process through modeling and data analysis and also offer services as an analyst or consultant so as to adopt a reflective approach to personal development and embrace the philosophy of continual professional development.	
Course Name	Course Objectives	Course Outcome
4821 Business Management	It will develop the knowledge of business and management principles for the decision thinking and problem solving for effective Organization. It will enable an awareness of the global environment in which business operate.	Learn the financial and business concepts when communicating and making business decision. Developing the communication skills to promote respect and relationship between person and organization utilize information by applying business and industry software and hardware.
4822 Marketing Management	The study will focus on concept of market, marketing, marketing management with the scope of product planning in marketing and product life cycle. It will develop the skill of product pricing, advertising, branding and brand policies.	Enable them to learn difference between market and marketing management so as to become aware of market strategies and role of environment in marketing. The student will able to know the target marketing customer segmentation, and recognize the different brands and their quality
4823 Personnel Management	It aimed at the personnel management in marketing including market & product planning. The learning objectives will include the concept of role of an individual in marketing management, including growth, recruitment process and human resource management.	The student will develop the skill in personnel management, learning the skill/education requirement of the staff and how to make Recruitment and Selection. They will understand the need and method of the y Performance Evaluation and Human Resource Planning techniques & its auditing linked to Wage and salary.
4824 Research Methodology and Business Statistics	To have the knowledge to Identify a business problem and making a functional research design including developing a method for data collection through instrument design and its statistical analysis. The concepts of hypothesis design, testing and graphical presentation of data with optimization principles will also taught.	The students will be able to gain the knowledge to solve business problems using the skill learnt in research design and apply the concepts of business statistics, probability, estimation and hypothesis testing choosing the appropriate analytical tools and make a graphical presentation of the statistical and research report.
4825 Business & Economic Environment	Develop the knowledge of the advanced and technical concepts including the current economic environment and factors governing	Will be able to identify and use economics environment for the growth of business and identify the factors helpful in positive way.

	it.	
5821 Strategic Management	To expose students to various perspectives and concepts in the field of Strategic Management so that they are able to learn principles of strategy formulation, implementation and control in organizations and also apply to the solution of business problems.	They will develop skill of the strategic management processes and method of integrating analysis and intuition in strategic management. Can know the state the nature of strategy formulation, implementation and evaluation activities and the benefits of good business and concept of global marketing.
Group A Intuitional Area 5822 Management Of Public Enterprises 5823 Management of Small Enterprises	To acquire advance knowledge of management principles and sense of responsibility and a capacity for public enterprises including marginal and small companies	Will able to use managerial skills in different types of the enterprises. The skill so acquire can be applied to a variety of business management problems in different enterprises.
Group B Marketing Area 5824 Sales & Advertising Management 5825 Marketing Research	The students will learn advance concepts of marketing management and strategies for promotion of sales including concept and applications of the market research.	This equips the students with advance marketing concepts based on market needs and research.
Group C Finance Area 5826 Financial Management 5827	The students will learn the practical aspects of financial management including the concept of financial institutions and merchant banking.	The students will learn the financial institutions including various banks and merchant banking and their role in money and finance.
Group D Human Area 5828 Labour Legislation in India 5829 Labour Welfare & Industrial Relations	To make student learn the different legislations and their impact of organization of a business.	The students will be able to acquire the full knowledge laws related to working and welfare of the labour and employees.

Programme	Three Years BBA	
PO	The BBA learning objectives specify the intellectual and behavioural competencies that graduates should possess and that provide a foundation for the managerial skill and their future professional and personal development. The students are expected to become a critical thinker and quick in resolving the business issues with prompt decisions through viable alternatives and application of the appropriate quantitative and qualitative techniques. The course will develop the business communication skill effective oral business presentations using a variety of appropriate technologies. It will develop the sense of the ethical behaviour and social responsibility in the business.	
PSO	The BBA graduates must be able to demonstrate conceptual knowledge, technical skill and their impact on global business and the society. The graduate will have full confidence in business management abilities, using the balanced interpersonal relations and working in a team. The skill of diagnosis of business problem, its categorization and handling will understand through the various courses including applications of the computer and other skills. The need for and will make ready for the preparation and ability to self engage in independent life – long learning in the broadest context of business changes as well changes in technologies.	
Course Name	Course Objectives	Course Outcome
101 Economic Environment of Business	Explain how overall economic issues affect society and the general impact on business of public policy. The course will define and explain the nature of and critically appraise the difference between economic externalities, uncertainty and risk.	On completion of this course, students will be able to Analyze the environment of a business from the legal & regulatory, macroeconomic, cultural, political, technological and natural perspectives.
102 Business Communication and Soft Skills	The course will provide an overview of prerequisites to Business & organizational Communication and use of the basic mechanics of Grammar. Additionally it is meant to impart the correct practices of the strategies of Effective Business writing.	On completion of this course, the students will be able to learn the concepts in business communication and the principle of communication including in the foreign trade.
103 Financial Accounting	Maintenance of Records of business Transactions Calculation of Profit and Loss. Depiction of Financial Position. Providing Accounting Information to its users. To understand the principles and maintain the records of business transactions, calculation of Profit & Loss, and depict the Financial.	The students will be able to learn and apply fundamental accounting concepts, record basic accounting transactions and prepare annual financial and inventory statements. Know the consignment, hire purchase, installment systems, and insurance claims.
104 Business Mathematics	To learn basic terms in the areas of business calculus and financial mathematics leading to solving of business problems.	Develop knowledge in the areas of business calculus and financial mathematics including the basic methods of business calculus, types and methods of interest account and their basic applications in practice through solving problems of simple and compound interest.
105 Business Statistics-part I	To familiarize with the basic statistical tools and their application in business decision-making. To make the learner familiar with the processes needed to develop, report, and analyze business data and practice in solving the variety of business related problems using a	The student will be familiar with basic statistical concepts such as statistical collection, species characteristics, statistical series, and tabular representation of data besides calculating statistical parameters (mean, measures of dispersion, correlation coefficient, indexes) and

