



<b>Programs: B.A.F</b> <b>Specific Program: B.A.F.</b> <b>Program Specific Outcome (PSO):</b> 1. Develop an in-depth knowledge, understanding and skills in Accountancy and Finance. 2. To develop essential skill set to cater to various positions in the financial sector. 3. Be able to apply concepts and techniques of Accounting and Finance in organizational settings. 4. Build a strong foundation of knowledge in different areas through a combination of theoretical and practical study			
<b>Course Outcome (COs):</b>			
Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	UC-FAF-101	Financial Accounting I	1. Students will revisit and strengthen fundamental accounting principles and processes, learn relevant accounting standards, accounting treatment for depreciation and other special transactions culminating in
	UC-FAF-102	Cost Accounting I	1. Understanding Costing Concepts and its usages. This helps ascertainment of <b>cost</b> , fixation of selling price, proper recording and presentation of <b>cost</b> data to management for measuring efficiency and for <b>cost</b> control and <b>cost</b> reduction, ascertaining the profit of each activity, assisting management in
	UC-FAF-103	Macro Economics	1. Students will learn how the economy functions, how trade with the rest of the World affects the Country, different macro-economic models of different economists and how they apply to the real World and the role played by the Government and Central Banks in stabilizing the economy under different
	UC-FAF-104	Information Technology	1. The above objective will help student to be a professional when it comes to working with the banking sector and corporates. 2. There are well equipped with the hands-on skill for the Industry. 3. Making Students professional in a way that one can be qualified to be a Literate in the Field of Information technology. 4. Student will gain basic knowledge of Software and hardware along with Microsoft office Skills. 5. Today we want our students to be market oriented so we have e module to know more about cyber-crime and technology with regards to handle misuse of internet.
	UC-FAF-105	Foundation Course - I (Indian Society and State: Contemporary	1. Enhanced understanding of current challenges and issues of Indian society. 2. A sensitized approach towards social problems plaguing Indian society ability to address the same. 3. Increased awareness towards environmental issues.
	UC- FAF-106	Business Law I	1. Role of law in economic, political and social context 2. Understand the legal and fiscal structure of different forms of business organizations and their responsibilities as employer 3. Relevance of law to individuals, business and organization 4. Understand the laws related to consumer protection.
	UC-FAF-107	Business Mathematics and Statistics I	1. It will enable students to apply basic mathematical techniques to daily walks of life 2. It will enable students to understand how the finance industry carries out simple calculations 3. It will empower students to understand the introduction to statistics and how averages are used to compute variables.
2 <sup>nd</sup>	UC- FAF-201	Financial Accounting II	1. The subject focuses on creating an in depth understanding of the concept of corporate accounting from a general perspective to a more specific one considering the application in all the organizations. It
	UC- FAF – 202	Cost Accounting II	1. This course is not just about controlling the costs but also uses the information for managerial decision making. The fundamental objective of strategic cost management and its methods is to gain a
	UC-FAF-203	Auditing I	1. Student will understand the audit process from the engagement planning stage through completion of the audit, as well as the rendering of an audit opinion via the various report options. 2. Student will understand auditors' legal liabilities, and be able to apply case law in making a judgment whether auditors might be liable to certain parties; 3. Student will understand to describe the various levels of persuasiveness of different types of audit evidence and explain the broad principles of audit sampling techniques; 4. Student will understand to discuss the need for an independent or external audit and describe briefly the development of the role of the assurance provider in modern business society; 5. Student will be able describe the quality control procedures necessary to ensure that a competent assurance engagement is performed, and apply professional ethics including Code of Conduct to specific scenarios. 6. Student will Explain the internal audit process including the professional standards applicable to the internal audit profession.
	UC-FAF-204	Business Communication	1. Enhance listening, speaking, reading and writing skills to meet the challenges in the business environment 2. Understand the importance of communication methods and channels in order to successfully use them in professional settings 3. Understand and demonstrate the use of basic and advanced writing techniques 4. Confidently participate in meetings, conferences, interviews and group discussions.
	UC-FAF-205	Foundation Course - II (Human Personality and Society)	1. The subject will enable the students to appreciate the importance of understanding self and group behaviour. 2. Students will understand the importance of team and how team building contributes to the success of the organization. 3. Leadership qualities and motivating factors relevant to human beings will be understood well.
	UC – FAF – 206	Business Law II	1. Role of law in economic, political and social context 2. Understand the legal and fiscal structure of different forms of business organizations and their responsibilities as employer 3. Relevance of law to individuals, business and organization 4. Awareness of laws related to employee's compensation management

	UC-FAF-207	Business Statistics	<ol style="list-style-type: none"> <li>1. The subject will enable students to apply quantitative techniques in various fields including research, corporate and the professional World.</li> <li>2. It will enable the students to apply these theories and make correct future estimates</li> <li>3. The students will learn how to analyse complex situations and apply statistical techniques to the same.</li> </ol>
3 <sup>rd</sup>	UC- SAF-301	Corporate Laws I	<ol style="list-style-type: none"> <li>1. Students will learn Role of law in economic, political and social context</li> <li>2. They will be able to Understand the legal and fiscal structure of different forms of business organizations and their responsibilities as employer</li> <li>3. Also, Relevance of law to individuals, business and organization.</li> </ol>
	UC- SAF-302	Financial Accounting- III	<ol style="list-style-type: none"> <li>1. This subject helps the students to get familiar with accounting knowledge of partnership concerns.</li> <li>2. To impart knowledge about the practical aspects of the subject.</li> <li>3. This course provides comprehensive understanding of accounting treatments for amalgamation, conversion and sale of partnership firms.</li> </ol>
	UC-SAF-303	Information Technology	<ol style="list-style-type: none"> <li>1. The above objective will help student to be a professional when it comes to working with the banking sector and corporates.</li> <li>2. There are well equipped with the hands-on skill for the Industry.</li> <li>3. We are making them professional in a way that one can be qualified to be a Literate in the Field of Information technology</li> <li>4. Student will gain basic knowledge of Tally and POWER BI Software Skills which is of great demand in the market</li> <li>5. Today's we want our students to be market oriented so we have enable the module of MIS and Business process to make them give an exposure of Software related to MIS and Business process.</li> </ol>
	UC-SAF-304	Foundation Course (Financial Markets and	<ol style="list-style-type: none"> <li>1. Students will be aware about the various investment avenues prevalent in the financial markets.</li> <li>2. Understand the role and importance of commodities and derivatives markets</li> <li>3. The students will learn about the fund and fee based financial services.</li> </ol>
	UC-SAF-305	Foundation Course Contemporary Issues – 1	<ol style="list-style-type: none"> <li>1. An improved understanding of socio-economic and human rights issues in India after globalization.</li> <li>2. Awareness of India's environmental commitments</li> <li>3. A developed scientific attitude.</li> </ol>
	UC – SAF–306	Cost Accounting - III	<ol style="list-style-type: none"> <li>1. This subject helps the students to get familiar with the cost accounting terms and policies.</li> <li>2. Students will learn to control the cost of a firm</li> <li>3. They will get knowledge about the practical aspects of the subject.</li> <li>4. They will be able to recognize, record, examine, summarize, and study the company's cost spent on any process, service, product or anything else in the organization.</li> <li>5. Students will learn and understand Cost Controlling.</li> </ol>
	UC-SAF-307	Auditing II	<ol style="list-style-type: none"> <li>1. It will help the students in understanding the various aspects of Auditing</li> <li>2. It will make the students understand verification of assets and liabilities.</li> <li>3. They will be able to do vouching of income and expenses</li> <li>1. This subject helps the students to get familiar with all the Auditing techniques</li> </ol>
	UC-SAF-308	Taxation I	<ol style="list-style-type: none"> <li>1. Students will be able to identify the technical terms related to direct taxation.</li> <li>2. Students should be able to determine the residential status of an assessee and thus should be able to compute the taxable income of assessee with different residential status.</li> <li>3. Students will be able to understand the various benefits/ deductions under Chap VI-A of the Income tax act, 1961 which are to be reduced from the gross total income of the assessee.</li> <li>4. Students will be able to compute the net total income and the total tax liability of an individual assessee considering the income from all heads of income and the deduction under Chap VI- A of the Income tax act, 1961.</li> <li>4. Students will be able to compute the taxable income and tax for a partnership firm.</li> </ol>
	UC-SAF-309	Financial Management	<ol style="list-style-type: none"> <li>1. This subject helps the students to get familiar with the Financial Management techniques.</li> <li>2. It will impart knowledge about the practical aspects of the subject.</li> <li>3. The course aims at explaining the core concepts of Financial Management and its importance in managing the company.</li> <li>4. The students will be able to develop financial analysis skills</li> <li>5. The students should be able to understand the importance and use of ratio analysis</li> </ol>
4 <sup>th</sup>	UC- SAF-401	Corporate Law - II	<ol style="list-style-type: none"> <li>1. The students will be able to understand how law is important in day to day life.</li> <li>2. The students will be able to identify and understand various laws applicable to individual and business concerns.</li> <li>3. The students will get elementary knowledge about process of various legal transactions that occurs in the business world.</li> <li>4. The students will get knowledge of how to exercise their legal rights in case of breach / violation in transactions in the business world.</li> </ol>
	UC- SAF–402	Financial Accounting IV	<ol style="list-style-type: none"> <li>1. This subject will help the students to get familiar with preparation of Final Accounts of different entities.</li> <li>2. The students will be able to understand and practice different aspects of Depreciation Accounting.</li> <li>3. This course will provide comprehensive understanding of preparation of Final Accounts of Companies and Limited Liability Partnerships</li> </ol>
	UC-SAF-403	Business Research Methodology	<ol style="list-style-type: none"> <li>1. Learners are expected to demonstrate an understanding of research methodologies.</li> <li>2. They will Identify the overall process of designing a research study from its inception to the report stage.</li> <li>3. They should be able to imbibe data collection, analysis, interpretation and presentation skills at par with globally accepted standards.</li> <li>4. It will provide a solid foundation for development of rational problem solving skills and analytical thinking that can last throughout their education and subsequent professional careers.</li> </ol>
	UC-SAF-404	Foundation Course (Introduction to Management)	<ol style="list-style-type: none"> <li>1. It will make students a better future managers and leaders.</li> <li>2. It will help students to be more decisive and improve their decision-making skills.</li> <li>3. It will create awareness amongst students about the complexities of the business and enable them to tackle the issues and challenges of the organization in a better way.</li> <li>4. Students will be able to design better organizational structure, policies, processes and procedures in order to attain the organizational objectives.</li> <li>5. Students will not only understand the in - depth essentials of management and functioning of the organization but will be also able to judge the needs, wants and motivation levels of their human resources, which will help them to align individual interest with the organizational requirement.</li> </ol>
	UC-SAF-405	Foundation Course	<ol style="list-style-type: none"> <li>1. A better understanding of India's rise as an economic power.</li> <li>2. Developed awareness of India's strengths and capabilities on domestic and international front.</li> </ol>

		(Contemporary	3. Relevance of the wisdom of culture, political values and foreign policy for improved relations.
	UC – SAF-406	Cost Accounting - IV	1. This subject will help the students to get familiar with the cost accounting terms and policies. 2. It will help to control the cost of a firm 3. It will impart knowledge about the practical aspects of the subject. 4. It will enable them to recognize recording, examining, summarizing, and studying the company's cost spent on any process, service, product or anything else in the organization. 5. It will help them understand Cost Controlling
	UC-SAF-407	Auditing - III	1. This subject helps the students to get familiar with the Audit of different undertakings. 2. It helps the students in understanding the various requirements of Auditing. 3. To develop understanding of Audit under CIS environment and other requirements of auditing.
	UC-SAF-408	Direct Taxes - II	1. To make the students understand the basic concepts, definitions and terms related to direct taxation. 2. To make the students understand the concept of residential status thus making them understand the scope of total income for an assessee with different kinds of residential status. 3. To make students understand the various heads under which income can be earned in India. To make students understand the procedure for computation of income under various heads namely income from salaries, house property, business/ profession, capital gains and income from other sources. Students will be able to compute income from salaries, house property, business/profession, capital gains and income from other sources 4. To help the students to understand the various deductions under Chap VI-A of the Income tax act, 1961. 5. To make the students determine the net total taxable income of an assessee after reducing the deductions from the gross total income earned from all or either of the five heads of income and also to compute tax based on slab rates. 6. To help the students understand the computation of income and tax for a partnership firm
	UC-SAF-409	Financial Management - II	1. It helps to develop understanding of Leverages, Management of Working Capital. 2. It will enable students to help students analyse the Cash flow statements.
5 <sup>th</sup>		Financial Accounting - V	1. The students will acquire skill in advanced company accounts. 2. They will learn the conventions in amalgamation, absorption and reconstruction. 3. They will be equipped with training on finalizing and adopting company accounts. 4. They will also be acquainted with buy back of shares and liquidation of companies.
		Financial Accounting - VI	1. The students will learn basics of Financial Reporting and Analysis. 2. They will learn financial reporting of limited companies, insurance and banking companies.
		Cost Accounting - III	1. The students will be able to know the techniques of costing in detail. 2. They will have a command of costing of hospitals, hotels, goods and passengers transport service. 3. They will be acquainted with ABC Costing System.
		Financial Management - II	1. The students will learn Investment decisions, financing decisions and Dividend decisions. 2. They will be Introduced to Valuation of securities 3. They will learn mutual fund and bond valuation 4. They will be able to manage receivables and other credit
		Taxation - IV (Indirect Taxes - II)	1. The students will be introduced to GST 2. They will have a grip on levy and collection of GST 3. They will also learn Input Tax Credit and Computation of GST 4. They will attain knowledge of registration
		International Finance	1. They will learn International financial securities 2. The students will be well acquainted with Derivatives and its types. 3. They will have grasp on futures and options 4. They will recognize and deal in Foreign Exchange Markets 5. They should be able to manage risks through hedging and arbitrage.
		Financial Analysis and Business Valuation	1. The students will get familiar to financial modelling and its concepts. 2. They will practice financial analysis of statements drawn. 3. They will be well acquainted with Valuation Models 4. They will learn application through valuation of assets and liabilities.
		Management -II (Management Applications)	1. The students will learn in depth management in different broad areas. 2. They will learn the applications and conventions in Marketing Management, Production management, human Resource management and Financial management.
6 <sup>th</sup>		Financial Accounting - VII	1. The students will learn financial reporting of electricity companies and cooperative societies. 2. They will be able to draw investment accounts 3. They will understand the valuation of mutual funds. 4. They will be introduced to Ind AS and IFRS
		Project Work	1. The main objective of inclusion of project work is to inculcate the element of research analyse and scientific temperament challenging the potential of learner as regards to his/ her eager to enquire and ability to interpret particular aspect of the study.
		Cost Accounting - IV	1. The students will get an understanding of techniques of cost accounting. 2. They will get awareness of budgetary control and different types of budgets. 3. They will learn application of managerial decision making with respect to different decisions like exploring new markets, make or buy, deciding sales mix etc. 4. They will do exercises on controlling costs by learning and practicing standard costing and variance analysis.
		Financial Management - III	1. The students will understand and study different sources of raising finance like hire purchase and leasing. 2. They will also learn working capital financing. 3. They will get equipped with approaches for valuation of business. 4. They will get abreast with advanced concepts like mergers, acquisitions, restructuring etc.
		Taxation - V (Indirect Taxes- III)	1. The students will continue to learn advanced concepts of GST. 2. They will also learn to file returns under GST and audit and assessment procedures. 3. They will get introduced to Customs Act. 4. They will get equipped with foreign trade policies.
		Security Analysis and Portfolio Management	1. The students will be able to value the portfolio and learn portfolio management in detail. 2. They will also get grasp on fundamental analysis 3. Following fundamental, they will be able to analyse the stocks technically.
		Management Control Systems	1. They will learn the new developments in control system and management accounting. 2. They will understand the need and process of inflation accounting. 3. They will get abreast with Financial Goal Setting, Transfer Pricing and Responsibility centre.
		Economics Paper – III	1. The students will learn about Indian economy specifically.

		(Indian Economy)	2. They will get well versed with various sectors of Indian economy like agricultural, industrial and service sector. 3. They will understand the monetary policy and the capital markets.
--	--	------------------	---

<b>Specific Program: B.Com (Banking and Insurance)</b> <b>Program Specific Outcome (PSO):</b> 1. The Program aims to produce graduates who will produce innovative solutions to problems, apply research skills to business challenges and communicate effectively. 2. This course will provide adequate exposure to operational environment in the field of Banking, Insurance and other related financial services 3. Students will be able to tackle the challenges of the business world, using their core- knowledge of two very important sectors of the domain- Banking and Insurance.			
<b>Course Outcome (COs):</b>			
Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	UC-FBI-101	Environment and Management of Financial Services	1. Describe the general structure of Financial System – Financial Institution, Financial Instruments, Financial Markets, Financial Services & in particular understand the functioning of Banking & Insurance industry 2. Understand the Development, Management, & working of Banking & Insurance industry 3. To provide basic understanding relating to the role of Regulating Agencies like RBI, SEBI, IRDA 4. Equip students with the Risk Management practices being followed
	UC-FBI-102	Micro Economics	1. Students will be able to identify and explain economic concepts and theories related to the behaviour of economic agents, markets, industry and firm structures, legal institutions, social norms, and government policies. 2. Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones. 3. Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare. 4. Students will be able to identify the basic features of alternative representations of human behavior in economics.
	UC-FBI-103	Financial Accounting I	1. Accounting involves dealing with real revenues, actual transactions and observable finance. 2. This subject will make students acquire knowledge about the laws that govern business, typical business administration schemes, ethics of accountancy, statistics and accounting theory.
	UC-FBI-104	Principles of Business and Management	1. The program seeks to develop in students the competencies and attitude in playing the various roles in the business world 2. To introduce Business and its environment 3. Explain the nature and different Management Concepts 4. Discuss the Importance of Entrepreneurship and Factors contributing to growth of Entrepreneurship
	UC-FBI-105	Business Communication	1. To help learners develop interpersonal skills that contribute to effective and satisfying personal, social and professional relationship 2. To facilitate understanding of the nuances of verbal and non-verbal communication as it plays a vital role in the accomplishment of organisational goals 3. To impart knowledge regarding exchange of information both within and outside the organisation. 4. To upskill learners with the use of the latest digital tools and techniques to facilitate effective communication at workplace
	UC-FBI-106	Business Mathematics	1. To develop the desired mental faculties that enable the students to present solutions to problems/queries where quantitative solutions are desired 2. To understand the concept of simple interest and compound interest 3. To know the rules of derivatives and application of it
Semester II	UC-FBI-107	Foundation Course I	1. To understand the pluralistic nature of Indian society. 2. To sensitize the students about gender disparity in the society. 3. To explain significance of human rights and understand the tenets of Indian Constitution. 4. To create awareness about growing social and environmental problems in India
	UC-FBI-201	Principles and practices of banking and insurance	1. To acquire the skills necessary to work in Financial Service Industry Particularly Banking & Insurance, 2. To describe and apply financial concepts, theories, and tools. 3. The course facilitates learning of industry practices with special focus on Banking & Insurance industry.
	UC-FBI-202	Macro Economics	1. Students will be able to identify and explain macroeconomic variables and understand the economic forces that influence and determine them. 2. Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence to explain past economic events and to formulate predictions on future ones. 3. Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare. 4. Students will be able to identify the basic features of alternative representations of human behaviour in economics.
	UC-FBI-203	Business Statistics	1. To develop the desired mental faculties that enable the students to present solutions to problems/queries where quantitative solutions are desired. 2. To describe data and make evidence-based decisions using inferential statistics
	UC-FBI-204	Financial Accounting II	1. Accounting involves dealing with real revenues, actual transactions, and observable finance. 2. This subject will make students acquire knowledge about the laws that govern business, typical business administration schemes, and ethics of accountancy, statistics and accounting theory.
	UC-FBI-205	Business Law	1. To explain the framework within which business activities shall be carried out 2. To raise an issue to various legal and semi-legal authorities against the government in case the legal rights of the business have been violated
			1. To acquaint the students with the art of Professionalism which include professional style of making presentation using keyboard shortcuts and presenting the same to many audiences.