	systematic approach involving accepted statistical techniques.	design, evaluate and apply regression analysis. Learn how and which statistical method to apply for solving practical problems.
106 Environmental studies	Recognize the inter relations of multiple factors in environmental challenges with diverse forms of knowledge and experience. Identify the multiple scales, actors, and stakes of environmental issues. Evaluate and interpret various forms of evidence about the environment. Develop and appreciate the environmental and cultural history of place they inhabit.	Demonstrate a general understanding of the breadth and interdisciplinary nature of environmental issues. Demonstrate a general understanding of the qualitative and quantitative empirical evidence bearing on evaluation of environment.
201 Business Regulatory Frame work	Learn the difference between valid void and voidable contract, contract of guarantee and indemnity and negotiation. Analyses the rights and duties of owner under contract of bailment and consumer protection act 1982.	The student will know the about the Indian contract act 1872, the contingent contracts and the consequences of its breach. Develop knowledge of the consumer protection act 1986 and the Factories Act, 1948.
202 Business Statistics- Part-2	To learn advance knowledge of the processes needed to develop, report, and analyze business data and practice in solving the advance practical business related problems using various soft and analytical tools.	Develop the use of the probability theory and distributions in relation to general statistical analysis. Will learn the sampling, distributions and estimation and use a statistical package and soft tools.
203 Managerial Economics	The course will enable to learn the managerial economics including budgeting and forecasting with possibilities and risks.	The student will learn management of the finance including budgeting and control of expenditure, revenue and profit.
204 Marketing Management	The students will learn how to differentiate between market, marketing management and strategies. It will lead to get knowledge of the customer segmentation, target marketing, and sales promotion techniques.	The learner can understand the concept of market, its management and other issues such as recent marketing trends, E-business, types of marketing - green, tele, relationship and retail. Become aware of market strategies.
205 Cost Accounting	To make aware about cost structure, cost elements and its application in business. To understand various aspects of process, contract, standard and marginal costing along with joint and by-product.	The students will able to learn about the costing methods besides purchase of materials & control, labour cost and control of overheads.
206 General Hindi	To enlighten students about the richness and value of the national language so that they develop the working knowledge of Hindi through Poetry, Stories and Grammar.	It will develop the better literary and linguistic skills and enhance creativity and communicative skills through use of Hindi.
301 Entrepreneurship Development	To develop the student to become critical thinkers with capabilities of identifying business opportunities and develop skill to start new businesses by applying the availing facilities, government support and also apply information technology in management.	Understand the concept of entrepreneurial development, business plan and model that supports the strategy as envisaged by the entrepreneur. Will learn the issues associated with planning, EDP schemes, new venture and the potential investors.
	The objective of course is to make	The student will learn the need and

<p>302 Indian Financial System</p>	<p>the students learn about the structure, organization and working of financial system in India so they become aware of the basics of a financial system in India.</p>	<p>distinct functions of each component of the financial system including the financial instruments and the economic principles underlying their use including in commercial banks.</p>
<p>303 Corporate Accounting</p>	<p>Develop the foundation in corporate accounting with the comprehensive understanding of the issues for assets, liabilities and owner's equity, dividends, bonus shares etc.</p>	<p>It will enable students to understand financial statement analysis of corporate accounts, profit & loss, rate of earnings per share besides the holding company accounts, accounting methods and Accounting Standard-21 (ICAI).</p>
<p>304 Auditing</p>	<p>Learning of the steps needed to prepare an audit plan, general audit terminology, and concepts of evidence, risk and materiality.</p>	<p>It will familiarize on the concept of audit for various types of holding and preparation of audit report. The student will know the various relevant internal control and check under Companies Act 2013.</p>
<p>305 Practical Business Accounting</p> <p>There shall be a Practical of 100 Marks (Internal 20, External 80) and duration of Practical Examination shall be 3 Hours. Lectures: 10, Practical in accounting Laboratory: 50</p> <p>OR</p> <p>305A E-Commerce</p>	<p>Practice on real problems in accounting.</p> <p>To understand the main activities of E-Commerce, its components, concepts of online shopping and electronic market. To understand the concepts of instant messaging, electronic Data Exchange and Secure Electronic transaction.</p>	<p>Learn the accounting problems in business.</p> <p>Will understand the impact, fundamental, and importance of E-commerce on business models and strategy. The student will learn exchange of business documents, legal issues and privacy in E-Commerce under IT Act 2000 and Cyber Crime.</p>
<p>306 Language Skills in English</p>	<p>Demonstrate the ability to approach writing as a recursive process that requires substantial revision of drafts for content, organization, and clarity. Be able to integrate their ideas with those of others using summary, paraphrase, quotation, analysis, and synthesis of relevant sources.</p>	<p>Learn communicative skills, to define, classify, and understand the methods of communication. Enable to practice those skills in their daily life and at work by identifying instances of communication in the circumstances.</p>