	UC-FBI-206	Information Technology	2. Documentation is another aspect where we want student to emphasize on how to select the correct format, layers and alignment in the documents, in last we also give much hands on working with spreadsheet (DATABASE ) basic skills in terms of Practical and as far as theory student must be acquainted with the knowledge of Computer, internet and network.
	UC-FBI-207	Foundation Course II	1. To understand the basic behaviour pattern of human personality. 2. To comprehend group behaviour. 3. To understand the issues of stress and stress management 4. To develop an understanding of aspects of organization behaviour and motivation
Semester III	UC-SBI-301	Business Ethics and Corporate Governance	1. Create and address relevance of social responsibility to the students 2. Making students understand the good corporate governance and its importance 3. Students understand the global challenges in business ethics.
	UC-SBI-302	Financial Markets	1. Students will be able to describe the general structure of Financial Markets and in particular understand the functioning of Banking & Insurance industry. 2. The subject will provide basic understanding relating to the role of Regulating Agencies like RBI, SEBI, IRDA. 3. It will introduce students to the Risk Management practices being followed in the financial sector.
	UC-SBI-303	Foundation Course- III ( Retail Banking)	1. Explain how retail and corporate banks function to deliver financial intermediation, support asset transformation and create money supply. 2. Evaluate the sources of risk that a retail bank manages in delivering these functions for customers and the wider economy. 3. Describe the core services of a retail bank and explain the value of these services to customers.
	UC-SBI-304	IT in Banking and Insurance	1. Be professional when it comes to working with the industry and corporates. 2. Making students well equipped with the hands-on skill for the Industry. 3. Making students professional in a way that one can be qualified to be skilled in the field of Information technology 4. Student will gain basic knowledge of Software, hardware and networking along with Microsoft office Skills 5. students to be market oriented and to know more on network, cyber-crime and technology with regards to misuse of internet and network
	UC-SBI-305	Mutual Fund Management	1. Learn about the mutual fund industry structure in India 2. Understand types of mutual funds 3. undertake necessary research to understand risks and valuation of funds 4. Be able to understand accounting and taxation for mutual funds
	UC-SBI-306	Management Accounting	1. To introduce students to various techniques used for analysing financial health of a company. 2. To understand the use of general and industry specific ratios. 3. To develop financial analysis skills among students.
	UC-SBI-307	Entrepreneurship Management	1. Sharpen creative, innovative and problem solving skills of students 2. Students will learn life skills and how to tackle failures and uncertainties 3. Identification of best entrepreneurial opportunities 4. Learn new business models and entrepreneurial ethics
	UC-SBI-308	Direct tax	1. Students will be able to identify the technical terms related to direct taxation. 2. Students should be able to determine the residential status of an assessee and thus should be able to compute the taxable income of assessee with different residential status. 3. Students will be able to understand the various benefits/ deductions under Chap VI-A of the Income tax act, 1961 which are to be reduced from the gross total income of the assessee. 4. Students will be able to compute the net total income and the total tax liability of an individual assessee considering the income from all heads of income and the deduction under Chap VI- A of the Income tax act,1961. 5. Students will be able to compute the taxable income and tax for a partnership firm.
	UC-SBI-309	Organisational Behaviour	1. Demonstrate the applicability of analyzing the complexities associated with management of individual behavior in the organization. 2. Analyze the complexities associated with management of the group behavior in the organization.
Semester IV	UC-SBI-401	Credit and Risk Management	1. Learn how risk management evolves in this disruptive and innovative environment 2. Provide an overview and working knowledge of risk governance and long-term value creation in the light of digital disruptions and new regulations
	UC-SBI-402	Corporate and Banking Laws	1. Learn and understand the provisions of the Special Contract Act. 2. Understanding about the Companies and learning the various provisions of Companies Act 2013 3. The students will get acquainted with the Banking Regulation Act 1949, Insurance Act 1938, IRDA 1999, Prevention of Money Laundering Act,2002, SARFAESI Act,2002
	UC-SBI-403	Foundation Course- IV (Life and General Insurance)	1. Students will understand the characteristics of insurance operations 2. Students will understand different insurance products. 3. Students will be able to understand need for health insurance and claim management 4. Students will know the concepts of liability insurance
	UC-SBI-404	Research Methodology	1. Learners are expected to demonstrate an understanding of research methodologies. 2. Identify the overall process of designing a research study from its inception to the report stage. 3. Imbibe data collection, analysis, interpretation and presentation skills at par with globally accepted standards. 4. It provides a solid foundation for development of rational problemsolving skills and analytical thinking that can last throughout their education and subsequent professional careers
	UC-SBI-405	Financial Planning	1. Understand Basic Concepts in Financial Planning 2. Learn about the Financial Products for Savers and Investors 3. Analyse the The Psychographics and Life Cycle of the Investor 4. How to frame the Goals and Investment Objectives 5. Learn Tax Planning to save tax 6. Building a Model Portfolio
	UC-SBI-406	Financial Management	1. Will enable students to make investment decisions considering time value money. 2. Learn to make Investment Decisions using Capital Budgeting techniques
	UC-SBI-407	Merchant Banking	1. Know the basics of the Merchant Banking in India. 2. Understand the functioning of Merchant Bankers related to Issue Management Process, Substantial Acquisition of Equity Shares, Buyback of Equity Shares and Delisting of Shares. 3. Know the regulatory environment in which the Merchant Bankers operates in India
			1. To get familiar with the Cost accounting techniques.

	UC-SBI-408	Cost accounting	<p>2. Learners will be able to prepare Cost Sheet in accordance with appropriate standards of cost.</p> <p>3. Learners shall possess the knowledge to apply standard costing and marginal costing which are commonly used in industries</p>
	UC-SBI-409	Customer Relationship Management	<p>1. The students will be able to understand the fundamental of customer relationship management such as customer behaviour, relationship marketing, customer satisfaction and loyalty</p> <p>2. There will be improvement in the analytical skills of the learners as they understand the key components of customer relationship management and explore ways to integrate it within an organization.</p> <p>3. The students will be able to study the impact of customer relationship management on sales &amp; marketing strategy.</p> <p>4. The students will be updated with basic technological infrastructure and organisations involved in current and emerging customer relationship management practices.</p> <p>5. There will be an awareness regarding consumer privacy concerns and the students will also learn methods to deal with privacy and ethical compliance.</p>
Semester V		International Banking and Finance	<p>1. Students understand the basics of international finance and its allied concepts</p> <p>2. Students acquire the knowledge of different international capital markets to the students.</p> <p>3. Students understand the reasons for growth and recent trends in international banking</p>
		Research Methodology	<p>1. Students understand and learn the different modes of sample selection through probability and non-probability sampling.</p> <p>2. It helps them to learn and apply the different sources of primary data collection which is helpful for their research projects.</p> <p>3. Research process forms an integral part of RM thus enabling them to take on responsibilities into research of market and finance in the future.</p>
		Financial Reporting and Analysis(Corporate)	<p>1. It teaches students not just the preparation of these accounts but also how to read them and understand them.</p> <p>2. It also enlightens the students about the international accounting system through the IFRS</p>
		Auditing- I	<p>1. Students gain knowledge of difference between auditing, accounting and investigation.</p> <p>2. Students understand various concepts like audit program, audit notebook and other allied concepts.</p> <p>3. Students gain knowledge of different auditing techniques like verification and vouching.</p>
		Strategic Management	<p>1. Strategic management is a broad term that includes innovative thinking, a strategic planning process and operational strategizing.</p> <p>2. Strategic business management, more specifically, relies largely on research. It is imperative that for a business strategy to be successful, customers' opinions, employees' contribution and the industry's best practices are all taken into account.</p> <p>3. A common way to encourage strategic business management, is to incorporate a lot of planning into board meetings, have trustees with valued and varied experience, and to carefully consider the impacts of decisions on each business function within the organization.</p> <p>4. Annual plans for businesses are often put together, but within the 21st century, it is important to be flexible and adapt to changing environments and demands</p>
		Financial Services Management	<p>1. This program will help the students to understand the important segment of Financial System.</p> <p>2. They will comprehend that the development of our country depends on Financial Services, since there is a greater need to exceed the expectations of customers and provide uninterrupted services.</p> <p>3. This subject will equip the students in the corporate world to manage Finance and Credit.</p> <p>4. The Module will also help the students to face the challenges in the corporate world through management of fee based and fund based services</p>
		Business Ethics and Corporate Governance	<p>1. Students will be able to understand the relationship between ethics, morals and values in the workplace.</p> <p>2. They will be able to critically apply understanding of ethics in real-world contexts</p> <p>3. Discuss the influence of corporate governance system on the performance of individual firms.</p> <p>4. Discuss the moral and social responsibility dimensions of corporate governance.</p>
		Actuarial Analysis in Banking & Insurance	<p>1. Students will be able to understand the mathematical and statistical methods to assess risk in the insurance and finance industries</p> <p>2. They will be able to understand the statistical evaluation of the financial and economic implications of possible contingencies.</p>
Semester VI		Central Banking	<p>1. Students understand the concept and growth of central banking in India</p> <p>2. Students gain knowledge of the role played by RBI as central Bank in India Vis a Vis the role of other central banks across the world.</p> <p>3. Students understand the need for central bank in the cyber world.</p>
		Project Work in Banking & Insurance	<p>1. To inculcate the element of research analysis and scientific temperament among learners.</p> <p>2. To Create awareness among learners regarding methodology of formulation and preparation of the project work</p>
		Security Analysis and Portfolio Management	<p>1. To acquaint the learners with various concepts of finance.</p> <p>2. To understand the terms which are often confronted while reading newspaper, magazines etc. for better correlation with the practical world.</p> <p>3. To understand various models and techniques of security and portfolio analysis.</p>
		Auditing - II	<p>1. Students gain knowledge of auditing of banking, insurance and limited companies.</p> <p>2. Students acquire the knowledge of new areas and trends in auditing.</p> <p>3. Students understand the need for professional ethics in the auditing process</p>
		Human Resource Management	<p>1. Students understand the need and objectives for human resource management with respect to the banking sector.</p> <p>2. Students gain knowledge of various aspects of Human Resource management and make them acquainted with practical aspect of the subject.</p> <p>3. Students understand concepts like recruitment, training, development and compensation with reference to the banking sector.</p>
		Turnaround Management	<p>1. Students gain knowledge of the different types of business organizations and approaches for their growth and survival.</p> <p>2. Students are able to analyze the different internal external symptoms of industrial sickness.</p> <p>3. Students are able to visualize how turnaround management is a skill.</p>
		International Business	<p>1. Explain the concepts in international business with respect to foreign trade/international business</p> <p>2. Students will be able to apply the current business phenomenon and evaluate the global business environment in terms of economic, social and legal aspects</p>

		Business	3. They can analyse the principle of international business and strategies adopted by firms to expand globally 4. Integrate concept in international business concepts with functioning of global trade
		Marketing in Banking & Insurance	1. To develop concepts in marketing. 2. To explain the scope of marketing management-analysing opportunities, selecting target segments, developing the market mix, managing the marketing effort

**Program: B.F.M**

**Specific Program: B.F.M**

**Program Specific Outcome (PSO):**

1. To provide adequate basic understanding about Banking, Insurance & other financial services to the students and to give an adequate exposure to operational environment in the field of Banking, Insurance & other related financial services of Accounting and Finance.
2. To inculcate training, and practical approach, by organizing industrial visits, summer placements and using modern technology in teaching the students in the field of Accounting & Finance and Banking.
3. To create an additional avenue of self employment to the student and to provide suitable trained personnel for the Financial Services Sector.
4. To prepare and train the graduates in such a manner so that they can compete in the markets
5. To make them aware about the practical aspect of the theoretical concepts.
6. To establish strong co-ordination with the service sector.

**Course Outcome (COs):**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	UC- FFM- 101	Introduction to Financial System	<ul style="list-style-type: none"> <li>Students will be aware about the financial system prevalent in the world.</li> <li>It will also enlighten them on how it has evolved over period.</li> <li>It will provide knowledge about the constituents of the system.</li> <li>It will involve working of various financial instruments across capital, money, forex, commodity &amp; derivative markets.</li> <li>It will also encompass the role of financial regulators &amp; their roles.</li> </ul>
	UC- FFM- 102	Micro Economics	<ul style="list-style-type: none"> <li>Students will be able to identify and explain economic concepts and theories related to the behaviour of economic agents, markets, industry and firm structures, legal institutions, social norms, and government policies.</li> <li>Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.</li> <li>Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.</li> <li>Students will be able to identify the basic features of alternative representations of human behaviour in economics.</li> </ul>
	UC- FFM- 103	Financial Accounting I	<ul style="list-style-type: none"> <li>Accounting involves dealing with real revenues, actual transactions and observable finance.</li> <li>This subject will make students acquire knowledge about the laws that govern business, typical business administration schemes, ethics of accountancy, statistics and accounting theory.</li> </ul>
	UC- FFM- 104	Business Mathematics	<ul style="list-style-type: none"> <li>To develop the desired mental faculties that enable the students to present solutions to problems/queries where quantitative solutions are desired.</li> <li>To fortify the students to think logically and provide numerical output, which enable decision making.</li> <li>To enable problem solving where unbiased and non- judgemental outputs are desired in the form of concise numbers.</li> <li>To provide a window for their further development into areas of analytics and big data.</li> </ul>
	UC- FFM- 105	Business Communication	<ul style="list-style-type: none"> <li>To help learners develop interpersonal skills that contribute to effective and satisfying personal, social and professional relationship</li> <li>To facilitate understanding of the nuances of verbal and non-verbal communication as it plays a vital role in the accomplishment of organisational goals</li> <li>To impart knowledge regarding exchange of information both within and outside the organisation.</li> <li>To upskill learners with the use of the latest digital tools and techniques to facilitate effective communication at workplace</li> </ul>
	UC- FFM- 106	Principles of Management	<ul style="list-style-type: none"> <li>Students will understand the basics of management. They will get to know how to attain maximum output by utilizing the resources (economic and non-economic) to its best.</li> <li>They will learn about the essential elements of management i.e. POSDCORB : their features, need and importance.</li> <li>It will enlighten the students as how management has evolved over the period.</li> <li>It will provide clarity to the students about organization vision, mission, objectives and goals.</li> <li>It will help students to understand the integration of individual goals with the organizational goals.</li> <li>It will update students with the kind of skills and organization structure is required in order to sustain in the business.</li> </ul>
2 <sup>nd</sup>	UC- FFM- 107	Foundation Course – I	<ul style="list-style-type: none"> <li>To understand the pluralistic nature of Indian society.</li> <li>To sensitize the students about gender disparity in the society.</li> <li>To explain significance of human rights and understand the tenets of Indian Constitution.</li> <li>To create awareness about growing social and environmental problems in India.</li> </ul>
	UC- FFM- 201	Financial Accounting II	<ul style="list-style-type: none"> <li>Accounting involves dealing with real revenues, actual transactions and observable finance.</li> <li>It will help students in preparing financial statements in accordance with appropriate standards.</li> <li>It will help students in interpreting the business implications of financial statement information</li> <li>It will help students in Preparing accounting information for planning and control and for the evaluation of products, projects and divisions.</li> </ul>
	UC- FFM- 202	Macro Economics	<ul style="list-style-type: none"> <li>Students will be able to identify and explain macroeconomic variables and understand the economic forces that influence and determine them.</li> <li>Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.</li> <li>Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.</li> </ul>

			<ul style="list-style-type: none"> <li>Students will be able to identify the basic features of alternative representations of human behaviour in economics.</li> </ul>
	UC- FFM- 203	Principles of Investment	<ul style="list-style-type: none"> <li>Students will be aware about the various investment avenues prevalent in the market.</li> <li>It will also enlighten them on how relevant they are &amp; their objectives.</li> <li>It will provide knowledge about the various types of investments &amp; its features.</li> <li>It will also involve working of various financial investments concepts &amp; their planning, risks, allocation &amp; taxation.</li> <li>It will also encompass the structure of investment portfolio, its performance &amp; various methods to calculate returns.</li> </ul>
	UC- FFM- 204	Business Statistics	<ul style="list-style-type: none"> <li>To develop the desired mental faculties that enable the students to present solutions to problems/queries where quantitative solutions are desired.</li> <li>The subject fortifies the students to think logically and provide numerical output, which enable decision making.</li> <li>The subject enables problem solving where unbiased and non- judgemental outputs are desired in the form of concise numbers.</li> <li>The subject complements qualitative thinking where both are to be looked at, as two sides of a coin, prior to providing a solution to a problem.</li> </ul>
	UC- FFM- 205	Business Environment	<ul style="list-style-type: none"> <li>Students will be aware about the business environment with the</li> <li>It will also enlighten them on how relevant they are &amp; their objectives.</li> <li>It will provide knowledge about the various factors affecting business</li> <li>It will give an overview on Entrepreneurship, Globalisation and at the same time Contemporary issues</li> </ul>
	UC- FFM- 206	Information technology	<ul style="list-style-type: none"> <li>To acquaint the students with the art of Professionalism which include professional style of making presentation using keyboard shortcuts and presenting the same to a large number of audiences.</li> <li>To equip with the hands-on skill for the Industry.</li> <li>Student should gain basic knowledge of Software and hardware along with Microsoft office</li> <li>Documentation is another aspect where we want student to emphasize on how to select the correct format, layers and alignment in the documents</li> <li>Provide hands on working with spreadsheet (DATABASE ) basic skills in terms of Practical</li> <li>Student must be acquainted with the knowledge of Computer, internet and network.</li> </ul>
	UC- FFM- 207	Foundation Course-II (Human skills)	<ul style="list-style-type: none"> <li>To understand the basic behaviour pattern of human personality.</li> <li>To comprehend group behaviour.</li> <li>To understand the issues of stress and stress management</li> <li>To develop an understanding of aspects of organizational behaviour and motivation.</li> </ul>
3 <sup>rd</sup>	UC-SFM-301	Business Law	<ul style="list-style-type: none"> <li>Learn and understand the provisions of the Indian Contract and Special Contract Act.</li> <li>Understanding about the Companies and learning the various provisions of Negotiable instruments Act.</li> <li>The students will get acquainted with the Sale of Goods Act.</li> </ul>
	UC-SFM-302	Management Accounting	<ul style="list-style-type: none"> <li>To acquaint management learners with basic accounting fundamentals and develop financial analysis skills.</li> <li>To enable understanding of cash flow statements and management of working capital.</li> </ul>
	UC-SFM-303	Foundation Course – III-	<ul style="list-style-type: none"> <li>Students will be able to understand the Markets its types and its implication.</li> <li>Students will understand the practical aspect of the importance of the Equity Markets.</li> </ul>
	UC-SFM-304	Information Technology in Financial Markets	<ul style="list-style-type: none"> <li>Be professional when it comes to working with the industry and corporates.</li> <li>Making students well equipped with the hands-on skill for the Industry.</li> <li>Making students professional in a way that one can be qualified to be skilled in the field of Information technology.</li> <li>Student will gain basic knowledge of Software, hardware and networking along with Microsoft office Skills.</li> <li>Students to be market oriented and to know more on network, cyber-crime and technology with regards to misuse of internet and network.</li> </ul>
	UC-SFM-305	Mutual Fund Management	<ul style="list-style-type: none"> <li>Students will be able to understand the Mutual funds and its types</li> <li>Students will understand the practical aspect of Mutual Funds and its steps and calculations</li> </ul>
	UC-SFM-306	Fundamental Analysis	<ul style="list-style-type: none"> <li>To have a basic understanding about fundamental analysis.</li> <li>To learn the various valuation methodologies</li> </ul>
	UC-SFM-307	Foreign Exchange Markets	<ul style="list-style-type: none"> <li>Students will be able to understand the Forex in detail with its practical implication</li> <li>Students will understand the practical aspect of Foreign Exchange and its steps and calculations</li> </ul>
	UC- SFM- 308	Direct Tax	<ul style="list-style-type: none"> <li>Students will be able to identify the technical terms related to direct taxation.</li> <li>Students should be able to determine the residential status of an assessee and thus should be able to compute the taxable income of assessee with different residential status.</li> <li>Students will be able to understand the various benefits/ deductions under Chap VI-A of the Income tax act, 1961 which are to be reduced from the gross total income of the assessee.</li> <li>Students will be able to compute the net total income and the total tax liability of an individual assessee considering the income from all heads of income and the deduction under Chap VI- A of the Income tax act, 1961.</li> <li>Students will be able to compute the taxable income and tax for a partnership firm.</li> </ul>
	UC-SFM-309	Treasury Management	<ul style="list-style-type: none"> <li>The students will be able to understand the complexities of treasury management</li> <li>The students will be able to Classify treasury market and Treasury Services</li> </ul>
4 <sup>th</sup>	UC-SFM-401	Corporate and Securities Law	<ul style="list-style-type: none"> <li>The students will be able to Understand the laws related to formation of companies, types of Companies, legal document regarding company, appointment of directors their qualifications and disqualification, meetings.</li> <li>The students will be to learn laws related to rules and provisions related to Partnership and LLP</li> <li>The students will be understanding the laws related to Foreign Exchange Management, Securities Exchange and Role of SEBI.</li> </ul>
	UC-SFM-402	Corporate Finance	<ul style="list-style-type: none"> <li>To develop understanding of capital structure and leveraging</li> <li>To enable students to make investment decisions considering time value of money.</li> </ul>
	UC-SFM-403	Foundation Course-IV – Fixed Income Securities	<ul style="list-style-type: none"> <li>Students will be able to understand the Debt and Money market in detail with its practical implication with its participants.</li> <li>Students will understand the regulatory aspect of the Fixed Income Securities and the process of investing in the same.</li> </ul>
			<ul style="list-style-type: none"> <li>Learners Are Expected To Demonstrate An Understanding Of Research Methodologies.</li> </ul>



	UC-SFM-404	Research Methodology	<ul style="list-style-type: none"> <li>Identify The Overall Process Of Designing A Research Study From Its Inception To The Report Stage.</li> <li>Imbibe Data Collection, Analysis, Interpretation And Presentation Skills At Par With Globally Accepted Standards.</li> <li>It Provides A Solid Foundation For Development Of Rational Problem Solving Skills And Analytical Thinking That Can Last Throughout Their Education And Subsequent Professional Careers.</li> </ul>
	UC-SFM-405	Financial Planning	<ul style="list-style-type: none"> <li>The students will be able to understand how Financial Planning is done and its importance</li> <li>The students will be able to carry out the Financial Planning activity, its process and its calculations</li> </ul>
	UC-SFM-406	Technical Analysis	<ul style="list-style-type: none"> <li>The students will be aware of basics of technical analysis</li> <li>Students will be able to understand major indicators and oscillators</li> <li>Students will be able to trade based on the various trading strategies and understanding of risk.</li> </ul>
	UC-SFM-407	Commodity & Derivatives Market	<ul style="list-style-type: none"> <li>Students will be able to understand the Commodity and Derivative Markets in detail with its practical implication with its participants.</li> <li>Students will understand the regulatory aspect of the Commodity and Derivatives Markets and the process of investing in the same.</li> </ul>
	UC-SFM-408	Indirect Tax	<ul style="list-style-type: none"> <li>Students will be able to identify the technical terms related to indirect taxation.</li> <li>Students will be able to understand the various provisions relating to GST.</li> <li>Students will be able to compute the GST and understand the documentation requirements, types and provisions of filing returns.</li> </ul>
	UC-SFM-409	Corporate Accounting	<ul style="list-style-type: none"> <li>To get a closer understanding of accounting involved in internal and external reconstruction of companies.</li> <li>To gain knowledge of ascertaining underwriting commission and profits prior to incorporation of companies.</li> </ul>
5 <sup>th</sup>		Marketing in financial Services	<ul style="list-style-type: none"> <li>To introduce students to the marketing of financial services.</li> <li>To demonstrate the benefits of using an analytical approach to marketing in the financial services industry.</li> <li>Students would be aware of all the concepts of marketing specific to financial services.</li> <li>Students would learn the various analytical approaches to marketing in financial services industry and understand the benefits of various approaches.</li> </ul>
		Technical analysis	<ul style="list-style-type: none"> <li>To demonstrate the students the concept of technical analysis and provide exposure to various charts and patterns in technical analysis.</li> <li>To expose students to live chart reading and analysis.</li> <li>Students would be able to read the basic charts and do simple analysis such as support and resistance of market etc.</li> <li>Students would get an exposure to various charts and patterns of technical analysis. And get an understanding on various tools available in technical analysis</li> </ul>
		Corporate Accounting	<ul style="list-style-type: none"> <li>Construct the financial statements of company within the frame work of Ind AS</li> <li>Develop a process for redemption of Preference shares</li> <li>Construct the Restructuring of capital structure in the financial statement of Joint stock company Ltd.</li> <li>Calibrate the procedure involved in Amalgamation of companies</li> <li>Calibrate the procedure involved in Absorption of companies</li> <li>Explain the implication of unethical accounting practices on the society</li> </ul>
		Equity Research	<ul style="list-style-type: none"> <li>The objective of the Equity Research course would be to help you be a better investor to provide you with an understanding of how to identify, analyze the financial statements of a business and invest in companies with better investment decisions.</li> <li>It would cover basic investment topics as well as advanced fundamental concepts in a manner which is easy to understand for someone without a background in accounting.</li> <li>It includes discussions via case studies, understanding broader investment topics, outlines on how to analyse a company, evaluation of companies, comprehend the annual report, capital allocation decision, portfolio construction and rebalancing and creating a correct psychological framework that will help one traverse various cycles of markets.</li> </ul>
		Direct Tax- Income Tax	<ul style="list-style-type: none"> <li>To acquaint the students with basic principles underlying the provisions of direct tax.</li> <li>To develop a broad understanding of the tax laws and accepted tax practices.</li> <li>Students would be able to explain different types of Incomes and their taxability and expenses and their deductibility.</li> <li>Students would be able to describe how the Provisions in the tax laws can be used for tax planning.</li> </ul>
		Business Valuation	<ul style="list-style-type: none"> <li>To acquaint the students with basic understanding of discounted cashflow method, and relative valuation Method</li> <li>To demonstrate students how to use the public information to analyse and value a company.</li> <li>Students would be able to conduct valuations based on the discounted cash flow method and relative valuation for a company.</li> <li>Students would be able to critically analyse publically available information about what is occurring in financial markets.</li> </ul>
6 <sup>th</sup>		Venture Capital and Private Equity	<ul style="list-style-type: none"> <li>Students will be provided with a deep understanding of the mechanism underpinning the creation and/or development of a firm and the financial support it can get from the financial system through venture capital investment.</li> <li>It tries to discover how special financial intermediaries (called private equity investors) finance through equity companies belonging to different stages of their life-cycle, starting from the very beginning to a more mature phase or also staying into crises and decline.</li> <li>Private equity (named venture capital when the company is in the first phases of its life cycle) deals with very different activities, such as scouting, advisory, deal-making, valuation, and financing as financial intermediaries see it.</li> </ul>
		Mutual Fund Management	<ul style="list-style-type: none"> <li>To get a basic overview and understanding of the evolution, regulatory bodies, organizational structure and types of mutual funds in India.</li> <li>To understand the valuation, accounting and taxation of Mutual Funds in India</li> <li>Students would have a fair understanding of the different products in mutual funds and various rules and regulations protecting the investors in mutual fund industry.</li> <li>Students would be able to evaluate the performance of various mutual funds and be aware of the various taxation benefits of each.</li> </ul>

		<b>Organisational Behaviour</b>	<ul style="list-style-type: none"> <li>To define basic organizational behavior principles, and analyze how these influence behavior in the workplace.</li> <li>To analyze individual human behavior in the workplace as influenced by personality, values, perceptions, and motivations.</li> <li>Students would be able to identify various factors that affect the motivational levels and values in an organization.</li> <li>Students would be aware of the various behavioral aspects that affect the workplace.</li> </ul>
		<b>Strategic Corporate Finance</b>	<ul style="list-style-type: none"> <li>To impart Broad perspective of financial matters within the corporate environment.</li> <li>To equip the students with an understanding on how crucial corporate finance decisions are taken and what are the factors to consider for such decisions.</li> <li>Students would have understanding of the various financial decisions in a corporate environment and the impact of such decisions in shareholder Value</li> <li>Students would have an understanding of the importance of various decisions such as dividend decision, capital budgeting etc.</li> </ul>
		<b>Indirect Tax- GST</b>	<ul style="list-style-type: none"> <li>To acquaint the students with basic principles underlying the provisions of indirect tax and to develop a broad understanding of the tax laws and accepted tax practices.</li> <li>Expose the participants to real life situations involving taxation and to equip them with techniques for taking tax-sensitive decisions.</li> <li>Students would be able to state the use of various deductions to reduce the taxable income.</li> <li>Students would be able to learn various direct and indirect taxes and their implication in practical situations.</li> </ul>
		<b>Corporate Restructuring</b>	<ul style="list-style-type: none"> <li>Identify the key issues and concepts of mergers and acquisitions.</li> <li>Understand the major strategies that underlie most M&amp;A transactions.</li> <li>Examine the necessary conditions for value to be created.</li> <li>Assess various case studies to analyze valuation strategies, pre and post merger issues and challenges.</li> </ul>

**Programs: B.M.S**

**Specific Program:**

**Program Specific Outcome (PSO):**

- Gain analytical skills, exposure and knowledge to handle responsibilities at middle level managerial roles in organisations; make reasoned, ethical decisions based on professional standards for ethical conduct in the best interests of the project, the organisation, the environment and the society as a whole.
- Develop competencies in the field of marketing, finance, human resource management, economics and productions, at national and international levels; apply the learnings to the primary, secondary and the tertiary commercial sectors.
- Acquire the aptitude and interest to pursue post-graduate studies and research in top-ranking institutions in India and renowned institutions abroad; excel in competitive examinations in public service and the armed forces.
- Effectively manage people and build strong relationships with all the stakeholders; make persuasive presentations that reveal strong written and oral communication skills.
- Employ critical thinking and analytical skills to investigate complex business problems and propose viable solutions.
- Start an entrepreneurial venture.

**Course Outcome (COs):**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	UC-FMS-101	<b>Introduction to Financial Accounting</b>	<ol style="list-style-type: none"> <li>Define bookkeeping and accounting</li> <li>Explain the general purposes and functions of accounting</li> <li>Explain the difference between management and financial accounting</li> <li>Describe the main elements of financial accounting information – assets, liabilities, revenue and expenses</li> <li>Identify the main financial statements and their purposes.</li> </ol>
	UC- FMS-102	<b>Business Law – I</b>	<ol style="list-style-type: none"> <li>The students will be able to understand how law is important in day-to-day life</li> <li>The students will be able to identify and understand various laws applicable to individual and business concerns</li> <li>The students will get elementary knowledge about process of various legal transactions that occurs in the business world</li> <li>The students will get knowledge of how to exercise their legal rights in case of breach / violation in transactions in the business world</li> </ol>
	UC-FMS-103	<b>Business Mathematics and Statistics – I</b>	<ol style="list-style-type: none"> <li>The subject fortifies the students to think logically and provide numerical output, which enables decision making.</li> <li>The subject enables problem solving where unbiased and non- judgemental outputs are desired in the form of concise numbers.</li> <li>The subject complements qualitative thinking where both are to be looked at, as two sides of a coin, prior to providing a solution to a problem.</li> <li>The subject provides a window for their further development into areas of analytics and big data.</li> </ol>
	UC-FMS-104	<b>Information Technology</b>	<ol style="list-style-type: none"> <li>To acquaint the students with the art of Professionalism which include professional style of making presentation using keyboard shortcuts and presenting the same to a large number of audiences.</li> <li>Documentation is another aspect where we want student to emphasize on how to select the correct format, layers and alignment in the documents,</li> <li>We also provide hands on working experience with working with spreadsheet (DATABASE ) basic skills in terms of Practical</li> <li>As far as theory student must be acquainted with the knowledge of Computer, software o SAP and some programming language Like Python</li> </ol>
	UC-FMS-105	<b>Foundation Course - I (Indian Society and State: Contemporary</b>	<ol style="list-style-type: none"> <li>To understand the pluralistic nature of Indian society.</li> <li>To sensitize the students about gender disparity in the society.</li> <li>To explain significance of human rights and understand the tenets of Indian Constitution.</li> <li>To create awareness about growing social and environmental problems in India.</li> </ol>
		<b>Management</b>	<ol style="list-style-type: none"> <li>To enable understanding of the basics of management. To ensure learning of how managers can attain maximum output by optimally utilizing resources (economic and non-economic).</li> <li>To enable learning about the essential elements of management i.e. POSDCORB : their features, need and importance.</li> <li>To enlighten the students as how management has evolved over period of time.</li> </ol>

	UC- FMS- 106	Management Foundation	<ol style="list-style-type: none"> <li>To provide clarity to the students about organization's vision, mission, objectives and goals.</li> <li>To help students in understanding the integration of individual goals with the organizational goals.</li> <li>To update students with the kind of skills and organization structure and their role in creating a sustainable business.</li> </ol>
	UC-FMS-107	Micro Economics	<ol style="list-style-type: none"> <li>Students will be able to identify and explain economic concepts and theories related to the behavior of economic agents, markets, industry and firm structures, legal institutions, social norms, and government policies.</li> <li>Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.</li> <li>Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.</li> <li>Students will be able to identify the basic features of alternative representations of human behavior in economics.</li> </ol>
2 <sup>nd</sup>	UC- FMS-201	Fundamentals of Business	<ol style="list-style-type: none"> <li>To provide students with an understanding of the nature of business activities</li> <li>To enable understanding of marketing environment within which organization's function.</li> <li>To ensure an understanding of human resource management business activities.</li> <li>To communicate importance of entrepreneurship.</li> </ol>
	UC- FMS – 202	Business Law- II	<ol style="list-style-type: none"> <li>The students will be able to understand how law is important in day to day life</li> <li>The students will be able to identify and understand various laws applicable to individual and business concerns</li> <li>The students will get elementary knowledge about process of various legal transactions that occurs in the business world</li> <li>The students will get knowledge of how to exercise their legal rights in case of breach / violation in transactions in the business world</li> </ol>
	UC-FMS-203	Business Statistics -II	<ol style="list-style-type: none"> <li>The students will be able to apply quantitative techniques in production, marketing and various other fields in the real-world scenario</li> <li>This subject will empower the students to quantify data and analyse it for the purpose of research</li> <li>It will equip students in organisational decision making and choosing the best alternative under different situations</li> <li>It will also enable students to read statistical data and draw inferences from the same</li> </ol>
	UC-FMS-204	Business Communication	<ol style="list-style-type: none"> <li>To enhance interpersonal skills that contribute to satisfying personal, social and professional relationships</li> <li>To gain knowledge about channels and methods of communication and learn their applications</li> <li>To draft letters essential for business correspondence</li> <li>To acquire skills to handle interview questions, conferences, group discussions and meetings</li> </ol>
	UC-FMS-205	Foundation Course - II (Human Personality and	<ol style="list-style-type: none"> <li>To understand the basic behaviour pattern of human personality.</li> <li>To comprehend group behaviour.</li> <li>To understand the issues of stress and stress management</li> <li>To develop an understanding of aspects of organizational behaviour and motivation.</li> </ol>
	UC – FMS – 206	Business Environment	<ol style="list-style-type: none"> <li>To help students in equipping and taking decisions in the business at the national and International level</li> <li>To scan the environment from the micro and macro point of view</li> <li>To build confidence amongst students with the changing trends in business</li> </ol>
	UC-FMS-207	Macro Economics	<ol style="list-style-type: none"> <li>Students will be able to identify and explain macroeconomic variables and understand the economic forces that influence and determine them.</li> <li>Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.</li> <li>Students will be able to evaluate the consequences of economic activities and institutions at the macro level</li> <li>Students will be able to identify the basic features of alternative representations of human behaviour in economics.</li> </ol>
3 <sup>rd</sup> Finance Electives	UC-SMS(F)-301	Equity and Debt Market	<ol style="list-style-type: none"> <li>Students will be able to understand the difference between Equity market and Debt markets</li> <li>Students will be able to understand Primary and Secondary Market Operations</li> <li>Students will be able to understand valuation of Equity and Bonds</li> </ol>
	UC-SMS(F)-302	Corporate Finance	<ol style="list-style-type: none"> <li>Develop understanding of capital structure and leverage theories</li> <li>Enable students to make investment decisions considering time value of money.</li> <li>Understanding concept of shareholder wealth maximization</li> </ol>
	UC-SMS(F)-303	Basics of Financial System	<ol style="list-style-type: none"> <li>Learners will be aware about the financial system prevalent in the world.</li> <li>Learners will be able to understand the various financial instruments</li> <li>Learners will understand the financial regulators &amp; their roles.</li> <li>Learners will be aware of the causes and Impact of Financial Crisis</li> </ol>
	UC-SMS(F)-304	Cost Accounting	<ol style="list-style-type: none"> <li>Understanding Costing Concepts and its usages.</li> <li>This helps ascertainment of cost, fixation of selling price, proper recording and presentation of cost data to management for measuring efficiency and for cost control and cost reduction, ascertaining the profit of each activity, assisting management in decision making.</li> </ol>
Marketing	UC-SMS(M)-305	Marketing Management	<ol style="list-style-type: none"> <li>It will make students better future marketers and keen analysts of the marketing environment.</li> <li>It will create awareness amongst students about the complexities of the marketing especially in the digital age of technology and social media.</li> <li>The syllabus is designed to provide a practical understanding of marketing through understanding of real business case studies.</li> </ol>
	UC-SMS(M)-306	Consumer Behaviour	<ol style="list-style-type: none"> <li>Discussing and understanding the principal factors that influence consumers as individuals and decision makers with an application to the buying decision process.</li> <li>Apply relevant consumer behavior theories in understanding the impact of marketing strategies.</li> <li>Develop critical and reflexive understandings of the nature of consumption, markets and culture. Apply appropriate research techniques. Appreciate the complexity of consumer behavior.</li> </ol>
	UC-SMS(M)-307	Product Innovations Management	<ol style="list-style-type: none"> <li>To give students an insight into the main innovation management terminology and concepts</li> <li>To help students recognize and describe different types of idea generation systems</li> <li>To make students understand the diffusion of innovation cycle and concepts of innovation strategy.</li> </ol>