<p style="text-align: center;">401 Management Principles & Organizational Behaviour</p>	<p>To students will develop knowledge & importance of human behavior under different conditions and analyze specific strategic human resources demands. It will enable students to synthesize related information and evaluate options for the most logical and optimal solution including prediction & control human behavior including the principles of the organization & types.</p>	<p>This will result in learning about the organization and human behavior. They will learn the concept of organizational behaviour including its control & integration applying the principles & techniques of management in an organization.</p>
<p style="text-align: center;">402 Event Management</p>	<p>To understand and learn about the evolution of event management and analyze the processes & the benefits.</p>	<p>It will help in developing the concepts of event management, types, its principles and procedures to follow before and during an event. Learn how to communicate, team working, leadership, critical thinking, initiative and time management.</p>
<p style="text-align: center;">403 Taxation-Part1</p>	<p>To acquire the complete knowledge of basic concepts of income tax and understand the concept of exempted incomes for various categories such as residential, individuals, Income from Salary & house property.</p>	<p>They will gain knowledge on the basic concepts of taxation, tax framework and also the functioning of various Income Tax Authorities. Understand the various types of income that are not chargeable to Income Tax and apply the same in future calculations.</p>
<p style="text-align: center;">404 Supply & Chain Logistics</p>	<p>To equip the students with the design/planning important concepts applied in Logistics and Supply Chain Management, highlighting the activities and understanding of concepts like inbound and outbound logistics in of the supply chain. To learn about the PLs, inventory management, bullwhip effect, offshore and inshore logistics etc.</p>	<p>The student will demonstrate understanding of the concepts applied in logistics and supply chain management. To develop skills for planning, designing the operational facilities of supply chain with the analytical and critical understanding.</p>
<p style="text-align: center;">405 Taxation-Part2</p>	<p>To identify the tax planning and assessment procedures for individuals, firms and companies and also the important provisions in u/s 80 Income Tax Act. To know the income classification, concepts and principles of income tax and knowledge of service tax.</p>	<p>This will develop aptitude to compute taxable business and professional income under various sections of Income Tax Act including set off and carry forward of losses. Will able to compute the income and tax liabilities in practical cases.</p>
<p style="text-align: center;">406 International Business</p>	<p>To develop knowledge of international business environment, strategies, and ability to apply concepts, principles and theories to various business situations. To develop awareness of the global business environment and its impacts on businesses, with the use of excel tools in real world scenarios.</p>	<p>The students will be able to know the concepts in international business with respect to foreign trade & business. They will also be able to evaluate the global business environment in terms of economic, social and legal aspects with the principle / legal aspects of international business to expand globally.</p>
<p style="text-align: center;">501 Production Management</p>	<p>To Gain knowledge production processes, operations and modern production techniques, skill required besides quality management. To study and apply quality control principles in production</p>	<p>The developed knowledge will include understand the basic concepts, theories and planning of the production with the confidence in operation processes and quality control principles and practices.</p>

	management.	
502 Research Methodology	To have the knowledge to Identify a business problem and making a functional research design including developing a method for data collection through instrument design and analyze data using Hypothesis testing, applying optimization principles.	The students will be able to gain the knowledge to solve business problems using the skill learnt in research design and apply the concepts of probability, estimation and hypothesis testing choosing the appropriate analytical tools and make a presentation of the research report.
503 Human Resource Management	To make student learn the manpower contribute to the development, implementation, and evaluation of company and also processes of the employee recruitment, selection, retention plans and welfare. Must learn the methods, to implement, and evaluate employee orientation, training, and development programs.	The students will be able to acquire the full knowledge on HRM including framing HR policies including selection training and career development.
504 - PRACTICAL Spreadsheet Applications	<ol style="list-style-type: none"> 1. To perform simple arithmetic calculations directly in a cell as well as by referring to another cell; 2. To perform operations on a whole column or a row; 3. To use absolute and relative references to refer to cells or cell ranges; 4. To use Excel functions to calculate mean, median, standard deviation, minimum and maximum values. 	<p>course, the students will be able to:</p> <ol style="list-style-type: none"> 1. To create simple graphs and charts; and create frequency tables using pivot table functions in Excel. 2. To insert or delete a worksheet in MS Excel file; 3. To identify cells in a worksheet by their names; 4. To enter and format data;
505 Management Accounting	Student will study the tools available for planning, control and decision making using Investment appraisal, break-even analysis and profit maximizing in both long and short-term decision making. They will study the cost variance analysis and understand the use of standard costs in flexible budgeting including calculating various accounting ratios, reports and relevant data.	They will be able to apply management accounting and its objectives in facilitating decision making and analyze different types of activity-based management tools through the preparation of estimates, analyze cost-volume-profit techniques to determine optimal managerial decisions.
506 Industrial Case Studies	Under this paper five industries shall be identified by the university every year and notified through university website. Student has to develop understanding about real world life situation regarding various aspect of functional management such as financial performance, marketing strategy, personnel, foreign verses domestic trade and production management strategy etc. Candidate has to appear in viva as well as written examination at end semester examination. Viva-voce shall be of 20 marks and written examination of 80 marks. In written examination, Student has to attempt 5 questions	Will learn actual field related problems and remedial solution.

	by selecting one question out of two from each industry. Each question shall carry 16mark. Students are supposed to get practical knowledge of any one industry through learning by experience (educational tour or excursion). Due weightage shall be given to those students who participate in learning by experience activity.	
601 Public Finance	To study the economics of government revenue, expenditure and taxation for policy implementation for the efficiency and equity. To learn & analyze the fiscal policies, market failures, and its implication in Indian Economy.	The student will develop conceptual knowledge of public finance system, expenditure, revenue and apply the principle of optimal taxation in analyzing various governments' policies. They will understand the application of public economics and various types of public goods and integrate Equity, Efficiency and Economics principles.
602 Company Law & Secretarial Practice	To provide knowledge in the various areas of Corporate Secretary ship and laws relating to companies so as to develop the skills of analyzing, evaluating problems and taking decisions keeping pace with dynamic industry changes and management practices.	The students will be able to work with company code of conduct, policies, ethics & conventions so as to maintain the organizational working as per corporate laws in business throughout its working.
603 Project Management	To learn to implement project management techniques, processes, lifecycle, embodied concepts, tools and techniques in order to achieve success in ongoing and new projects. To study the project management practices to meet the needs of stakeholders from multiple sectors and appraise the role of project management in organization change.	The students will be able to implement project life cycle, and can skillfully map each stage in the cycle through identifying the resources needed for each stage, including involved stakeholders, tools and supplementary materials. Can advice on project scope while considering factors such as customer requirements and internal /external goals.
604 Operations Research	Will study decision making using quantitative & mathematical techniques with the applications of the graphs, Simplex method, and transportation assignment and drive their optimal solution.	It will make student to Formulate and solve mathematical model (linear programming problem) for a physical situations like production, distribution of goods and economics and find optimal path /solution using quantitative techniques and mathematical modeling.
605 Financial Management	To educate the learner in understanding the link between company decision-making and the operation of capital markets in global market and financial environment. To study the tools in working capital management for operation of firms and managers.	The student will gain knowledge on source of finance, factors affecting capital structure formation, and concept of ethical accounting & reporting.
606 Business Ethics & CSR	To develop ethical skill and recognize legal and ethical issues in business decisions and know the ethical rules and ethical constraints.	Will learn the importance, scope, objectives and influential factors of business ethics and codes. The rules governing the corporate social responsibility and role of other agencies in CSR.