		management	4. Students will define creativity and understand how creativity can be stimulated and internalize how innovation projects should be selected and managed.
	UC-SMS(M)-308	Sports Marketing	1. Explain how marketing concepts related to the marketing mix (product, price, place and promotion) apply to sports-related settings. 2. Identify characteristics related to sports marketing promotion mix and 3. Understand the sports marketing environment and trends influencing marketers. 4. Evaluate sports sponsorship decisions 5. Understand the process and structure in sporting events
HR	UC-SMS (H)-309	Training and Development	1. It will make students learn how to improve the performance of employees at work place through training and development. 2. It will enhance the decision-making skills of students. 3. Students will learn how good training programme can help the organization in retaining their talent and in coping with this ever-changing environment. 4. Relevance of management development programmes in the Organizations to develop best managers.
	UC-SMS(H) -310	Motivation and Leadership	1. Students will learn the importance of strong leadership and how they can inculcate good habits of great leaders in their professional life. 2. It will help students in learning how organisation can help their employees managing work life balance. 3. The course will help in understanding essential skills leaders need, identify several specific leadership styles, and the appropriate use of each leadership style. 4. Students will learn Identifying the expectations and needs of the employees and motivating them for improved performance.
	UC- SMS(H) -311	Performance Management and Career Planning	1. To acquaint students on performance management tools used in the Organization. 2. Students will understand purpose, importance and evaluation techniques of performance appraisal 3. Awareness of ethical practices followed in performance management and the impact of the same. 4. To highlight the importance of career planning models and changing career patterns in the modern Organization.
	UC- SMS(H) -312	Employee Welfare and Relations	1. Be acquainted with the concepts, principles and issues connected with trade unions, collective bargaining, workers participation, grievance redressal, and employee discipline and dispute resolution. 2. Understand the various processes and procedures of handling Employee Relations 3. Overview on Labour Welfare practices in India
	US-SMS-313	Information Technology in Business Management	1. It will help student to be a professional when it comes to working with the banking sector and corporates world or even, they can plan to take a full time course from the given topic mention in the syllabus. 2. Since the basic of the course is design in such a way that they will be able to understand the topic and will not be wasting time in learning Basic of the topic again. 3. There are well equipped with the hands-on skill for the industry. 4. We are making them professional in a way that one can be qualified to be a Literate in the Field of Information technology what is needed for the current industry and academia 5. Student skills are developed in such a way that industry must absorb them after they finish their final year 6. Today we want our students to be market oriented so we have e module to know more about ERP. Digital Marketing and Power BI.
	UC-SMS-314	Foundation Course III (Environmental Management)	1. To understand and apply core concepts and methods from ecological and physical sciences to solve problems 2. To appreciate key concepts from economic, political, and social analysis as the learners pertain to the design and evaluation of environmental institutions and policies. 3. To reflect critically about one's identity and role as citizen, consumer and environmental actor in an interconnected and complex world 4. To gain knowledge and skills required to pursue professional career and advanced study related to the multi-faceted nature of environmental studies 5. To be more sensitive towards complex environmental issues and develop interdisciplinary approach to face today's challenges
	UC-SMS-315	Business Planning and Entrepreneurship Management	1. Sharpen creative, innovative and problem solving skills of students which will enable them to ideate towards new entrepreneurial ventures. 2. Students will learn life skills and how to tackle failures and uncertainties especially in the domain of entrepreneurship. 3. Identification and selection of best entrepreneurial opportunities through application of design thinking and other methodologies. 4. Learn new modern business models, entrepreneurial culture and ethics.
	UC-SMS-316	Accounting for Managerial	1. To develop financial analysis skills 2. To understand the importance and use of ratio analysis.
	UC-SMS-317	Organizational Behaviour and Human Resource Management	1. Demonstrate the applicability of analyzing the complexities associated with management of individual behavior in the organization. 2. Analyze the complexities associated with management of the group behavior in the organization. 3. Students will get a clear understanding of managing the human resources from getting employees on board to developing and retaining them 4. Evaluate the developing role of human resources in the global era
4 <sup>th</sup> Finance	UC-SMS-401(F)	Commodities and Derivatives Market	1. Students will be able to understand the Commodity and Derivative Markets in detail with its practical implication with its participants. 2. Students will understand the regulatory aspect of the Commodity and Derivative 3. markets and the process of investing in the same. 4. Students will be able to understand futures and options and the risks associated with them
	UC-SMS-402(F)	Corporate Restructuring	1. To develop understanding of causes, methods and types of restructuring. 2. To help students analyse the effect post restructuring.
	UC-SMS-403(F)	Financial Management	1. To develop understanding of Leverages, Management of Working Capital. 2. To help students analyse the Cash flow statements.
			1. Student will understand auditors' legal liabilities, and be able to apply case law in making a judgment whether auditors might be liable to certain parties; 2. Student will understand to describe the various levels of persuasiveness of different

	UC-SMS-404(F)	Auditing	3. Types of audit evidence and explain the broad principles of audit sampling techniques; 4. Student will understand to discuss the need for an independent or external audit and 5. Describe briefly the development of the role of the assurance provider in modern business society 6. Student will be able describe the quality control procedures necessary to ensure that a 7. Competent assurance engagement is performed, and apply professional ethics including Code of Conduct to specific scenarios 8. Student will explain the internal audit process including the professional standards 9. Applicable to the internal audit profession.
Marketing	UC-SMS-405(M)	Customer Relationship Management and Rural Marketing	1. Students will understand the relevance of building long term relationship with customers and other internal and external stakeholders in business. 2. A thorough understanding of the upcoming rural sector for marketing and distribution. 3. Knowledge about the extremely viable Bottom of the pyramid.
	UC-SMS-406 (M)	Integrated Marketing Communication	1. To examine how integrated marketing communications help to build brand identity and brand relationship, and create brand equity through brand synergy. 2. To enable students to choose a marketing communications mix to achieve the communications and behavioural objectives of the IMC campaign plan. 3. To develop an integrated cross-media strategy and creative message and concept to reach the target audience and deliver the brand promise through an IMC campaign. 4. Structure an integrated marketing communications campaign plan based on the application of marketing concepts, principles, and practices within an organization. 5. Measure and critically evaluate the communications effects and results of an IMC campaign to determine its success.
	UC-SMS-407(M)	Event and Social Marketing	1. Knowledge about categories of Events and their roles in promotion. 2. Understanding of the concept of social marketing, compare and contrast marketing in a profit-oriented corporate and a non-profit social environment.
	UC-SMS-408(M)	Tourism Marketing	1. Define and understand the usage of marketing mix with respect to Tourism Industry 2. Understand the importance and use of public relations 3. Define competition analysis and positioning strategies of Tourism Marketing 4. Better understanding of Global Tourism and its challenges
HR	UC-SMS-409(H)	Human Resource Planning and Information System	1. It will make students learn Importance of Human resource Planning. 2. It will help students learn methods of demand and supply forecasting of Human Resource in the organisation. 3. Students will learn how good HRP strategy in place can improve the productivity and profitability of any organisation. 4. Students will learn how to implement changes in the organisation through job design, redesign and restructuring. 5. Students will learn concept of Human Resource Information system and its application in the other functions of HRM.
	UC-SMS-410(H)	Talent Management	1. Students learn skills and knowledge required to successfully implement an effective talent management system 2. Better understanding of acquiring, engaging and retaining talent. 3. Relationship of Talent Management contributing to the sustainable competitive advantage of an organization.
	UC-SMS-411(H)	Change and Stress Management	1. Student would learn effective strategies, plans and techniques to deal with stress 2. Better Stress management in daily lives and organization leading high levels of performance. 3. Better understanding of change resistance and ways to handle it.
	UC-SMS-412(H)	Conflict and Negotiation	1. Identifying the types of conflict management styles and its outcome 2. Define, analyze and understand the key practical and theoretical concepts of managing and resolving conflict 3. Apply theoretical and practical components of negotiation and mediation 4. Relevance of culture and ethics in the negotiation
	UC-SMS-413	Business Research Method	1. Learners are expected to demonstrate an understanding of research methodologies. 2. Identify the overall process of designing a research study from its inception to the report stage. 3. Imbibe data collection, analysis, interpretation and presentation skills at par with globally accepted standards. 4. It provides a solid foundation for development of rational problem-solving skills and analytical thinking that can last throughout their education and subsequent professional careers.
	UC-SMS-414	Foundation Course IV (Ethics and Governance)	1. Create and address relevance of social responsibility to the students 2. Making students understand the good corporate governance and its importance 3. Students understand the global challenges in business ethics.
	UC-SMS-415	Strategic Management	1. Understand the relationship between strategic analysis and strategic implementation 2. Comprehend the distinction between firms and markets 3. Apply strategy principles to understand the benefits and costs of diversification 4. Understand the international dimensions of strategic management 5. Study the major contemporary trends in strategic management
	UC-SMS-416	Production and Quality Management	1. Learners will become aware of the importance of Production and Quality Management in the sustainable working of an organization. 2. Learners will be able to enhance knowledge of Inventory Management and Purchase techniques. 3. Learners will be equipped with knowledge of Six Sigma, Lean Thinking and TQM.
	UC-SMS-417	Indian Economic System	1. Develop ideas of the basic characteristics of Indian economy and its potential. 2. Understand Indian agriculture and analyze the progress and changing nature of agricultural sector and its contribution to the Economy as a whole. 3. Understand the basic features of Service Led Growth In India and the Sustainability aspects 4. Evaluating trends In Indian Monetary Policy and Financial Markets.
V	UBMSFSV.4	Investment Analysis And Portfolio Management	5. To acquaint the learners with various concepts of finance 6. To understand the terms which are often confronted while reading newspaper, magazines etc for better correlation with the practical world 7. To understand various models and techniques of security and portfolio analysis
V	UBMSFSV.5	Commodity and Derivates Market	1. To understand the concepts related to Commodities and Derivatives market 2. To study the various aspects related to options and futures 3. To acquaint learners with the trading, clearing and settlement mechanism in derivatives market.
			1. To provide an overview of various aspects related to wealth management

V	UBMSFSV.6	Wealth Management	<ol style="list-style-type: none"> <li>To study the relevance and importance of Insurance in wealth management</li> <li>To acquaint the learners with issues related to taxation in wealth management</li> <li>To understand various components of retirement planning</li> </ol>
V		Financial Accounting	<ol style="list-style-type: none"> <li>To acquaint the learners in preparation of final accounts of companies</li> <li>To study provisions relating to underwriting of shares and debentures</li> <li>To study accounting of foreign currency and investment</li> <li>To understand the need of ethical behaviour in accountancy</li> </ol>
V		Risk Management	<ol style="list-style-type: none"> <li>To familiarize the student with the fundamental aspects of risk management and control</li> <li>To give a comprehensive overview of risk governance and assurance with special reference to insurance sector</li> <li>To introduce the basic concepts, functions, process, techniques of risk management</li> </ol>
V		Direct Taxes	<ol style="list-style-type: none"> <li>To understand the provisions of determining residential status of individual</li> <li>To study various heads of income</li> <li>To study deductions from total income</li> <li>To compute taxable income of Individuals</li> </ol>
V	UBMSFSV.8	Service Marketing	<ol style="list-style-type: none"> <li>To understand distinctive features of services and key elements in services marketing</li> <li>To provide insight into ways to improve service quality and productivity</li> <li>To understand marketing of different services in Indian context</li> </ol>
V	UBMSFSV.9	E-Commerce and Digital Marketing	<ol style="list-style-type: none"> <li>To understand increasing significance of E-Commerce and its applications in Business and Various Sectors</li> <li>To provide an insight on Digital Marketing activities on various Social Media platforms and its emerging significance in Business</li> <li>To understand Latest Trends and Practices in E-Commerce and Digital Marketing, along with its Challenges and Opportunities for an Organisation</li> </ol>
V	UBMSFSV.10	Sales & Distribution Management	<ol style="list-style-type: none"> <li>To develop understanding of the sales &amp; distribution processes in organizations</li> <li>To get familiarized with concepts, approaches and the practical aspects of the key decision making variables in sales management and distribution channel management</li> </ol>
V	UBMSFSV.11	Customer Relationship Management	<ol style="list-style-type: none"> <li>To understand concept of Customer Relationship Management (CRM) and implementation of Customer Relationship Management</li> <li>To provide insight into CRM marketing initiatives, customer service and designing CRM strategy</li> <li>To understand new trends in CRM, challenges and opportunities for organizations</li> </ol>
V		Industrial Marketing	<ol style="list-style-type: none"> <li>To understand basics of industrial marketing, Marketing Environment, Segmenting Targeting Positioning, channel strategy, marketing communication and pricing</li> <li>To provide knowledge of industrial market structure and how they function</li> <li>To provide understanding of the various attributes and models applicable in Industrial Marketing</li> <li>To acquaint the students with trends in Industrial Marketing</li> </ol>
V		Strategic Marketing Management	<ol style="list-style-type: none"> <li>To understand marketing strategies and their impact on business models</li> <li>To learn strategic marketing tactics related to product, price, service, brand, positioning, incentives and communication for business growth</li> <li>To learn the various marketing strategies adopted by Companies to create a competitive advantage</li> </ol>
V	UBMSFSV.12	Finance for HR Professionals and Compensation Management	<ol style="list-style-type: none"> <li>To orient HR professionals with financial concepts to enable them to make prudent HR decisions</li> <li>To understand the various compensation plans</li> <li>To study the issues related to compensation management and understand the legal framework of compensation management</li> </ol>
V	UBMSFSV.13	Strategic Human Resource Management and HR Policies	<ol style="list-style-type: none"> <li>To understand human resource management from a strategic perspective</li> <li>To link the HRM functions to corporate strategies in order to understand HR as a strategic resource</li> <li>To understand the relationship between strategic human resource management and organizational performance</li> <li>To apply the theories and concepts relevant to strategic human resource management in contemporary organizations</li> <li>To understand the purpose and process of developing Human Resource Policies</li> </ol>
V	UBMSFSV.14	Performance Management & Career Planning	<ol style="list-style-type: none"> <li>To understand the concept of performance management in organizations</li> <li>To review performance appraisal systems</li> <li>To understand the significance of career planning and practices</li> </ol>
V	UBMSFSV.15	Industrial Relations	<ol style="list-style-type: none"> <li>To understand the concept of performance management in organizations</li> <li>To review performance appraisal systems</li> <li>To understand the significance of career planning and practices</li> </ol>
V		Talent and Competency Management	<ol style="list-style-type: none"> <li>To understand key talent management &amp; competency management concepts</li> <li>To understand the concept and importance of competency mapping</li> <li>To understand the role of talent management and competency management in building sustainable competitive advantage to an organization</li> <li>To know the ethical and legal obligations associated with talent management</li> </ol>
V		Stress Management	<ol style="list-style-type: none"> <li>To understand the nature and causes of stress in organizations</li> <li>To familiarize the learners with the stress prevention mechanism</li> <li>To understand the strategies that help cope with stress</li> <li>To be able to apply stress management principles in order to achieve high levels of performance</li> </ol> <p>To enable to learners to adopt effective strategies, plans and techniques to deal with stress</p>
V	UBMSFSV.1	Logistics and Supply Chain Management	<ol style="list-style-type: none"> <li>To provide students with basic understanding of concepts of logistics and supply chain management</li> <li>To introduce students to the key activities performed by the logistics function</li> <li>To provide an insight in to the nature of supply chain, its functions and supply chain systems</li> <li>To understand global trends in logistics and supply chain management</li> </ol>
V		Corporate Communication and public relations	<ol style="list-style-type: none"> <li>To provide the students with basic understanding of the concepts of corporate communication and public relations</li> <li>To introduce the various elements of corporate communication and consider their roles in managing organizations</li> <li>To examine how various elements of corporate communication must be coordinated to communicate effectively</li> <li>To develop critical understanding of the different practices associated with corporate communication</li> </ol>