Faculty of Science

Department of Life Sciences (Botany, Zoology and Environment Science)

Department of Physics and Mathematics

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Graduate Attributes and Learning Objectives:

- **Scientific Thinking Skills:** The Science graduating students must have super command in identifying the problem, analysis and arrive at logical scientific solution. They must reflect in their resolution different perspectives and the applications of established theorem involving critical thinking using theoretical issues.
- **Effective Way of Communication:** Must be capable of convincing skill with full assertive, acceptable and reasonable communication skills demonstrating oral communication and listening skills in group learning environments.
- **Learning Global Innovation:** Develop keenness to know and learn global scientific issues and innovation and link them to the national & society development.
- **Integrity and Ethics:** A Science graduates must demonstrate intellectual integrity, understanding of ethics and corporate, social, and environmental responsibility.
- Demonstrate an understanding of the relevance of ethics to the public and private sectors, and of the role of ethics demonstrating the ethical academic standards in behaviour & reports.
- **Independent, Collaborative and Professional Work Skills:** Plan and undertake independent research & search work to use the outcome appropriately in different contexts.
- **Discipline-** Specific goals graduates will have a specialized understanding of their chosen field of study as defined by the relevant major attributes.

Programme Specific Objectives: The course is considered as a foundation course for students so they can make their career in the field of Science and prepare themselves in science subjects, as per their choices, through applications of the theoretical and practical exposure so that they can drive technological and societal advancement through scientific innovation and entrepreneurship. The graduate must remain involved with the scientific professional communities to work upon foundational knowledge, learn, adapt and successfully bring to bear analytical and scientific & computational approaches on changing societal, environmental and technological challenges. They grow as leader and a responsible citizen whose strengths come from an ability to draw on and contribute to diverse teams, expertise, and experiences recognizing the need for and have the preparation and ability to engage in independent and life – long learning in the broadest context of technological change.

Program Outcomes: It aimed at what students are expected to know and be able to do by the time of graduation, such as they are enable to apply knowledge of science, computing and mathematics appropriate to the discipline and identify, formulate, and develop solutions to scientific & environmental challenges. They will learn to design, implement, and evaluate a system within realistic constraints linked to professional, ethical, legal, security, and social issues and responsibilities for the profession. They will communicate and engage effectively with diverse stakeholders and assess the impacts of science on individuals, organizations, and society with as approach to engage in continuing professional development.

Programmes: B. Sc. (Maths) & B. Sc. (Bio)

Course Name & No	Course Objectives	Course Outcome
<p align="center">1209 Environmental Studies</p> <p>Note: Only passing the paper is required, marks will not be counted for award of division.</p>	<p>Recognize the inter relations of multiple factors in environmental challenges with diverse forms of knowledge and experience. Identify the multiple scales, actors, and stakes of environmental issues. Evaluate and interpret various forms of evidence about the environment. Develop and appreciate the environmental and cultural history of place they inhabit.</p>	<p>Demonstrate a general understanding of the breadth and interdisciplinary nature of environmental issues. Demonstrate a general understanding of the qualitative and quantitative empirical evidence bearing on evaluation of environment.</p>
<p align="center">1704 General English</p>	<p>Demonstrate the ability to approach writing as a recursive process that requires substantial revision of drafts for content, organization, and clarity. Be able to integrate their ideas with those of others using summary, paraphrase, quotation, analysis, and synthesis of relevant sources.</p>	<p>Learn communicative skills, to define, classify, and understand the methods of communication. Enable to practice those skills in their daily life and at work by identifying instances of communication in the circumstances.</p>
<p align="center">1705 General Hindi</p>	<p>To enlighten students about the richness and value of the national language so that they develop the working knowledge of Hindi through Poetry, Stories and Grammar.</p>	<p>It will develop the better literary and linguistic skills and enhance creativity and communicative skills through use of Hindi.</p>
<p align="center">Chemistry</p> <p>There will be three of Chemistry every year of the course of study. The papers will be in the areas of</p> <p>i: Inorganic Chemistry ii: Organic Chemistry iii: Physical Chemistry iv: Practical</p> <p>The student will attain the Course Outcome, if s/he studies all three years' papers and attend practical classes.</p>	<p>The Programme will enable the students To understand basic facts and concepts in all three branches of the Chemistry, while retaining the exciting aspects so as to develop interest in the study of chemistry as a discipline. To provide a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective. To provide students with the skills required to succeed in graduate studies, the chemical industry or professional courses. To expose the students to a breadth of experimental techniques using modern instrumentation. The student will understand the interdisciplinary nature of chemistry and to integrate knowledge of mathematics, physics and biology to a wide</p>	<p>The students will have a firm foundation in the fundamentals and application of current chemical and scientific theories including those in Analytical, Inorganic, Organic and Physical Chemistries. They will be able to carry out and interpret scientific experiments as well as accurately record and analyze the results of such experiments. The study of the courses will develop skill in problem solving, critical thinking and analytical reasoning as applied to scientific problems. The students will appreciate the central role of chemistry in our society and use this as a basis for ethical behavior in issues facing chemists including an understanding of safe handling of chemicals, environmental issues and key issues facing our society in energy, health and medicine. As of outcome, they will be able to function as a member of an interdisciplinary problem solving team.</p>