VI	UBMSFSVL5	International Finance	<ol style="list-style-type: none"> <li>1. The objective of this course is to familiarize the student with the fundamental aspects of various issues associated with International Finance</li> <li>2. The course aims to give a comprehensive overview of International Finance as a separate area in International Business</li> <li>3. To introduce the basic concepts, functions, process, techniques and create an awareness of the role, functions and functioning of International Finance in this Globalised Market</li> </ol>
VI	UBMSFSVL6	Innovative Financial Services	<ol style="list-style-type: none"> <li>1. To familiarize the learners with the fundamental aspects of various issues associated with various Financial Services</li> <li>2. To give a comprehensive overview of emerging financial services in the light of globalization</li> <li>3. To introduce the basic concepts, functions, process, techniques and create an awareness of the role, functions and functioning of financial services</li> </ol>
VI	UBMSFSVL7	Project Management	<ol style="list-style-type: none"> <li>1. The objective of this course is to familiarize the learners with the fundamental aspects of various issues associated with Project Management</li> <li>2. To give a comprehensive overview of Project Management as a separate area of Management</li> <li>3. To introduce the basic concepts, functions, process, techniques and create an awareness of the role, functions and functioning of Project Management</li> </ol>
VI		Strategic Financial Management	<ol style="list-style-type: none"> <li>1. To match the needs of current market scenario and upgrade the learner's skills and knowledge for long term sustainability</li> <li>2. Changing scenario in Banking Sector and the inclination of learners towards choosing banking as a career option has made study of financial management in banking sector inevitable</li> <li>3. To acquaint learners with contemporary issues related to financial management</li> </ol>
VI		Financing Rural Development	<ol style="list-style-type: none"> <li>1. To acquaint the learners with the concept of rural banking</li> <li>2. To give an overview of micro finance and MSME finance</li> <li>3. To study the provisions of final accounts of the Banking Companies</li> <li>4. To understand risk management in rural finance</li> </ol>
VI		Indirect Taxes	<ol style="list-style-type: none"> <li>1. To understand the basics of GST</li> <li>2. To study the registration and computation of GST</li> <li>3. To acquaint the students with filing of returns in GST</li> </ol>
VI	UBMSFSVL8	Brand Management	<ol style="list-style-type: none"> <li>1. To understand the meaning and significance of Brand Management</li> <li>2. To Know how to build, sustain and grow brands</li> <li>3. To know the various sources of brand equity</li> </ol>
VI	UBMSFSVL9	Retail Management	<ol style="list-style-type: none"> <li>1. To familiarize the students with retail management concepts and operations</li> <li>2. To provide understanding of retail management and types of retailers</li> <li>3. To develop an understanding of retail management terminology including merchandize management, store management and retail strategy.</li> <li>4. To acquaint the students with legal and ethical aspects of retail management</li> <li>5. To create awareness about emerging trends in retail management</li> </ol>
VI	UBMSFSVL10	International Marketing	<ol style="list-style-type: none"> <li>1. To understand International Marketing, its Advantages and Challenges.</li> <li>2. To provide an insight on the dynamics of International Marketing Environment.</li> <li>3. To understand the relevance of International Marketing Mix decisions and recent developments in Global Market</li> </ol>
VI	UBMSFSVL11	Media Planning and Management	<ol style="list-style-type: none"> <li>1. To understand Media Planning, Strategy and Management with reference to current business scenario.</li> <li>2. To know the basic characteristics of all media to ensure most effective use of advertising budget.</li> <li>3. To provide an insight on Media Planning, Budgeting, Scheduling and Evaluating the Different Media Buys.</li> </ol>
VI		Sports Management	<ol style="list-style-type: none"> <li>1. To equip the learner with an understanding of the business of sports marketing</li> <li>2. To help the learner understand environmental factors influencing sports marketing</li> <li>3. To help the learner understand components of marketing mix in the context of sports marketing</li> <li>4. To understand legal aspects in sports marketing &amp; franchising agreements</li> </ol>
VI		Marketing of Non-Profit Organisation	<ol style="list-style-type: none"> <li>1. This course introduces students to the challenges of marketing in the nonprofit sector.</li> <li>2. To understand the role and application of marketing to promote social change and to achieve social goals for non-profits organizations including social and cause related marketing, fundraising</li> <li>3. To apply marketing in a diverse range of non-profit environments including charities, social programs and ideas, health, education, arts, as well as goods and services</li> <li>4. To understand the advocacy v/s lobbying and the concept of CSR and the policy framework of CSR under the Companies Act of 2013</li> </ol>
VI		HRM in Global Perspective	<ol style="list-style-type: none"> <li>1. To introduce the students to the study and practice of IHRM</li> <li>2. To understand the concepts, theoretical framework and issues of HRM in Global Perspective</li> <li>3. To get insights of the concepts of Expatriates and Repatriates</li> <li>4. To find out the impact of cross culture on Human Resource Management</li> <li>5. To provide information about Global Workforce Management</li> <li>6. To study International HRM Trends and Challenges</li> </ol>
VI		Organisational Development	<ol style="list-style-type: none"> <li>1. To understand the concept of Organisational Development and its Relevance in the organization</li> <li>2. To Study the Issues and Challenges of OD while undergoing Changes</li> <li>3. To get an Understanding of Phases of OD Programme</li> <li>4. To Study the OD Intervention to meet the Challenges faced in the Organisation</li> <li>5. To get an Insight into Ethical Issues in OD</li> </ol>
VI	UBMSFSVL12	HRM in Service sector Management	<ol style="list-style-type: none"> <li>1. To understand the concept and growing importance of HRM in service sector</li> <li>2. To understand how to manage human resources in service sector</li> <li>3. To understand the significance of human element in creating customer satisfaction through service quality</li> <li>4. To understand the Issues and Challenges of HR in various service sectors</li> </ol>
VI		Workforce Diversity	<ol style="list-style-type: none"> <li>1. To understand the nature of workforce diversity</li> <li>2. To familiarize the learners with the strategies to deal with work force diversity</li> <li>3. To understand the impact of technology in managing workforce diversity</li> <li>4. To be able to interlink between workforce diversity and HRM functions</li> </ol>
VI		Human Resource Accounting and Auditing	<ol style="list-style-type: none"> <li>1. To understand the value of human resource in organizations</li> <li>2. To understand the importance of Human Resource Accounting at National and International level</li> <li>3. To familiarize with the Human Resource Accounting Practices in India</li> <li>4. To familiarize the learners with the process and approaches of Human Resources Accounting and Audit</li> </ol>

			5. To understand the significance of Human Resource Auditing as a Tool of Human Resource Valuation
VI	UBMSFSV1.2	Indian Ethos in Management	1. To understand the concept of Indian Ethos in Management 2. To link the Traditional Management System to Modern Management System 3. To understand the Techniques of Stress Management 4 To understand the Evolution of Learning Systems in India
VI	UBMSFSV1.1	Operations Research	1. To help students to understand operations research methodologies 2. To help students to solve various problems practically 3. To make students proficient in case analysis and interpretation

Program: B. Com.

Specific Program: B Com

Program Specific Outcome (PSO):

1)The Bachelor of Commerce course is designed to provide competencies in basic commerce discipline as also impart requisite skills in problem solving, leadership, communications, decision making in organizations with appropriate subjects covering areas of economics, accounting, business management, human resource, taxation, marketing management and Information Technology.

2)The focus on Project Based Learning and Industrial Training will help the students become eligible and fully equipped for employment in industries, higher studies for entrepreneurship.

3)The course structure will definitely equip the students to accept the challenges of globalisation and constant change and will enable them to be well placed in business, academics and administration in the country as well as abroad.

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	UC-FCO-107	Mathematical and Statistical Techniques I	At the end of the course, learner will be able to <ul style="list-style-type: none"> <li>• apply mathematical and statistical techniques in a diverse variety of disciplines</li> <li>• solve problems on their own by analysing the topics</li> <li>• calculate financial values required in business <ul style="list-style-type: none"> <li>• recognize the importance and value of mathematical and statistical thinking</li> <li>• recognize and appreciate the connections between mathematical and statistical theory and applications</li> <li>• understand the independently read mathematical and statistical</li> <li>• Improve presentation and interpersonal communication skills through presentations for the assignments/projects.</li> </ul> </li> </ul>
II	UC-FCO-207	Mathematical and Statistical Techniques II	At the end of the course, learner will be able to <ul style="list-style-type: none"> <li>• apply mathematical and statistical techniques in a diverse variety of disciplines</li> <li>• solve problems on their own by analysing the topics</li> <li>• calculate financial values required in business <ul style="list-style-type: none"> <li>• recognize the importance and value of mathematical and statistical thinking</li> <li>• recognize and appreciate the connections between mathematical and statistical theory and applications</li> <li>• independently read mathematical and statistical literature</li> </ul> </li> </ul>



Program: BSc

Specific Program: BSc in Biotechnology

PSO Biotechnology

1. Acquire knowledge on the fundamentals of biotechnology for sound and solid base which enables them to understand the emerging and advanced engineering concepts in life sciences.
2. Acquire knowledge in domain of biotechnology enabling their applications in industry and research.
3. Students will be able to correctly use biological instrumentation and proper laboratory techniques.
4. Students will be able to recognize the relationship between structure and functions at all levels that is molecular, cellular and genetics.
5. Empower the students to acquire technological knowhow by connecting disciplinary and interdisciplinary aspects of biotechnology
6. Recognize the importance of Bioethics, IPR, entrepreneurship, Communication skills so as to usher next generation of Indian industrialists.

#### CO Biotechnology

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	US-FBT-101	Biotechnology: Introduction and applications	<ul style="list-style-type: none"> <li>• Introduction to the fields of Biotechnology, its scope, and its application in the field of agriculture and food biotechnology</li> <li>• To develop a good perspective of the field of Biotechnology and ethical issues related to biotechnology</li> <li>• To introduce the concept of Bioinformatics.</li> <li>• To understand the principles underlying design of Fermenter and Fermentation Process</li> </ul>
I	US-FBT-102	Genetics and molecular biology	<ul style="list-style-type: none"> <li>• To develop an understanding of the eukaryotic and prokaryotic genetics.</li> <li>• To discuss the structure of Chromosomes and Chromosomal Aberrations</li> </ul>
I	US-FBT-103	Cell: Ultra structure and Signalling	<ul style="list-style-type: none"> <li>• To learn to differentiate between prokaryotes and eukaryotes</li> <li>• To develop an understanding of the Cytoskeleton and Cell Membrane</li> <li>• Understand the signalling process in bacteria and plants.</li> </ul>
I	US-FBT-104	Microscopic examination, nutrition and control of	<ul style="list-style-type: none"> <li>• To develop skills associated with laboratory techniques viz. sterilization, microbial cell culture &amp; cell lines techniques, microscopy and staining techniques to view specimens under a microscope</li> </ul>
I	US-FBT-105	Basic Chemistry	<ul style="list-style-type: none"> <li>• Discuss the concepts in Stereochemistry by providing an understanding of the relative spatial arrangement of atoms in molecules. To help students understand the types and significance of chemical bonds.</li> <li>• Understand Stereochemistry of organic molecules and their practical significance</li> <li>• Develop an understanding about the nature and role of chemical bonds in the formation of compounds.</li> </ul>
I	US-FBT-106	Biomolecules	<ul style="list-style-type: none"> <li>• Understand the knowledge related to biological role of all major Biomolecules.</li> <li>• Develop an understanding about Carbohydrates, proteins, amino acids, lipids and nucleic acids.</li> </ul>
I	US-FBT-107	Societal Awareness	<ul style="list-style-type: none"> <li>• To learn different concepts of Societal Awareness</li> <li>• Develop a sense of awareness about the Problems in Society</li> </ul>
II	US-FBT-201	Tissue Culture techniques	<ul style="list-style-type: none"> <li>• Develop an understanding of Plant and Animal Tissue Culture</li> <li>• Develop basic skills required to carry out these techniques</li> </ul>
II	US-FBT-202	Genetic engineering	<ul style="list-style-type: none"> <li>• Develop an understanding of recombinant DNA technology and its applications</li> <li>• Discuss the principles of various techniques in molecular biology and its application.</li> </ul>
II	US-FBT-203	Physiology (Plants and animals) and Ecology	<ul style="list-style-type: none"> <li>• Develop an understanding of the different physiological processes in the eukaryotic living system viz. Plants, animals</li> <li>• Discuss the importance of the various interactions of the ecosystem.</li> <li>• Awareness of advanced techniques like remote sensing that are used for animal and plant protection.</li> </ul>
II	US-FBT-204	Genetics & immunology	<ul style="list-style-type: none"> <li>• Develop an understanding of various concepts of genetic variations in populations and the role of population genetics in Conservation Biology.</li> <li>• Understand the role of immune system.</li> <li>• Understand how to identify and classify mutations in DNA followed by mechanism of DNA</li> </ul>
II	US-FBT-205	Analytical Chemistry	<ul style="list-style-type: none"> <li>• Understand two common and significant analytical techniques viz. Chromatography and Colorimetry</li> <li>• To learn how to make solutions, buffers and perform titrimetric analysis.</li> </ul>
II	US-FBT-206	Physical Chemistry	<ul style="list-style-type: none"> <li>• Develop an understanding of kinetics involved in various types of chemical reactions</li> <li>• Learn to distinguish reactions involving oxidation and reduction processes</li> </ul>
II	US-FBT-207	Globalization, Ecology and Sustainable Development	<ul style="list-style-type: none"> <li>• Understand the concept of sustainable development</li> <li>• Impart of Globalization to make students aware about the Problems in Society.</li> </ul>
III	USBT301	Biophysics	<ul style="list-style-type: none"> <li>• Develop an understanding of the different aspects of classical Physics.</li> <li>• To learn various applications and techniques in the field of Biology such as Microscopy, Spectroscopy and Electrophoresis.</li> </ul>
III	USBT302	Applied Chemistry-I	<ul style="list-style-type: none"> <li>• Develop an understanding of the different aspects of Organic and Green Chemistry.</li> <li>• Discuss role of Organic Compounds in Biology and Synthesis of Organic Compounds.</li> <li>• Discuss role of Green Chemistry and its application in Industry</li> </ul>
III	USBT303	Immunology	<ul style="list-style-type: none"> <li>• Understand the role of different types of Cells, Effector Molecules and Effector Mechanisms in Immunology.</li> <li>• Understand the principles underlying various Immunotechniques</li> </ul>
III	USBT304	Cell biology and cytogenetics	<ul style="list-style-type: none"> <li>• Develop an understanding of the Cytoskeleton and Cell Membrane.</li> <li>• Discuss the structure of Chromosomes and types of Chromosomal Aberrations.</li> <li>• Discuss the principles underlying Sex Determination, Linkage and Mapping.</li> </ul>
III	USBT305	Molecular Biology	<ul style="list-style-type: none"> <li>• Discuss the mechanisms associated with Gene Expression at the level of Transcription and Translation.</li> <li>• Discuss the mechanisms associated with Regulation of Gene Expression in Prokaryotes and Eukaryotes</li> <li>• To develop an understanding of the various aspects of Bioprocess Technology.</li> </ul>
III	USBT306	Bioprocess Technology	<ul style="list-style-type: none"> <li>• Develop skills associated with screening of industrially important strains.</li> <li>• Understand principles underlying design of Fermenter and Fermentation Process</li> </ul>
III	USBT307	Research Methodology	<ul style="list-style-type: none"> <li>• To understand basic principles of Research Methodology and learned to identify a Research Problem.</li> <li>• Understand a general definition of Research Design.</li> <li>• Understand the overall Process of Designing a Research Study from its inception to its Report</li> </ul>
IV	USBT401	Biochemistry	<ul style="list-style-type: none"> <li>• Discuss the Metabolic Pathways of Carbohydrates, Amino Acids, Lipids and Nucleotides.</li> <li>• Learn the role of Energy Rich Molecules in Metabolism</li> </ul>
IV	USBT402	Applied Chemistry- II	<ul style="list-style-type: none"> <li>• Develop an understanding of the different aspects of Analytical Chemistry.</li> <li>• Gain knowledge of Natural Product Chemistry and related acquired skills.</li> <li>• Gain an understanding of basic concepts in Polymer Chemistry and Nanomaterials.</li> </ul>
IV	USBT403	Medical microbiology	<ul style="list-style-type: none"> <li>• Gain insight into disease Factors and Processes and Diseases Caused by Microorganisms.</li> <li>• To learn the factors playing a role in causing a disease.</li> <li>• To discuss the various aspects of Systemic Infections including Causative Agents, Symptoms and Prophylaxis</li> <li>• Gain the technical capability of handling, isolating and identifying various Bacteria</li> </ul>
IV	USBT404	Environmental Biotechnology	<ul style="list-style-type: none"> <li>• Gain an understanding of the causes, types and control methods for Environmental Pollution.</li> <li>• To learn application of different life forms in Environmental Remediation</li> </ul>
IV	USBT405	Bioinformatics and Biostatistics	<ul style="list-style-type: none"> <li>• To gain an understanding of the basic concepts of Bioinformatics and Biostatistics. Understand the tools used in Bioinformatics.</li> <li>• Apply the various Statistical Tools for Analysis of Biological Data</li> </ul>
IV	USBT406	Molecular Diagnostics	<ul style="list-style-type: none"> <li>• To gain an understanding of the basic Principles used in Molecular Diagnosis.</li> <li>• To gain critical thinking and analytical skills to understand new Diagnostic Methods.</li> <li>• Apply the knowledge and skills gained in the course developing new diagnostic kits</li> </ul>
IV	USBT407	Entrepreneurship Development	<ul style="list-style-type: none"> <li>• Develop an understanding of the systematic process and to select and screen a Business Idea.</li> <li>• Design strategies for successful implementation of ideas.</li> </ul>
V	USBT-501	Cell biology	<ul style="list-style-type: none"> <li>• Understand the cellular components underlying mitotic cell division and understand cell cycle</li> <li>• To study concepts of cell biology with selected examples of changes or losses in cell function which include responses to environmental or physiological changes, or alterations of cell function brought about by mutation.</li> <li>• Understanding core topics like cancer biology and apoptosis.</li> <li>• Understanding the basics concepts of developmental biology.</li> </ul>
V	USBT-502	Medical Microbiology & Instrumentation	<ul style="list-style-type: none"> <li>• Learn about different types, structure of viruses</li> <li>• Learn about treatment using drugs, importance of drugs and their mode of action.</li> <li>• Learn and understood various important analytical techniques like spectroscopy, HPLC used in most of research areas</li> </ul>
		Genetics and Molecular	<ul style="list-style-type: none"> <li>• Understand about various techniques involved in genetic engineering of plants and animals, learned about various transgenic plants and animals.</li> </ul>

V	USBT-503	Cellular and Molecular Biology	<ul style="list-style-type: none"> <li>Understand the concept of various tools and techniques used in molecular biology, nucleic acid sequencing.</li> </ul>
V	USBT-504	Marine Biotechnology	<ul style="list-style-type: none"> <li>Understand the nature and habitat of marine ecosystem</li> <li>To learn about different types of medicinal products and food products that can be derived from marine environment</li> <li>To learn the importance of marine products in cosmetic industry.</li> </ul>
V	APPLIED COMPONENT	Biosafety	<ul style="list-style-type: none"> <li>To learn about various biosafety rules and techniques along with learning good lab practices.</li> <li>To learn various methods for detection of contamination and regulation of biosafety in food or processing industry</li> </ul>
VI	USBT-601	Biochemistry	<ul style="list-style-type: none"> <li>To learn in depth, the biochemical pathways of cellular communication and system functioning</li> <li>Learn different types of metabolism in details with special reference to carbohydrates</li> <li>Learn about protein structure and their biochemistry</li> <li>Learn about endocrine system and different types of dietary necessary elements.</li> </ul>
VI	USBT-602	Industrial Microbiology	<ul style="list-style-type: none"> <li>Study different types of fermentation processes</li> <li>Learn various commercial fermentation products with respect to dairy industry.</li> <li>Understand the methods and procedures of recovering and formulating the final industrial product</li> <li>Study downstream processing along with good manufacturing practices required for industries.</li> </ul>
VI	USBT-603	Pharmacology and Neurochemistry	<ul style="list-style-type: none"> <li>Understand the general principles of pharmacology</li> <li>Understand the concept of toxicology</li> <li>Understand the mechanism of drug absorption and distribution</li> <li>Understand basic and regulatory toxicology.</li> </ul>
VI	USBT-604	Environmental Biotechnology	<ul style="list-style-type: none"> <li>Understand the importance of Environmental Biotechnology and parameters</li> <li>Study the importance of biogas and biofuels as renewable sources of energy</li> <li>Learn the various treatment procedures applied for wastewater and industrial effluents</li> <li>Understand the basic ways in which hazardous waste can be managed.</li> </ul>
VI	APPLIED COMPONENT	Agribiotechnology	<ul style="list-style-type: none"> <li>Learn about the various agricultural systems</li> <li>Learn about the various tools and processes involved in plant biotechnology, effects of different stressed on plants.</li> <li>Study various molecular markers used in plant breeding</li> <li>Learn about applications of bio fertilizers and bio pesticides.</li> </ul>

<b>Program: B. Sc.</b> <b>Specific Program: B.Sc. Botany (First Year)</b> <b>Program Specific Outcome (PSO):</b> 1. Studying examples from different groups of plants, in relation to their complexity and functions, will help students to learn more about evolution and function. 2. Applications of these primary groups of plants in various fields will help students to take up/think about related research projects. 3. Students will learn the significance of not only 'why' but also 'how' to study the detailed aspect of plants, at the cellular, molecular and genetic level. 4. Plants are very good model systems; students will know to modify a specific plant model to the advantage of the mankind. 5. Students will be better prepared to extract maximum benefits and use plants as resource material. 6. Students will be now equipped with the knowledge about plants, to protect, conserve and treat plants as the most important factor to maintain the balance in the environment .			
<b>Course Outcome (COs):</b>			
<b>Semester</b>	<b>Course-Code</b>	<b>Course Title</b>	<b>Course Outcome (in bullets)</b>
1 <sup>st</sup>	US-FBO-101	Plant Diversity I	1. Life cycle of <i>Nostoc</i> and Life cycle of <i>Spirgyra</i> 2. Economic importance of Algae 3. Smith's Classification 4. General characters, classification, Ecology and significance 5. Life cycle of <i>Rhizopus</i> and <i>Aspergillus</i> 6. Economic importance of Fungi, Mode of Nutrition in Fungi, structure of fungal cell wall 7. General characters of Bryophyta and class Hepaticae / Bryopsida Life cycle of <i>Riccia</i> / <i>Funaria</i> 8. Ecological and economic importance of Bryophyta, Economic Botany: Plant Resource Utilization
	US-FBO-102	Form and Function I	1. Cell Biology 2. General structure of plant cell: cell wall, plasma membrane (lipid bilayer and Fluid mosaic model, membrane proteins and their functions), cell inclusions 3. Ultrastructure and functions of Endoplasmic reticulum, Chloroplast and mitochondria 4. Ecology Energy flow in an Ecosystem Organization, plant categories based on habitat, plant succession Types of Ecosystems (aquatic and terrestrial) applied field in ecological studies, vegetation mapping, endemism Ecosystem organization Energy flow in Ecosystem Aquatic Ecosystem Terrestrial Ecosystems and impact of urbanization 5. Genetics and Biostatistics 6. Phenotype / Genotype, Post Mendelian interactions, Incomplete dominance, codominance, multiple allelism, epistatic interactions and epistatic effects- dominant and recessive 7. Biostatistics calculations – mean, median and mode
2 <sup>nd</sup>	US-FBO-201	Plant Diversity II	1. Pteridophytes, Structure life cycle, systematic position and alteration of generations in <i>Nephrolepis</i> 2. Stellar evolution 3. Gymnosperms Structure life cycle, systematic position and alteration of generations in <i>Riccia</i> 4. Economic importance of Gymnosperms 5. Angiosperms, leaf, inflorescence and study of families <i>Malvaceae</i> , <i>Papilionaceae</i> , <i>Fabaceae</i> , <i>Mimosae</i> , <i>Asteraceae</i> , <i>Amoryllidaceae</i>
	US-FBO-202	Form and Function II	1. Anatomy of Simple and complex tissues, Primary structure of Dicot and Monocot root, stem and leaf, Epidermal tissue system: Epidermal outgrowths, Dicot and Monocot stomata 2. Physiology Factors affecting rate of photosynthesis Photosynthetic light and dark reaction, Photosynthesis in C3, C4 and CAM plants, Photophosphorylation and Photorespiration, Significance of Photosynthesis 3. Medicinal Botany History of Medicinal Botany with various Traditional medicinal practices Pharmacopeia and its relevance in quality control of herbal drugs, Concept of primary and secondary metabolites, differences between primary and secondary metabolites Pharmacognosy and Phytochemistry: Concept and overview, Active principles with few examples. Plants from Grandma's Pouch and medicinal uses- <i>Aloe vera</i> , <i>Ocimum sanctum</i> , <i>Adathoda vasica</i> , <i>Zingiber officinale</i> , <i>Curcuma longa</i> , <i>Santalum album</i> , <i>Azadiracta indica</i> , <i>Mentha piperita</i>

**Program: BSc.**  
**Specific Program: BSc Chemistry**  
**Program Specific Outcome**

- Introduction to the fundamentals of chemistry.
- Getting familiar with chemical calculations.
- Studying the basic topics of organic chemistry such as nomenclature, reaction mechanisms, stereochemistry and aromaticity.
- Understanding the periodicity and gradation in properties of elements.
- To apply concepts to summarize, analyze and inculcate problem solving approach in newer developments and innovations in the future.
- Developing the understanding of Chemical thermodynamics and chemical equilibrium.
- It equips the students with the fundamentals of physical, inorganic, organic and analytical chemistry thus helping in examining the most basic qualities of matter, mastering strategies of chemical synthesis, solving chemical mysteries in the laboratory and learning to communicate facts & theories about chemistry to others.
- The undergraduate curriculum is demanding both intellectually and in terms of time.
- Help the students to develop skills and competencies to build a progressive and successful career in the field of chemistry.

#### COs

Semester	Course-Code	Course Title	Course Outcome (in bullets)
1st	US-FCH -101	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Conceptual understanding of concepts of Thermodynamics.</li> <li>➤ Understanding of stoichiometric calculations which are important from practical point of view.</li> <li>➤ Fundamentals of organic reaction mechanism along with study of structure, bonding &amp; IUPAC nomenclature of organic compounds.</li> </ul>

1st	US-FCH -102	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Stakeholders will be able to understand constitutive of liquid as well as reactions which are time dependent.</li> <li>➤ Basic understanding of structure of atom and its correlation with the periodicity of elements.</li> <li>➤ Types of isomerism in organic compounds along with representation of configuration of organic molecules and their inter-conversions along stereo chemically important concepts such as Enantiomers, Diastereoisomers and racemic mixture.</li> </ul>
2nd	US-FCH -201	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Fundamental properties of gaseous state are explained in detail.</li> <li>➤ Introduction to identification of radicals (cations &amp; anions) and its application extended to practical as semi-micro analysis.</li> <li>➤ Chemistry of aliphatic hydrocarbons along with an idea of organic reactions with mechanisms.</li> </ul>
2nd	US-FCH -202	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Learners will be aware of photochemical reactions &amp; their properties and effects. They will also understand solid state chemistry and ionic equilibria.</li> <li>➤ Introduction to coordination chemistry in order to maintain continuity of same topic in higher classes.</li> <li>➤ Concept of aromaticity and conformational analysis of organic compounds.</li> </ul>
3rd	US-SCH-301	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Applications of Second law of Thermodynamics for the calculation of various thermodynamic parameters.</li> <li>➤ Concept of Conductance and its applications in practicals.</li> <li>➤ Principles of VBT &amp; MOT are dealt with in order to maintain continuity with higher classes.</li> <li>➤ Study of halogenated hydrocarbons and organometallic compounds with reactions and mechanisms. Idea of preparation and reactions of alcohols and phenols.</li> </ul>
3rd	US-SCH-302	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Classification of various complex reactions &amp; the understanding of the effects of temperature on the rate of reaction. Application of the same is extended to problems.</li> <li>➤ Thermodynamics of Binary liquid mixtures &amp; understanding the relation between the composition &amp; vapor pressure/temperature.</li> <li>➤ Understanding the trends in periodic properties of Group 13, 14 &amp; 15.</li> <li>➤ Methods of preparation &amp; reactions of carbonyl compounds along with idea of phase transfer catalysts like Crown ethers.</li> </ul>
3rd	US-SCH-303	Analytical Chemistry	<ul style="list-style-type: none"> <li>➤ Study of classical methods i.e. Titrimetry with the underlying basic principles.</li> <li>➤ Application of statistics to treatment of analytical data.</li> <li>➤ Instrumental methods of analysis with special stress on spectroscopic techniques.</li> </ul>
4th	US-SCH-401	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Detailed information or representation of electrochemical cells &amp; its applications or</li> <li>➤ Introduction of Phase rule and its applications in one/two component systems.</li> <li>➤ Study of theories of coordination chemistry &amp; bonding in coordination compounds.</li> <li>➤ Nomenclature, preparation, and reactions of carboxylic acids and sulphonic acids with emphasis on reaction mechanism.</li> </ul>
4th	US-SCH-402	Physical, Inorganic, Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Recapitulation of characteristics of various cubic systems &amp; also explanation and application of X-Ray Diffraction method for studying crystal lattice structure.</li> <li>➤ Understanding of mechanism and kinetics of Acid-Base catalyzed reactions and enzyme catalysis. Also introduction of the particle size in nanoparticles as catalyst.</li> <li>➤ Understanding the acidity of cations and basicity of anions. Also environmental chemistry of volatile Oxo acids &amp; their use.</li> <li>➤ Preparation and reactions of amines, diazonium salts and some heterocycles.</li> </ul>
4th	US-SCH-403	Analytical Chemistry	<ul style="list-style-type: none"> <li>➤ Study of separation techniques commonly used in the laboratory.</li> <li>➤ Deals with understanding electrochemical methods of instrumental analysis.</li> <li>➤ Developing the thorough understanding of classical methods i.e. Gravimetric analysis.</li> </ul>
5th	USCH - 501	➤ Physical Chemistry	<ul style="list-style-type: none"> <li>➤ Understanding of the basic concepts, energy associated and wave numbers of the transitions observed in the Rotational, Vibrational, Vibrational-Rotational and Raman Spectroscopy. This will also help students in solving various numericals based on the above topics.</li> <li>➤ This gives clear idea about application of thermodynamics on colligative properties</li> <li>➤ From this learner gets the idea about kinetics of unimolecular and bimolecular processes using collision theory.</li> <li>➤ Nuclear chemistry comprehends the knowledge of nuclear radiation, radioactivity and various applications of nuclear radiations.</li> <li>➤ Explanation of concept of adsorption (Physical &amp; Chemical) and how variation of pressure affects the adsorption. This unit will also help students understand theories of adsorption.</li> </ul>
5th	USCH - 502	Inorganic Chemistry	<ul style="list-style-type: none"> <li>➤ Importance of symmetry and various point groups existing in molecules.</li> <li>➤ Molecular orbit concept, closest packing in rigid spheres in solids along with stoichiometric point defects.</li> <li>➤ Inner-transition elements and its characteristics and non-aqueous solvents.</li> <li>➤ Chemistry of group 16 &amp; 17 elements and preparation, structures and properties of Interhalogen compounds.</li> </ul>
5th	USCH - 503	Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Study of mechanism of Organic reactions including Pericyclic reactions and its classification. An idea of photochemical reactions with important reactions such as Di - <math>\pi</math> methane rearrangement, Norrish Type- I &amp; Norrish Type - II process cleavages.</li> <li>➤ Students learn about molecular chirality &amp; elements of symmetry along with stereochemistry of cummulenes and biphenyls. An idea about agrochemicals along with preparation &amp; reactions of Pyridine-N-oxide, quinolone and quinuoline.</li> <li>➤ Idea about types of organic synthesis, IUPAC nomenclature of compounds like bicyclo, biphenyl, spiro and certain heterocyclic compounds.</li> <li>➤ Spectroscopy of organic compounds and natural product chemistry of terpenoids, alkaloids and hormones.</li> </ul>
5th	USCH - 504	Analytical Chemistry	<ul style="list-style-type: none"> <li>➤ The detailed theoretical information of complexometric and redox titrations learnt by the students followed by practical aspect using potentiometric technique.</li> <li>➤ Basic and valuable knowledge about various separation techniques such as Solvent extraction, Solid Phase extraction, High Performance Liquid Chromatography is learnt by the students.</li> <li>➤ The concept of quality is elaborated. The students are trained for preparation of solutions of normality, formality, molarity, ppm, ppb etc. the interconversion of various concentration units is taught at this stage.</li> <li>➤ Instrumental methods like FES, AAS, fluorimetry, nephelometry, phosphorimetry, and turbidimetry are explained.</li> </ul>
5th	USACDD 501	Drugs & Dyes (Applied Component)	<ul style="list-style-type: none"> <li>➤ General introduction to Drugs along with Routes of drug administration including dosage forms with brief introduction of Pharmacodynamic agents &amp; classification of CNS drugs including synthesis of one drug.</li> <li>➤ Idea of other Pharmacodynamic agents such as Analgesics, Antipyretics, Anti-inflammatory agents, Antihistaminic drugs, Cardiovascular drugs, Ant diabetic agent, Antiparkinsonism drugs, Drugs for Respiratory system along with synthesis of one important drug from each category.</li> <li>➤ Introduction to dyestuff Chemistry including physical properties of dyes along with nomenclature and color index. Types of Dyes and fibres along with idea Optical Brighteners &amp; Classification of Dyes based on mode of application and Dyeing methods.</li> <li>➤ Study of Theories for color &amp; chemical constitution of dyes along with Unit processes and Dye intermediate.</li> </ul>
6th	USCH - 601	Physical Chemistry	<ul style="list-style-type: none"> <li>➤ This course aims at giving an advanced understanding of electrochemistry and its applications.</li> <li>➤ The basic objective of polymer is to acquire basic knowledge, properties, types and its applications.</li> <li>➤ Understanding limitations of classical mechanics and introduction of quantum wave mechanics with the focus on standing and progressive wave equations. This unit will also help students understand the concept of operators and applications of operators</li> <li>➤ Introduction to basic principles and instrumentation of NMR and ESR.</li> </ul>
6th	USCH - 602	Inorganic Chemistry	<ul style="list-style-type: none"> <li>➤ Study of organometallic compounds formed by main group elements with different characteristics along with metallocene molecules and their synthesis and characteristics.</li> <li>➤ Homogeneous and Heterogeneous catalysis including mechanism of Wilkinson's catalyst for hydrogenation of alkenes.</li> <li>➤ Biological significance of elements.</li> <li>➤ MOT &amp; CFT for coordination compounds along with construction of <math>\sigma</math> and <math>\pi</math> molecular orbitals and factors affecting stability of metal complexes.</li> </ul>
6th	USCH - 603	Organic Chemistry	<ul style="list-style-type: none"> <li>➤ Study of Stereo selectivity and Stereo specificity along with Stereochemistry of substitution, elimination &amp; addition reactions. Also imparts knowledge about the classification, properties and preparation of amino acids.</li> <li>➤ Detailed mechanisms of certain molecular rearrangement reactions &amp; study of Carbohydrates with respect to classification, structure, mutarotation in D-Glucose with chain elongation, shortening &amp; some reactions of D-Glucose - D-Fructose.</li> <li>➤ Study of polymers and organic spectroscopy with problems on structure elucidation.</li> <li>➤ Basic information of catalysts and reagents used in organic synthesis and structure &amp; constitution of Nucleic acids.</li> </ul>
6th	USCH -604	Analytical Chemistry	<ul style="list-style-type: none"> <li>➤ Analytical Method Validation: need of Analytical Method Validation and the parameters involved in validation of method are discussed. Method validation is very essential in pharmaceutical companies.</li> <li>➤ Students are trained in Polarography and amperometry titrations with reference to the instrumental methods and various technique of food preservation, food processing is explained in detail. Study, analysis of food products and detection of adulterants is carried out with special reference to milk, honey, tea, coffee.</li> <li>➤ Basic and valuable knowledge about concepts of chromatographic separation techniques is learnt by the students followed by detailed information of operation and application of Gas &amp; Ion exchange chromatography.</li> <li>➤ Introduction to different thermal methods of analysis like Thermo gravimetric analysis, Differential thermal analysis &amp; Thermo-metric titration is learnt by the students.</li> </ul>

6th	USACDD  601	Drugs & Dyes  (Applied Component)	<p>➤ Idea of Drug Metabolism, Drug Discovery, Design and Development. Study of Chemotherapeutic agents such as Antibiotics, Antivirals, Antimalarials, Anthelmintics, Antifungal agents along with synthesis of one drug of each category.</p> <p>➤ Study of Chemotherapeutic agents such as Antiamoebic, Antitubercular, Antileprotic, Anti-neoplastic drugs along with synthesis of one drug of each category. Brief idea of Anti-HIV drugs along with synthesis of some drug intermediates and important uses of Nanoparticles in medicinal chemistry &amp; impact of pharmacological industries on environment.</p> <p>➤ Detailed classification of dyes based on chemical constitution &amp; synthesis of selected dyes. Environmental &amp; health hazards of synthetic dyes and its corresponding remediation.</p> <p>➤ Details of Non-textile uses of dyes, idea of pigments along with differences between dyes &amp; pigments. Growth, development, challenges and opportunities with respect to dyestuff industries in India.</p>
-----	-------------------	---	--

5th	US3BCH501	Biochemistry I	<p>➤ The students are taught the chemical structures of amino acids and proteins. The different tests for the same are discussed</p> <p>➤ The detailed study of enzymes with reference to their kinetics and mode of action are discussed in details along with a section of chemical structure of nucleic acids along with its biological significance.</p> <p>➤ The biochemical aspects of carbohydrates with special reference to its structure and function is covered in details</p> <p>➤ The concept of acid bases and ionic equilibria are discussed in detail</p>
5th	US3BCH502	Biochemistry II	<p>➤ This paper deals with the mechanisms related to carbohydrate and protein metabolism.</p> <p>➤ The section on nutrition and biostatistics discusses the various applications and principles of biostatistics.</p> <p>➤ Genetics and industrial biotechnology section talks about the recent advances in the respective fields</p>
6th	US3BCH601	Biochemistry I	<p>➤ Various biochemical aspects of structure and function along with detailed classification of lipids is covered.</p> <p>➤ Chromatography, a basic technique in biochemistry is studied in detail.</p> <p>➤ The study of electrophoresis, Spectroscopy and centrifugation gives the learners an insight in to these basic techniques used in routine chemical study.</p>
6th	US3BCH602	Biochemistry II	<p>➤ This paper deals with the mechanisms related to lipid metabolism.</p> <p>➤ The process of photosynthesis is discussed with special emphasis on the different biochemical pathways related to it.</p> <p>➤ Endocrinology discusses the different structure function correlation of the hormonal system and its impact on the body.</p> <p>➤ Recombinant DNA technologies and bioinformatics deal with the latest advances in the respective areas.</p>

**Program: B.Sc**

**Specific Program: B.Sc. Computer Science**

**Program Specific Outcome (PSO):**

1. Inculcating high knowledge levels of software development and programming languages.
2. Provide students with the tools that will allow them to design and implement software solutions to problems.
3. To communicate effectively with different levels of clients.
4. To spark the ambition towards their own constant and ongoing professional development.