	<p>variety of chemical problems. To be familiarized with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences and to apprise the students of its relevance in future studies. The student will learn the laboratory skills needed to independently conduct and interpret chemical experiments. To develop skills in the proper handling of apparatus and chemicals.</p>	
<p>Physics There will be three of Physics every year of the course of study. The papers will be in the areas of</p> <p>i: Mechanics of Particles, Rigid Bodies and Continuous Media ii: Oscillations, Waves and Acoustics iii: Electricity, Magnetism, Electronics, Electrodynamics, Electromagnetic Waves and Relativity iv: Optics v: Quantum Mechanics, Atomic and Molecular Physics vi: Solid State, Nuclear and Particle Physics vii: Practical</p> <p>The student will attain the Course Outcome, if s/he studies all three years' papers and attend practical classes.</p>	<p>It aims at bridging the gap between the plus two and post graduate levels of study of the Physics by providing a more complete and logical framework in almost all areas of basic Physics as listed. It is designed such that the students can attain a reasonable common level in rigid bodies, waves & acoustics, electronic & magnetic related fields mechanics, solid state, a secure foundation in mathematics, other relevant subjects to become complement for the future courses of study and develop the experimental and data analysis skills through experiments in laboratory. The students will be able to work with tools for tackling a wide range of topics in Optics, Laser, Fiber optics, semiconductor devices and circuits. They will acquire the knowledge of core Physics by covering a range of topics in all listed areas of physics including Quantum Mechanics, Electricity and Electrodynamics, Relativity and spectroscopy, Thermal Physics, Nuclear and Particle physics, Solid State Physics, Digital Electronics etc. The student will learn the laboratory skills needed to independently conduct and interpret experiments in listed areas of study. To develop skills in the proper handling of apparatus and instruments.</p>	<p>The programme also aims to develop strong back ground in the fundamentals and application of Physics and the abilities to read, understand and interpret physical information for the topics they have studied including representation using the mathematics and graphical. They will develop skills required for career & higher education in physics by completing the courses they studied. They will be able to carry out and interpret scientific experiments as well as accurately record and analyze the results of such experiments. The study of the courses will develop skill in supporting the problem solving, critical thinking and analytical reasoning as applied to the areas of current science such as space, instruments, bio sciences, communication etc. As of outcome, they will be able to function as a member of an interdisciplinary team and use Information Communication Technology to gather knowledge.</p>
<p>Mathematics There will be three of</p>	<p>The study of the course is aimed to impart the knowledge of calculus, vectors, vector</p>	<p>The Student Outcomes consist of the general requirements for all real life applications and the students are</p>

<p>Mathematics every year of the course of study. The papers will be in the areas of</p> <p>i: Algebra ii: Calculus iii: Geometry iv: Numerical Analysis v: Operations Research</p> <p>The student will attain the Course Outcome, if s/he studies all three years' papers and attend practical classes.</p>	<p>calculus, geometry, analysis and operation research.</p> <p>To educate the students in these basic mathematical structures which are essential in solving problems in various other branches of study such as Chemistry & Physics.</p> <p>The students will be taught to application of the mathematics in real life problems such as how the curvilinear coordinates, vectors have applications in problems with motion of the bodies, physical situation etc. The students will be groomed to find optimum solution and application of differentiations, integrations, differential equations as well as finding the roots of equations etc.</p> <p>They will develop skill of how to formulate a physics problem and solve given mathematical equation out of it.</p>	<p>expected to achieve an ability to apply knowledge of mathematics to science.</p> <p>They will gain an ability to function in multidisciplinary teams through identification, formulation, and solving project related problems with use of knowledge acquired by study of various topics.</p> <p>They will be able to recognize the need for, and an ability to engage in life-long learning.</p>
<p>Botany</p> <p>There will be three of Botany every year of the course of study. The papers will be in the areas of</p> <p>i: Algae, Lichens and Bryophytes ii: Mycology, Microbiology and Plant Pathology iii: Palaeobotany, Pteridophytes and Gymnosperms iv: Taxonomy and Embryology of Angiosperms v: Anatomy Of Angiosperms, Economic Botany and Ethnobotany vi: Cytogenetics, Plant Breeding, Evolution and Biostatistics vii: (Environmental Biology and Phytogeography viii: Plant Physiology and Biochemistry ix: Molecular Biology and Biotechnology</p>	<p>To provide knowledge about classification and the flora of plant groups from primitive to highly evolved and know the potential, conservation, sustainable use and applications of different plants including range of plant diversity in terms of structure, function and environmental relationships.</p> <p>To be familiarized with the emerging areas of Botany in various spheres of sciences, apprise the students of its relevance in future studies and create foundation for further studies in Botany.</p> <p>To equip the students with skills related to laboratory as well as field based plants studies regarding Interpreting plant morphology and anatomy, Plant identification, Plant physiology, Molecular Biology, physiological activities etc.</p>	<p>The student will be able to evaluate, collect relevant information and study the structure of the plants, so as recognize the position of plant in the broad classification and phylogenetic level.</p> <p>They will be able to identify problems and propose solutions using creative approaches, experiences, and knowledge/expertise in the field of Plant Identification.</p> <p>The students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a scientific framework.</p> <p>They will be equipped to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.</p> <p>They will be able to explain how Plants function at the level of the gene, genome, cell, tissue, Flower development drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.</p>
<p>Zoology</p> <p>There will be three of Botany every year of the</p>	<p>To understand the fundamental principles of all types of animals classification, their</p>	<p>The student Learning Outcomes for the Zoology Program includes: To be able to identify the major groups</p>