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	US-FCS-101	Computer Organization and Design	<ol style="list-style-type: none"> <li>1. To learn about how computer systems work and underlying principles</li> <li>2. To understand the basics of digital electronics needed for computers</li> <li>3. To understand the basics of instruction set architecture for reduced and complex instruction sets</li> <li>4. To understand the basics of processor structure and operation</li> <li>5. To understand how data is transferred between the processor and I/O devices</li> <li>6. To learn about microcontrollers and its applications.</li> </ol>
I	US-FCS-102	Programming with Python - I	<ol style="list-style-type: none"> <li>1. Students should be able to understand the concepts of programming before actually starting to write programs.</li> <li>2. Students should be able to develop logic for Problem Solving.</li> <li>3. Students should be made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.</li> <li>4. Students should be able to apply the problem-solving skills using syntactically simple language i.e., Python (version: 3.X or higher)</li> </ol>
I	US-FCS-103	Web Technologies - I	<ol style="list-style-type: none"> <li>1. To learn the different aspects of Website designing</li> <li>2. To learn HTML and CSS</li> <li>3. To learn JavaScript functions and objects</li> </ol>
I	US-FCS-104	Database Systems	<ol style="list-style-type: none"> <li>1. Students should be able to evaluate business information problem and find the requirements of a problem in terms of data.</li> <li>2. Students should be able to design the database schema with the use of appropriate data types for storage of data in database.</li> <li>3. Students should be able to create, manipulate, query and back up the databases.</li> </ol>
I	US-FCS-105	Discrete Mathematics	<ol style="list-style-type: none"> <li>1. To provide overview of theory of discrete objects, starting with relations and partially ordered sets.</li> <li>2. Study about recurrence relations, generating function and operations on them.</li> <li>3. Give an understanding of graphs and trees, which are widely used in software.</li> <li>4. Provide basic knowledge about models of automata theory and the corresponding formal languages.</li> </ol>
I	US-FCS-106	Statistics and R - I	<ol style="list-style-type: none"> <li>1. Enable learners to know descriptive statistical concepts</li> <li>2. Enable study of probability concept required for Computer learners</li> </ol>
I	US-FCS-107	Soft Skills Development & Digital Marketing	<ol style="list-style-type: none"> <li>1. To know about various aspects of soft skills and learn ways to develop personality</li> <li>2. Understand the importance and type of communication in personal and professional environment.</li> <li>3. To provide insight into much needed technical and non-technical qualities in career planning.</li> <li>4. Learn about Leadership, team building, decision making and stress management</li> <li>5. Learn Content &amp; Email marketing, Social Media Marketing</li> </ol>
II	US-FCS-201	Data Structures using C	<ol style="list-style-type: none"> <li>1. Students should be able to write, compile and debug programs in C language.</li> <li>2. Students should be able to use different data types in a computer program.</li> <li>3. Students should be able to design programs involving decision structures, loops and functions.</li> <li>4. Students should be able to explain the difference between call by value and call by reference</li> <li>5. Students should be able to understand the dynamics of memory by the use of pointers.</li> <li>6. Students should be able to use different data structures and create/update basic data files.</li> <li>7. To understand stacks and queues in data structures</li> <li>8. To learn link list, sorting and searching</li> </ol>
II	US-FCS-202	Programming with Python - II	<ol style="list-style-type: none"> <li>1. Students should be able to understand how to read/write to files using python.</li> <li>2. Students should be able to catch their own errors that happen during execution of programs.</li> <li>3. Students should get an introduction to the concept of pattern matching.</li> <li>4. Students should be made familiar with the concepts of GUI controls and designing GUI applications.</li> <li>5. Students should be able to connect to the database to move the data to/from the application.</li> <li>6. Students should know how to connect to computers, read from URL and send email.</li> <li>7. To read and write csv files</li> </ol>
II	US-FCS-203	Web Technologies - II	<ol style="list-style-type: none"> <li>1. Learn to plan site navigation, publish and maintain website</li> <li>2. Learn HTML 5, CSS, JavaScript</li> </ol>
II	US-FCS-204	Database Management using PLSQL	<ol style="list-style-type: none"> <li>1. To learn the functionality of PLSQL procedural language such as decision making, iteration, etc.</li> <li>2. Learn to use a single command in PL/SQL to execute a number of queries.</li> <li>3. Learn to reuse PL/SQL units such as functions, triggers, procedures, etc that are stored in the database after the creation.</li> </ol>
II	US-FCS-205	Calculus	<ol style="list-style-type: none"> <li>1. Understanding of Mathematical concepts like limit, continuity, derivative, integration of functions.</li> <li>2. Ability to appreciate real world applications which uses these concepts.</li> <li>3. Skill to formulate a problem through Mathematical modelling and simulation.</li> </ol>
II	US-FCS-206	Statistics and R - II	<ol style="list-style-type: none"> <li>1. Enable learners to know descriptive statistical concepts</li> <li>2. Enable study of probability concept required for Computer learners</li> </ol>
II	US-FCS-207	Green and Open-Source Technologies	<ol style="list-style-type: none"> <li>1. Learn about green IT can be achieved in and by hardware, software, network communication and data center operations.</li> <li>2. Understand the strategies, frameworks, processes and management of green IT</li> <li>3. Students should have a good working knowledge of Open-Source ecosystem, its use, impact and importance.</li> <li>4. This course shall help student to learn Open-Source methodologies, case studies with real life examples.</li> </ol>
			1. Understand Grammar and Languages

III	USCS301	Theory of Computation	2. Learn about Automata theory and its application in Language Design 3. Learn about Turing Machines and Pushdown Automata 4. Understand Linear Bound Automata and its applications
III	USCS302	Core Java	1. Object oriented programming concepts using Java. 2. Knowledge of input, its processing and getting suitable output. 3. Understand, design, implement and evaluate classes and applets. 4. Knowledge and implementation of AWT package
III	USCS303	Operating System	1. To provide an understanding of operating system, its structures and functioning 2. Develop and master understanding of algorithms used by operating systems for various purposes.
III	USCS304	Database Management Systems	1. Master concepts of stored procedure and triggers and its use. 2. Learn about using PL/SQL for data management 3. Understand concepts and implementations of transaction management and crash recovery
III	USCS305	Combinatorics and Graph Theory	1. Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings. 2. Understand the combinatorial features in real world situations and Computer Science applications. 3. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems
III	USCS306	Physical Computing and IoT Programming	1. Enable learners to understand System on Chip Architectures. 2. Introduction and preparing Raspberry Pi with hardware and installation. 3. Learn physical interfaces and electronics of Raspberry Pi and program them using practical's 4. Learn how to make consumer grade IoT safe and secure with proper use of protocols.
III	USCS307	Web Programming	1. To design valid, well-formed, scalable, and meaningful pages using emerging technologies. 2. Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites 3. To develop and implement client-side and server-side scripting language programs. 4. To develop and implement Database Driven Websites. 5. Design and apply XML to create a markup language for data and document centric applications.
IV	USCS401	Fundamentals of Algorithms	1. Understand the concepts of algorithms for designing good program 2. Implement algorithms using Python
IV	USCS402	Advanced Java	1. Understand the concepts related to Java Technology 2. Explore and understand use of Java Server Programming
IV	USCS403	Computer Networks	1. Learner will be able to understand the concepts of networking, which are important for them to be known as a 'networking professionals. 2. Useful to proceed with industrial requirements and International vendor certifications
IV	USCS404	Software Engineering	1. To Learn system analysis and modelling 2. To learn software project management 3. To learn software quality assurance and testing
IV	USCS405	Linear Algebra using Python	1. Appreciate the relevance of linear algebra in the field of computer science. 2. Understand the concepts through program implementation 3. Install a computational thinking while learning linear algebra.
IV	USCS406	.Net Technologies	1. Understand the .NET framework 2. Develop a proficiency in the C# programming language 3. Proficiently develop ASP.NET web applications using C# 4. Use ADO.NET for data persistence in a web application
IV	USCS407	Android Developer Fundamentals	1. Understand the requirements of Mobile programming environment. 2. Learn about basic methods, tools and techniques for developing Apps 3. Explore and practice App development on Android Platform 4. Develop working prototypes of working systems for various uses in daily lives.
V	USCS501	Artificial Intelligence	1. The learner should get a clear understanding of AI and different search algorithms used for solving problems. 2. The learner should also get acquainted with different learning algorithms and models used in machine learning.
V	USCS502	Linux Server Administration	1. Learner will be able to develop Linux based systems and maintain. 2. Learner will be able to install appropriate service on Linux server as per requirement. 3. Learner will have proficiency in Linux server administration.
V	USCS503	Software Testing and Quality Assurance	1. Understand various software testing methods and strategies. 2. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. 3. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.
V	USCS504	Information and Network Security	1. Understand the principles and practices of cryptographic techniques. 2. Understand a variety of generic security threats and vulnerabilities, and identify & analyse particular security problems for a given application. 3. Understand various protocols for network security to protect against the threats in a network
V	USCS505	Architecting of IoT	1. Learners are able to design & develop IoT Devices. 2. They should also be aware of the evolving world of M2M Communications and IoT analytics.
V	USCS506	Web Services	1. Emphasis on SOAP based web services and associated standards such as WSDL. 2. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services
V	USCS507	Game Programming	1. Learner should study Graphics and gaming concepts with present working style of developers where everything remains on internet and they need to review it, understand it, be a part of community and learn.
VI	USCS601	Wireless Sensor Networks and Mobile Communication	1. Learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. 2. Also implement and evaluate new ideas for solving wireless sensor network design issues.
VI	USCS602	Cloud Computing	1. Learner should be able to articulate the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing using open-source technology. 2. Learner should be able to identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc. 3. They should explain the core issues of cloud computing such as security, privacy, and interoperability.
VI	USCS603	Cyber Forensics	1. Learners should be able to plan and prepare for all stages of an investigation - detection, initial response and management interaction, investigate various media to collect evidence, report them in a way that would be acceptable in the court of law.
VI	USCS604	Information Retrieval	1. Learner should get an understanding of the field of information retrieval and its relationship to search engines. 2. It will give the learner an understanding to apply information retrieval models.
VI	USCS605	Digital Image Processing	1. Learner should review the fundamental concepts of a digital image processing system. Analyze the images in the frequency domain using various transforms. 2. Evaluate the techniques for image enhancement and image segmentation. 3. Apply various compression techniques. 4. They will be familiar with basic image processing techniques for solving real problems.
VI	USCS606	Data Science	1. The students should be able to understand & comprehend the problem; and should be able to define suitable statistical method to be adopted
VI	USCS607	Ethical Hacking	1. Learner will know to identify security vulnerabilities and weaknesses in the target applications. 2. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.

#### BSc Economics

1. Develops an understanding of the core micro and macroeconomic principles and models and how they apply to a wide range of real-world issues.
2. Enhances the ability to critique and create economic research by mastering the theoretical and applied tools.
3. Familiarise with the salient developments in the Indian and world economy, in both present-day and historical contexts.
4. Develops research and advocacy skills through critical pedagogies in the classroom and through individual and group applied projects.
5. Identify compile, interpret, and analyze quantitative economic data by expressing relationships between concepts through graphs, statistical or econometric analysis.
6. Develop requisite skills in areas which have direct bearing on future employment prospects and meet the requirements of business, corporate sector, public services and other professional jobs.

#### CO Economics

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	US-FEC-101	Introductory Microeconomics	1. Understand, summarize, analyse and apply the basic microeconomic principles of economics in their daily lives. 2. Understand the concepts of demand, supply and elasticity.

			3. Critically differentiate between various approaches of consumer behaviour.
I	US-FEC-102	Introductory Macroeconomics	1. Understand, summarize, analyse and apply the concepts of Macro Economics in their daily lives. 2. Identify and understand the different components of National Income Accounting 3. Comprehend the different theories of demand for and supply of money, role of central bank, commercial banks and the process of credit creation in the economy.
II	US-FEC-201	Intermediate Microeconomics	1. Get a nuanced understanding of producer behaviour. 2. Differentiate between the various cost concepts and interrelationship between revenue concepts under different market conditions. 3. Understand the various objectives of a firm and their pricing methods. 4. Identify different market structures around them based on their characteristics and understand their behaviour.
II	US-FEC-202	Intermediate Macroeconomics	1. Appreciate macroeconomic issues like inflation, Balance of payment, Exchange rate policy etc. 2. Understand the mechanism of IS-LM model and apply it to interpret the fiscal and monetary policy interactions in the economy.
III	US-SEC-301	Advanced Microeconomics	1. Understand the concepts of oligopoly, game theory of microeconomics. 2. Interpret the principles of General Equilibrium and Welfare Economics 3. Understand the mechanism of factor market
III	US-SEC-302	Economics of Development	1. Knowledge of the basic concepts of growth and development along with human and sustainable development. 2. Understand various models and theories of development discussed by economists. 3. Familiarity with the provisions for poverty, inequality and measures to reduce income inequality. 4. Understand the important role of infrastructure and technology for economic development.
III	US-SEC-303	Financial Economics	1. Enables a deep theoretical understanding of the economics of finance. 2. Imparts knowledge about the basic models of investment and portfolio analysis including CAPM 3. Develops an understanding of valuation of assets, derivatives and options and patterns of corporate financing.
IV	US-SEC-401	Advanced Macroeconomics	1. Understand the Goods Market (IS) equilibrium in close and open economy. 2. Familiarity with financial market equilibrium in close and open economy. 3. Understand policy mix of Fiscal and Monetary Policy for equilibrium of economy through Mundell-Fleming Model. 4. Understand the various exchange rate regimes with pros & cons. 5. Trace the International Monetary History since 1900
IV	US-SEC-402	International Economics	1. Awareness about the importance of international economics and the difference between domestic and foreign trade. 2. Understand the theories of international trade. 3. Familiarity with the recent trends in international economic relations. 4. Knowledge about the instruments of trade policy, controversies in trade and the growing importance of regional trade agreements.
IV	US-SEC-403	Indian Financial System	1. Familiarity with various components of the Indian financial system 2. Develops an understanding of the working and trends that have taken place over the years especially since financial sector reforms. 3. Acquainting students with the mechanism of the various financial markets.

**Program: B. Sc. (Applied Component)**

**Specific Program: Environmental Science**

Environmental Science follows the concept of having a flexi syllabus which is a unique feature of this syllabus. The concept of flexi syllabus would ensure that learner and facilitator have the liberty to select any four units out of eight which can be decided by both the stake-holders collectively.

**Program Specific Outcome (PSO):**

1. To revise the important concepts of environment and its impact on the inter-relationship between various components of the environment
2. To recognise and realise, the harmful effects of pollutants on the environment, when their balance shifts as a result of anthropogenic activities
3. To direct the learner's aptitude and skills to develop innovative chemical technology, aimed to reduce or eliminate the use or generation of hazardous substances
4. To comprehend, the importance of alternative energy resources
5. To emphasise the need, to conserve the energy resources
6. To re-familiarise the principles, methods as also develop perspectives on the application of analytical methods to the study of environment
7. To introduce the learner to the concept of green environmental audit
8. To expose and augment the avenues of employability and entrepreneurship in the arena of industrial consultancy
9. To ensure that the learner applies the learning gained during the under graduate days for enhancing his skills and employability quotient in relevant industries
10. To develop an understanding of the Maharashtra Pollution Control Board norms and procedure for liaison
11. To expose the learner to the array of environmental related domestic products with a view to develop, market and discover their application for the purpose of a better environment
12. To explore business analytics of environmental testing and monitoring laboratories for research purposes and as career ventures
13. To focus the learner towards the immediate need to develop and practise the present and future systems, processes, technologies used for treatment of domestic waste water and industrial effluents
14. To seek and explore alternatives to conventional resources
15. To introduce the learner to the concept of statistical modelling and neural networking
16. To direct and broaden the perspective of the learner to comprehend the importance of modelling while summarising the findings of research and survey data, or while accepting new applications in systems and processes
17. To introduce the various concepts of costing, book keeping and final accounts
18. To sensitize the learner towards the importance of conserving the existing biodiversity
19. To explore possibilities within learners to be nature enthusiasts, passionate naturalists, adventurers and eco-friendly tourists
20. To tap the ecotourism avenues within and outside the country
21. To awaken the learner towards focussing on the critical issue of climate change
22. To establish the impact of climate change, the greatest destabilizing force that undermines global economy, and threatens our health
23. To develop the knowledge and thinking ability regarding environmental issues. To help the learner to acquire a set of values for environment protection

**Course Outcome (COs):**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
5 <sup>th</sup>	USACEVSS01	Applied Environmental Sciences	1. Introduction to Environment and Pollution-Components of Environment, Types of pollution 2. Green Chemistry and Sustainability- The Twelve Principles of Green Chemistry, Sustainable Development- Principles and sustainable development indicators, Areas highlighted by Agenda, Transition from Industrial economy to Green economy. 3. Alternate Energy Resources- The alternative energy resources and hence follow the 4 R's (Reduce, Reuse, Recycle & Reinvent), Learner may discover and design products, operations or processes, which conserve the energy resources. 4. Applications of Analytical methods-Skills in instrumentation used for the study and analysis of various substances related to the environment 5. Green/Environmental Audit – To develop conceptual clarity on pollution control and green environmental auditing, besides gaining knowledge about these programmes in the Indian scenario. 6. Industrial Consultancy – Knowledge of various areas and facets of industrial consultancy, and also develop competency and confidence to explore it, also able to grasp the importance of various norms required for Maharashtra Pollution Control Board permits and procedure for liaison 7. Neo-avenues -An acumen to tap the potential for entrepreneurship with respect to environment related products and indoor plants 8. Case Study and Simulation
6 <sup>th</sup>	USACEVSS01	Environmental Management	1. Business Analytics of Environment Testing - Knowledge about environmental testing and monitoring laboratories, air, water quality and noise exposure standards and methods of physico-chemical and bacteriological sampling 2. Ecological Restoration – To study and comprehend the treatment practices applied for domestic waste water and industrial effluents 3. Impact Assessment through Ecological modelling - To develop an understanding on the concept, application and limitation of modelling as a tool for summarising or applying the research and survey findings, also to develop skills on the application of neural networking and statistical modelling 4. Finance – To understand various concepts of costing, book keeping and final accounts 5. Industry's observation and ecotourism -to understand the importance of conserving the existing biodiversity, to explore possibilities within learners to be nature enthusiasts, passionate naturalists, adventurers and eco-friendly tourists. Also, to tap the ecotourism avenues within and outside the country. 6. Climate Change - Global warming and its effects, Greenhouse substances: Sources & effects, Geospatial technology- Remote Sensing & GIS, Role of IPCC in climate change monitoring; Kyoto Protocol, Montreal Protocol, Earth Summit & UN Convention on Climate Change 7. Environmental Education and Legislation-Goals, objectives & principles of environmental education, Environmental education programmes in India, Environmental organizations & agencies- CITES, EPA, IUCN & MAB, Environmental laws in India: Wild life Protection Act, 1972, Water Prevention & Control of Pollution Act, 1974, Air Prevention & Control of Pollution Act, 1981, Environment Protection Act, 1986 & Biological Diversity Act, 2002 8. Open Unit-Open unit is one of the eight units that may or may not be opted by the college. Teachers in consultation with the students shall define syllabus under this unit every year, if required, and shall seek endorsement of the Head and the Principal.