<p>course of study. The papers will be in the areas of</p> <p>i: Life and Diversity of Animals-I Invertebrates ii: Cell Biology iii: Developmental Biology iv: Life and Diversity of Animals Vertebrates v: Genetics and Biotechnology Zoology Practical Applied Zoology, Microbiology, Animal Physiology, Biochemistry and Immunology, Ecology and Biostatistics, Ethology and Evolution.</p> <p>The student will attain the Course Outcome, if s/he studies all three years' papers and attend practical classes.</p>	<p>characters, life diversity and the related theories.</p> <p>To learn about the groups of invertebrate & Vertebrates animals their general characters and classification and the special features, organs, pathogenecity, life history and significance.</p> <p>To practice and study the underlying principles of dissections of different systems using and making the temporary slides from different organs for details of their structures prepared.</p> <p>To make students aware of the size, shape structure and function of cells and different cell organelles.</p> <p>The study animal's functions of the body including nutrition. Respiration, heart, excretion, nerve physiology etc in which all structure, function, process and control.</p> <p>To learn the biochemical components of the body system with the view of the chemical compositions & energy production in our body.</p>	<p>of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework.</p> <p>To learn to compare and contrast the characteristics of animals that differentiates them from other forms of life.</p> <p>To learn to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth and also to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior.</p> <p>Learning to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.</p> <p>To demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within the course.</p>
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Department of Computer Sciences

Programmes: PGDCA & BCA

PO, PSO AND CO

Programme	Three Years BCA
PO	The BCA programme objectives specify the intellectual and behavioural competencies that graduates should possess and that provide a foundation for their future professional skill and growth & success in career. The graduates will apply a broad understanding of the fundamental theories, concepts, and applications of computer science in their career with the knowledge of analyze & solve a complex computing problem with the principles of computing and subject knowledge. They will be able to design, implement, and evaluate a computing-based solution by applying computer science theory and software development fundamentals. The graduates will be engaged in a wide range of careers and/or graduate studies in computer science or related fields with a passion for lifelong learning, work effectively as a member or leader of a team, communicate effectively, act ethically and with social responsibility in their careers. They will learn to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. The graduate will learn to document their work, write clearly and appropriately in an Information Technology context, respect user's data, including backup and security, and to think through the ethical consequences of Information Technology decisions.
PSO	The specific objectives relates to the development of domain expertise to apply knowledge of computing and mathematics appropriate to the discipline. Develop perfection in making a successful team to build software systems and apply the technologies in various fields of Computer Technology, including hardware problems, web site development and management, databases, and software engineering techniques using modern tools. The students will learn essential IT support & networking skills & law including installing, configuring, securing & troubleshooting operating systems, hardware and also learn to diagnose and solve operating system and hardware problems. The graduate must keep acquiring the new technologies independently and update their knowledge.

COURSE OBJECTIVES

BCA I Year		
Course Name	Course Objectives	Course Outcome
1704 GENERAL ENGLISH	1) Demonstrate the ability to approach writing as a recursive process that requires substantial revision of drafts for content, organization, and clarity. 2) Be able to integrate their ideas with those of others using summary, paraphrase, quotation, analysis, and synthesis of relevant sources.	1) Learn communicative skills, to define, classify, and understand the methods of communication. 2) Enable to practice those skills in their daily life and at work by identifying instances of communication in the circumstances.
101 INTRODUCTION TO INFORMATION	To impart knowledge about the structure, components and functions of a computer system so that they understand working of basic input and output devices, learn the	The students can work on the Operating System, peripheral devices, networking, multimedia, internet etc. with ability to use internet for searching information on web, sending e-mails and many other tasks. They will acquire the skill to work with MS-Word, Excel and PowerPoint and on the process of

TECHNOLOGY AND PC PACKAGES	binary number representation along with its operations and MS-Office and the role of computers in business, education and society.	writing business letters or job applications, tabulating data, preparing PPTs etc using MS-Office.
102 BUSINESS COMMUNICATION	The course is intended to give knowledge on the importance of communication in business and methods of communication relevant to various business situations and to build up communication skill including the management Information System and its functioning in an organization.	They will learn about the team activities using collaborative work skills, communicate via electronic mail, Internet, and other technologies For effective business communications and MIS.
103 PROBLEM SOLVING THROUGH C PROGRAMMING	The students will be introduced to powerful programming language – C, learn is basic structure and programming errors. They will learn the techniques of making a flowchart and design an algorithm, develop logics and programs.	The full knowledge about the various concepts of C language which will enable them to read, understand and trace the execution of programs, debug a program and write program code in C to solve real world problems.
104 BASIC PHYSICS		
105 BASIC MATHEMATICS	To inculcate in students the fundamental mathematical background in computer science and learn about Sets, Relations Functions, Matrices, Mathematical logic, and Group theory.	They will develop the understanding of the basic concepts of Sets, Relations Functions, Matrices, Mathematical logic, and Group theory and develop analytical ability to solve real-world problems using these methodologies.
106 COMPUTER ORGANIZATION	It is intended to enable the students to learn the basic functions, principles and concepts of Computer Architecture, its fundamental and design including the processor and control unit design techniques. They will study the I/O interfacing.	It will result in learning the binary and hexadecimal number systems including computer arithmetic with the history and development of modern computers, the fundamentals of different instruction set architectures and their relationship to the CPU design.
107 PC PACKAGES AND MICROPROCESSOR LAB	To educate the students on the applications and processing of various programmes and how to draw graphical pictures, flow charts, block diagrams etc., using the drawing tools available in MS Word or MS Power Point and incorporate them into documents and presentations.	After the study of the courses the students will be able to demonstrate advanced knowledge of the Word Processing package, MS Office and a how to design & create effective and structured documents like technical reports, letters, brochures, etc. They will acquire the skills in the appropriate use of various features of the spread sheet package, graphical pictures, block diagram and their applications in tabulated statements, balance sheets, statistical charts, business statements, etc.
108 C PROGRAMMING LAB	To provide knowledge on programming. Foundation so as they are enable to analyze and efficiently solve the problems using C language	They will be able to draw flowcharts and implement different operators in a program 7 write a C code to solve a given problem and formulates the algorithms. They will be able to write and implement programs using pointers and structures.
BCA II Year		
1705 HINDI	To enlighten students about the richness and value of the national language. To offer working knowledge of Hindi to the students.	The student will learns reading and writing Hindi. Understands and learns proper use of Grammar. Develops communication Skills.
201 COMPUTER COMMUNICATION	To understand the working principle of various communication protocols. To analyze the various routing	The student will be able to learn the fundamentals of computer networking, details and functionality of layered network architecture. They will be able to apply

AND NETWORKS	algorithms. To know the concept of data transfer between nodes.	mathematical foundations to solve computational problems in computer networking. And analyze performance of various communication protocols. CO5: Compare routing algorithms.
202 DATABASE MANAGEMENT SYSTEM	To familiarization with Database Management System including the comprehensive knowledge of database models so as to learn the code database transactions using SQL and write PL/SQL programs.	They will know the database system and method of design a database using different models. The students will handle database during execution of the transactions and by concurrent users including gaining the knowledge of SQL and PL/SQL.
203 FUNDAMENTALS OF OPERATING SYSTEM	To deliver detailed knowledge of integral software in a computer system and educate on the working of operating system as a resource manager so that they are familiar with process and memory management and process synchronization and its solution	Develop ability to apply CPU scheduling algorithms to manage tasks and methods of prevention and recovery from a system deadlock. They will learn how to Initiate into the process of applying memory management methods and allocation policies.
204 DATA STRUCTURE	To familiarize the students with data structures used for representing data in memory like Arrays, Linked Lists, Graphs, Tree, Sorting etc; and analyze the performance of algorithms data structures on data with methods used in data structures.	The will acquire skill to analyze algorithms and how to determine its correctness and their time efficiency. The students will gain knowledge of advanced abstract data type (ADT) and data structures and their implementations so as to able to implement algorithms to perform various operations on data structures.
205 SYSTEM ANALYSIS AND DESIGN	To make them understand both the nature of 'information systems analysis and design' and its various components by demonstrating the different phases of Systems Development Life Cycle (SDLC) and the use of systems design techniques, methodologies, and tools.	The student will be able to Identify various types of information systems concepts and terminologies, the initial phases of the System Development Life Cycle (SDLC) using analytical tools and quantitative techniques used to identify problems. The can define problems and opportunities that initiate projects and apply at least one specific methodology or tool for analyzing a business situation (a problem or opportunity) by modeling it using a formal technique.
206 OBJECT ORIENTED PROGRAMMING USING C++	It is meant to familiarization with a widely used programming concept – Object Oriented Programming and to develop logical thinking, skill to write codes in C++ by applying concept of OOP, such as Objects, Classes, Constructors, and Inheritance etc. and solve mathematical or real world problems. Also to develop ability to isolate and fix common errors in C++ programs.	They will get an overview of benefits of Object Oriented Programming (OOP) approach over the Traditional Programming and know the comprehensive view of OOP concept.
207 DATABASE MANAGEMENT SYSTEM LAB	To design and build a simple database system and demonstrate competences with fundamental task involved with modelling, designing, and implementing a DBMS. The students will learn how to design E-R diagrams for	The will result in meeting the objective to provide students with an understanding of how to write sql query and do manipulation in the table, how to create, delete, insert, update table.

	given problems and use data manipulation language to query, update and manage a database.	
208 DATA STRUCTURE LAB	Students will learn to choose appropriate data structure as applied to specified problem definition for implementation and handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures. They will practice to use linear and non-linear data structures like stacks, queues, linked list etc.	They will be able to work on the basic concepts and understand the applications of database systems to construct an Entity-Relationship (E-R) model from specifications and to transform to relational model, to construct unary/binary/set/aggregate queries in Relational Algebra and apply database normalization principles. They will understand principles of database transaction management, database recovery, security.
BCA III Year		
301 JAVA PROGRAMMING	To learn the syntax and semantics to write Java programs. To understand the fundamentals of object-oriented programming in Java. To familiarize with the concept of inheritance, polymorphism, packages and interfaces.	It will result in developing the skill to write Java application programs using OOP principles and proper program structuring so as to able to create packages and interfaces and implement error handling techniques using exception handling.
302 INFORMATION SYSTEMS	To make them worm on the categories of Information System (IS) and its various operations support systems so as to acquire knowledge about various IS like Accounting System, Inventory Control System and Office Automation System and various phases of software development life cycle (SDLC).	The will develop the ability to analyze a problem and identify how to define the computing requirements appropriate to its solution and evaluate a computer based information system leading to get capability to assist in the creation of an effective Project plan. This will enable the students to understand managerial issues related to the information systems.
303 CLOUD COMPUTING	Aimed at developing the understanding the dimensions of the challenge of Cloud Computing and assessment of the economics, financial, and technological implications for selecting cloud computing for an organization including study of the financial, technological, and organizational capacity of employer for actively initiating and installing cloud-based applications.	They will get full knowledge of Cloud Computing and memorize the services and deployment models with importance of virtualization along with the technologies. They can use and examine different cloud computing services, analyze the components of open stack & Google Cloud platform and understand Mobile Cloud Computing and also design & develop backup strategies for cloud data based on features.
304 WIRELESS AND MOBILE COMPUTING	To provide an overview knowledge of Wireless Communication networks area and its applications in communication engineering with its contribution to overall technological growth. They will learn the various terminology, principles, devices, schemes, concepts, algorithms and different methodologies used in Wireless Communication Networks.	The study of the course will result in creating to understand fundamentals of wireless communications, analyze security, energy efficiency, mobility, scalability, and their unique characteristics in wireless networks. Demonstrate basic skills for cellular networks design. The will be able to apply knowledge of TCP/IP extensions for mobile and wireless networking. This will enable students to compare and contrast multiple division techniques, mobile communication systems, and existing wireless networks.

<p align="center">305 WEB TECHNOLOGY</p>	<p>Aimed at to learn various Web Technologies so the students are able to design and implement static and dynamic Web pages besides they acquire fundamental skills to maintain web server services required to host a website</p>	<p>This will result in their ability to develop web pages using HTML and Cascading Style Sheets, create XML documents and Schemas. They will get knowledge of client-side (JavaScript) and server-side scripting (PHP, ASP.NET) languages to build dynamic web pages and also familiarization with Web Application Terminologies, Internet Tools, E – Commerce and other web services.</p>
<p align="center">306 JAVA PROGRAMMING</p>	<p>To understand how to design, implement, test, debug, and document programs that use basic data types and computation, simple I/O, conditional and control structures, string handling and functions.</p>	<p>The student will be able to demonstrate how to achieve reusability using inheritance, interfaces, and packages and develops application faster and identify and describe common abstract and user interface components to design GUI in Java using APPLET and AWT along with response to events.</p>
<p align="center">WEB AND MOBILE TECHNOLOGY LAB</p>	<p>The student will practice on real time problems in web and mobile technologies learn in various courses.</p>	<p>This will result in their ability to apply the techniques to web designing and work on the developed web pages using various languages.</p>

One Year PGDCA

Graduate Attributes and Programme Objectives:

The objective of this programme is to develop Software engineering knowledge to prepare the system programmers and analysts to meet the manpower requirement of fast developing software industry. Besides leaning the skill, they will analyze and design the new system & perform testing of error for error free software.

To Student will use the concept of entity relationship diagram & its basic concept, feasibility study and technical feasible. The programme is designed to enrich the programming and analysis ability of students so as to seek work in multinational and reputed software companies. They will be able to create, select and apply appropriate techniques & resources like 4G, OOP. The students are also introduced to Digital Electronics & Elements of Computer Hardware. Being in the IT sector, it is expected that they will be lifelong learner demonstrating higher standards. They must work independently & in team using rigorous methods and appropriate theories with intellectual honesty and a respect for ethical values.

Programme Specific Objectives & Learning Outcomes:

Are aimed to develop skill to apply advance knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing problems and requirements so as to design and evaluate solutions for computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations using modern and new tools. They will develop **communication efficacy** to deal with multinational computing community, and with society at large, about computing activities.

Course Objectives

Course Name & No	Course Objectives	Course Outcome
<p style="text-align: center;">101- I.T. Tools and Networks</p>	<p>To make student learn about the computer system and languages commonly used by the beginners in IT field.</p>	<p>On completion of this course, the students will be able to understand the basics of computer system, its architecture, database and Networks including the basic concepts, terminology of IT and the use of IT tools. They will know the computer languages such as M. S. Office (M.S. Excel, M.S. Excel and M.S. PowerPoint).</p>
<p style="text-align: center;">102- Programming and Problem Solving Through C Language</p>	<p>To make student know the concept of Computer Programming methodology and understand fundamental concepts of structured programming language and constructs of 'C' language. They will learn to write programs in C and to solve the problems.</p>	<p>They will be able read, understand and trace the execution of programs written in C language, write the C code for a given algorithm and learn problem solving techniques. They will implement programs with pointers and arrays, perform pointer arithmetic, and use the pre-processor.</p>
<p style="text-align: center;">103- Structured System Analysis and Design</p>	<p>It aimed to create a firm basis for understanding the life cycle of a systems development project; evaluate problems in the planning and implementation of organizational change as related to an organization's information and enterprise systems. They will understand how to communicate with project team members, client, users, and others associated with development, operation, and maintenance of systems.</p>	<p>They will be able to gather data and analyze and specify the requirements of a system besides design system components and environments. Design a database for storing data, a user interface for data input and output, and controls to protect the system and its data.</p>
<p style="text-align: center;">104- Database Management System</p>	<p>Student must learn to utilize the knowledge of basic database system, identify how the data is presented in relation model and create using SQL. They will be taught file and page organization technique and utilize the knowledge of basic SQL and construct queries. Identify different recovery technique</p>	<p>They will handle problems using the basic concepts of database management systems, especially relational database so as to create good database design with implementation of various constrains. They can effectively use database for storing, managing and retrieving data from DBMS like MS-ACCESS, MySQL, Oracle and DB2 via SQL statements.</p>
<p style="text-align: center;">105- Web Technologies</p>	<p>Apply critical thinking and problem solving skills required to successfully design and implement a web site and demonstrate the ability to analyze, identify and define the technology required to build and implement a web site. They will acquire knowledge of artistic and design components that are used in the creation of a web site.</p>	<p>They will successfully demonstrate competency in the use of common HTML code and to transfer web pages to a server with competency using FTP. They will be able to construct efficient file structure for web sites & create web pages that meet accessibility needs of those with physical disabilities. Will develop understanding of the role of JavaScript in web page creation including modify CSS and JavaScript for use on a web site.</p>
	<p>They will understand how a</p>	<p>They will be able operate a</p>

<p>I.T. & Programming Language Lab</p>	<p>computer operates while running a program and the work of a compiler and an interpreter; learn the basic elements of a programming 'C' language and learn for/while loops and if-else statements & the concept of an array and its usage.</p>	<p>computer with running a program and the work of a compiler and an interpreter including learning the basic elements of a programming 'C' language, for/while loops and if-else statements.</p>
<p>Database Management Lab</p>	<p>To give an introduction to systematic database design approaches covering conceptual design, logical design and an overview of physical design.</p>	<p>They will work on practical aspects of database technologies for design and implementing a database schema for a given problem-domain.</p>
<p>Web Technologies Lab</p>	<p>To work on a problem leading to web designs and its concepts.</p>	<p>They can create a static website using HTML and add dynamic functionality to it by using java Script thus gains confidence to create dynamic website on real world problems.</p>
<p>Project (Based on any above Technologies)</p>	<p>Learn about different software development process models and software engineering principles and develop an ability to apply them to software design of real life problems. Plan, analyze, design and implement a software project using different programming languages. Gain confidence at having conceptualized, designed and implemented a working on project with their team.</p>	<p>To work on the programming language concepts and basics of Software Development Life Cycle model for the implementation of the project and to plan, analyze, design and implement a software project using SDLC model.</p>