1. Information Technology graduates will apply their knowledge and skills to succeed in their career/ professional development and/or postgraduate education to pursue flexible career paths amidst future technological changes.
2. Our graduates will apply basic principles and practices of computing grounded in mathematics and science to successfully complete hardware and/or software related projects to meet customer business objectives and/or productively engage in research.
3. Conceptualize domain specific problems, analyse and develop efficient algorithms and provide solutions with help of modern tools and techniques.
4. The degree in IT is awarded for completing a programme of study in the field of Software Development, Software Testing, Software Engineering, Web Design, Embedded System, Internet of Things, Digital Electronics, Databases, Programming, Computer Networking, Artificial Intelligence, Machine Learning, Data Warehousing, Business Intelligence, Geographic Information System, Graphics and Animations etc.
5. Apply standard / best industry practices and techniques in developing software systems.
6. The syllabus also covers subjects to develop soft skills of students which enables them to prepare better resume, interviews, leadership skills, and the ability to function effectively in multi-disciplinary teams.
7. The students are able to work as part of a team with constant collaboration and communication in order to build projects.
8. This enables the student to get absorbed in the campus placement and to prepare for certification courses.

#### IT

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	UG-FIT-101	Object Oriented Programming with C++	<ul style="list-style-type: none"> <li>Understand the difference between procedure oriented and object-oriented approach.</li> <li>Understand the difference between the top-down and bottom-up approach.</li> <li>Describe the object-oriented programming approach in connection with C++.</li> <li>Apply the concepts of object-oriented programming namely, Polymorphisms, Encapsulation, Data Abstraction, Inheritance, and Data Binding.</li> <li>Illustrate the process of exception handling, file operations, operator and function overloading using C++.</li> <li>Implement various types of constructors, inheritance, templates.</li> <li>Apply virtual and pure virtual function and implement the concept of late and early binding.</li> </ul>
	UG-FIT-102	Digital Electronics	<ul style="list-style-type: none"> <li>Introduction to Binary, Hexadecimal and Octal number system. Arithmetic operations using the same.</li> <li>Devices working on binary number system like transistor, diode as switch. Types of Gates designed using the same, their types, working, and applications.</li> <li>Describe Combinational logic Circuits like adders, subtractors, multipliers, dividers, encoders, decoders, multiplexers, demultiplexers, code converters.</li> <li>Describe Sequential Logics like flip-flops, counters, shift registers etc.</li> <li>Describe signal converters- Analog to Digital, Digital to Analog, Memory- RAM, ROM, EPROM, Dynamic RAM etc.</li> </ul>
	UG-FIT-103	Operating System	<ul style="list-style-type: none"> <li>Describe the general architecture of computers and important computer system resources also the role of operating system in their management policies and algorithms.</li> <li>Understand the process management policies and scheduling of processes by CPU and describe, contrast and compare differing structures for operating systems.</li> <li>Evaluate the requirement for process synchronization and coordination handled by operating system</li> <li>Describe and analyse the memory management and its allocation policies.</li> <li>Identify use and evaluate the storage management policies with respect to different storage management technologies</li> </ul>
	UG-FIT-104	Mathematics I	<ul style="list-style-type: none"> <li>Apply the Set theory and Relation concepts.</li> <li>Apply the Functions and define the recursive functions.</li> <li>Apply Elementary number theory and methods of proof to different applications.</li> <li>Apply Matrices, sequences, Mathematical Induction and Recursion to different applications.</li> <li>Identify the permutations and combinations using counting and probability.</li> </ul>
	UG-FIT-105	Professional Communication Skills	<ul style="list-style-type: none"> <li>Understand the role of communication skills in personal &amp; professional success.</li> <li>Students will develop knowledge, skills, and judgment around human communication that facilitate their ability to work collaboratively with others and develop awareness of appropriate communication strategies.</li> <li>Prepare and present presentations with a specific intent.</li> <li>Analyze a variety of communication acts including communication competencies such as managing conflict, understanding small group processes, active listening, and appropriate self-disclosure.</li> <li>Understand how preconceptions and limited perceptions interfere with communication.</li> <li>Ethically use, document and integrate sources.</li> </ul>
II	UG-FIT-201	Python Programming	<ul style="list-style-type: none"> <li>To learn how to design and program in Python.</li> <li>To learn how to use lists, tuples, and dictionaries in Python programs.</li> <li>To identify various Python object and their types.</li> <li>To define the structure and components of a Python program.</li> <li>To design object oriented programs with Python classes.</li> <li>To use class inheritance in Python.</li> <li>To learn how to write loops and decision statements in Python.</li> <li>To learn how to write functions and passing of arguments in Python.</li> <li>To learn how to use system defined packages and to create user defined Python modules.</li> <li>To learn how to read and write files in Python.</li> <li>To learn how to use exception handling in Python applications for error handling.</li> </ul>
II	UG-FIT-202	Microprocessor Architecture and Interfacing	<ul style="list-style-type: none"> <li>Introduction to Microprocessor, Process of Evolution of Computers, Types of Computers.</li> <li>Describe 8085 Microprocessor in terms of Pin Diagram of IC 8085, Internal Block Diagram, and Working of the same. Introduction to Assembly Language Programming, Instruction set for IC 8085.</li> <li>Programming model of 8085, Assembly Language Programs for various operations like Addition, Subtraction, Multiplication, Division, Data Transfer, Calculation of square and square root, generation of series and many more.</li> <li>Describe the interfacing of Memories- RAM, ROM to microprocessor, Input Output Devices.</li> <li>Describe the programmable peripheral interfaces like IC 8255, IC 8155. Their use and various devices that can be interfaced using 8255 and 8155.</li> </ul>
	UG-FIT-203	Introduction to Unity and Graphics	<ul style="list-style-type: none"> <li>To learn how to develop video games using the C# programming language and the Unity game engine on Windows or Mac.</li> <li>Able to use tool sets of Photoshop, Image editing and enhancement, use of Filters, Advanced Filters.</li> <li>Apply Concepts of rigging and animation.</li> <li>Creating Assembly for Games, Virtual reality, augmented reality with ARCore.</li> <li>Installation of Google SketchUp.</li> </ul>
	UG-FIT-204	Mathematics-II	<ul style="list-style-type: none"> <li>To find the solution of linear and nonlinear equations, and the solution of differential equations.</li> <li>To understand the principles of sampling theory.</li> <li>To understand the object of approximation theory and basic types of problems caused by it.</li> <li>Calculate and interpret the correlation between two variables.</li> <li>Determine whether the correlation is significant.</li> <li>Calculate the simple linear regression equation for a set of data.</li> <li>Determine whether a regression model is significant.</li> </ul>
	UG-FIT-205	Green Computing	<p>Understand what Green IT is and how we can meet standards set for Green Computing.</p> <p>Comprehend Green IT from the perspective of hardware, software, storage, and networking at the enterprise level and innovate with cost friendly efforts.</p> <p>Create awareness among stakeholders and promote green initiatives in their environments leading to a green movement.</p> <p>Adopt special skills such as knowledge about energy efficiency, ethical IT assets disposal, carbon footprint estimation.</p> <p>Strategize Green Initiatives, create eco-friendly environment and look at the future of Green IT.</p>

III	USIT301	Python Programming	<ul style="list-style-type: none"> <li>To learn and understand Python programming basics and paradigm.</li> <li>To learn and understand python looping, control statements and string manipulations.</li> <li>Design and implement GUI applications.</li> <li>To learn and know the concepts of file handling, exception handling and database connectivity.</li> </ul>
	USIT302	Data Structures	<ul style="list-style-type: none"> <li>Choose appropriate data structures to represent data items in real world problems.</li> <li>Analyse the time and space complexities of algorithms</li> <li>Understand the intricacies of various structures arrays, stacks, queues, binary trees, and search trees, heaps, graphs, and B-trees.</li> <li>Understand algorithm on operations on Traversals, Insertion, Deletion, Search, and Sort on these data structures.</li> <li>Design programs using a variety of data structures</li> <li>Analyse and implement various kinds of searching and sorting techniques Binary Search, Linear Search, MergeSort, Heapsort, Quick Sort and the likes.</li> </ul>
	USIT303	Computer Networks	<ul style="list-style-type: none"> <li>Understand and describe the layered protocol model.</li> <li>Describe, analyse and evaluate a number of datalink, network, and transport layer protocols.</li> <li>Program network communication services for client/server and other application layouts.</li> <li>Design, analyse, and evaluate networks and services for homes, data centres, IoT/IoE, LANs and WANs.</li> <li>Implement a simple LAN with hubs, bridges and switches.</li> <li>Describe how packets in the Internet are delivered.</li> <li>Describe how routing protocols work</li> </ul>
	USIT304	Database Management Systems	<ul style="list-style-type: none"> <li>Identify the basic concepts and various data model used in database design ER modelling concepts and architecture use and design queries using SQL.</li> <li>Apply relational database theory and be able to describe relational algebra expression, tuple and domain relation expression from queries.</li> <li>Recognize and identify the use of normalization and functional dependency, indexing and hashing technique used in database design.</li> <li>Recognize the purpose of query processing and optimization and also demonstrate the basic of query evaluation.</li> <li>Apply and relate the concept of transaction, concurrency control and recovery in database.</li> <li>Discuss recovery system and be familiar with introduction to web database, distribute databases, data warehousing and mining.</li> </ul>
	USIT305	Applied Mathematics	<ul style="list-style-type: none"> <li>Study complex numbers and its arithmetic as application to scientific calculations.</li> <li>Describe Matrix Algebra and Introduction to Matrix Calculus used to solve multiple linear equations and equations of higher order.</li> <li>Study Differential Equations in terms of order of equations, Degree of Equations, Simultaneous Equations, various methods to solve them.</li> <li>Describe use of Laplace Transform to Solve problem by performing the arithmetic in 'S' Plane as compared to regular 'v' plane. Hence finding the usefulness of Laplace Transform to solve complicated equations.</li> <li>Describe second order and third order integration useful to study two dimensional and three dimensional surfaces and volumes. Application of the same to analyse surface and volumetric contents of electricity in terms of charge stored.</li> </ul>
IV	USIT401	Core Java	<ul style="list-style-type: none"> <li>Analyse and explain the behaviour of simple programs involving the following fundamental programming constructs: assignment, I/O (including file I/O), selection, loops, function</li> <li>Write a program that uses each of the following fundamental programming constructs: assignment, I/O (including file I/O), selection, iteration, methods</li> <li>Break a problem into logical pieces that can be solved (programmed) independently</li> <li>Develop, and analyse, algorithms for solving simple problems</li> <li>Use a suitable programming language, and development environment, to implement, test, and debug algorithms for solving simple problems.</li> <li>Write programs that use each of the following data structures (and describe how they are represented in memory): strings, arrays.</li> <li>Understand the basics of the concept of recursion</li> <li>Understand and apply object-oriented design and testing involving the following concepts: data abstraction, encapsulation, information hiding, inheritance, and polymorphism.</li> </ul>
	USIT402	Introduction to Embedded Systems	<ul style="list-style-type: none"> <li>Understanding of internal structure of embedded devices.</li> <li>Knowledge of possible options to choose for designing own Embedded Systems.</li> <li>Understand what are sensors and actuators, communication interfaces.</li> <li>How to use embedded C for programming 8051 microcontroller.</li> <li>Idea of different trends in the embedded industry.</li> <li>Learning the Embedded Development Life Cycle.</li> <li>Choosing proper data types, particular port pins of microcontroller and debugging options.</li> </ul>
	USIT403	Computer Oriented Statistical Techniques	<ul style="list-style-type: none"> <li>To learn techniques to calculate the measures of central tendency and different measures of dispersion.</li> <li>To gain insight into consequences of plan by probability techniques and processing samples using sampling techniques.</li> <li>Drawing valid conclusion using estimation theory and proper decision using decision theory.</li> <li>To measure experimental result based on hypothesis using chi square techniques.</li> <li>To learn techniques to correlate the relationship between various variables.</li> </ul>
	USIT404	Software Engineering	<ul style="list-style-type: none"> <li>Understand how to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment.</li> <li>Develop an ability to work in one or more significant application domains.</li> <li>Develop an ability to identify, formulate, and solve complex engineering problems by applying principles and techniques of software engineering, science, and mathematics.</li> <li>Work as an individual and as part of a multidisciplinary team to develop and deliver quality software and create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.</li> <li>Demonstrate an understanding of and apply current theories, models, tools and techniques that provide a basis for the software lifecycle.</li> </ul>
	USIT405	Computer Graphics and Animation	<ul style="list-style-type: none"> <li>To list the basic concepts used in computer graphics.</li> <li>To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping</li> <li>To describe the importance of viewing and projections</li> <li>To define the fundamentals of animation, virtual reality and its related technologies.</li> <li>To understand a typical graphics pipeline.</li> </ul>
V	USIT501	Software Project Management	<ul style="list-style-type: none"> <li>Define various software application domains and remember different process model used in software development.</li> <li>Explain needs for software specifications also they can classify different types of software requirements and their gathering techniques.</li> <li>Convert the requirements model into the design model and demonstrate use of software and user interface design principles.</li> <li>Generate project schedule and can construct, design and develop network diagram for different type of Projects.</li> <li>Also organize different activities of project as per Risk impact factor.</li> </ul>
	USIT502	Internet of Things	<ul style="list-style-type: none"> <li>Knowledge of existing IOT devices.</li> <li>Understand concept of Internet communication.</li> <li>When to choose open source or closed source options.</li> <li>How to choose proper platform for prototyping.</li> <li>Knowledge of various tools available for making physical design of system.</li> <li>Understanding of API concepts.</li> <li>How to make efficient use of available memory.</li> <li>Knowledge of various Business Models.</li> <li>How to design PCBs.</li> </ul>
	USIT503	Advanced Web Programming	<ul style="list-style-type: none"> <li>The basics of the asp.net programming with the introduction of .NET framework and .NET class framework with some programming variables, data types, object-oriented terminology, creating objects and classes, overloading methods, constructors, shared methods.</li> <li>Inheritance and interface implement the inheritance i.e. creating base class, properties subclass and by using 'inherit' the keyword; overloading and overriding methods, shadowing, and object interface in detail.</li> <li>There are few applications viz; controlling web applications, creating and deploying web applications.</li> <li>Custom controls include the input validation controls, intrinsic controls, list bound controls, rich controls and user controls.</li> <li>XML serialization and XML stream-style parsers.</li> </ul>
	USIT504	Linux System Administration	<ul style="list-style-type: none"> <li>Knowledge of basic commands in Linux for file handling and process management.</li> <li>How to install and use various software packages.</li> <li>Use of configuration commands for File System.</li> <li>How to connect two or more systems using networking commands.</li> <li>How to perform file sharing between different systems.</li> <li>How to protect system with the help of firewall and file permissions.</li> <li>How to implement Cryptographic Services for authentication purpose.</li> <li>Procedure to set up different servers.</li> <li>Knowledge of shell script programming.</li> <li>Understand concept of clustering and Installation server.</li> </ul>
			<ul style="list-style-type: none"> <li>Develop error-free, well-documented Java programs;</li> </ul>



	USIT505	Enterprise Java	<ul style="list-style-type: none"> <li>Develop and test Java network, search engine, and web framework programs.</li> <li>Learn how to write, test, and debug advanced-level Object-Oriented programs using Java.</li> <li>Develop appropriate data model and database scheme.</li> <li>Create and test prototypes.</li> <li>Develop Structure.</li> <li>Identify major subsystems and interfaces.</li> <li>Validate design scheme and models.</li> </ul>
	USIT601	Software Quality Assurance	<ul style="list-style-type: none"> <li>Describe Quality and Software Quality. Various factors and aspects of Software Quality to be analysed during the Software Development Process. Different models used for development as well as testing.</li> <li>Study different methodologies used for testing and identify the field of application of each.</li> <li>Describe different levels of testing in the project, identify which method to use at each level.</li> <li>Study different types of special testing required as per the construction of the hardware and implementation of the software.</li> <li>Describe the process of verification and validation of software. Different levels at which the process is implemented. The review techniques used for the same.</li> </ul>
	USIT602	Security in Computing	<ul style="list-style-type: none"> <li>Identify some of the factors driving the need for security.</li> <li>Identify and classify particular examples of attacks.</li> <li>Define the terms vulnerability, threat and attack.</li> <li>Identify physical points of vulnerability in simple networks.</li> <li>Compare and contrast symmetric and asymmetric encryption systems and their vulnerability to attack, and explain the characteristics of hybrid systems.</li> </ul>
VI	USIT603	Business Intelligence	<ul style="list-style-type: none"> <li>Describe the concepts and components of Business Intelligence (BI).</li> <li>Understand and use the technologies and tools that make up BI (e.g. Data warehousing, Data reporting and use of online analytical processing (OLAP)).</li> <li>Understand and design the technological architecture that underpins BI systems               <ul style="list-style-type: none"> <li>Implementation of a BI system.</li> </ul> </li> </ul>
	USIT604	Principles of Geographic Information Systems	<ul style="list-style-type: none"> <li>Explain the principles of GIS as a combination of geospatial data input, processing, output and personnel subsystems;</li> <li>Explain the requirements for co-ordinate reference systems in GIS and apply them within a GIS;</li> <li>Describe and critically assess the use of vector and raster representations of real world objects and how to convert between them;</li> <li>Describe and critically assess the use of analytical tools within GIS including overlay, buffer, network, and terrain analysis and how they are applied in the ArcGIS (or equivalent) environment;</li> <li>Produce effective maps and reports based on output of GIS processes; apply acquired GIS skills to a range of applications.</li> </ul>
	USIT605	IT Service Management	<ul style="list-style-type: none"> <li>Describe the importance of IT enabled services and challenges.</li> <li>Identify strategic IT planning for software development</li> <li>Recognize enterprise IT architecture for Information technology.</li> <li>Use of Information Technology so as to enable them for job in sunrise industries.</li> <li>Illustrate various IT web services for betterment of knowledge.</li> </ul>

**Program : BSc.**

**PSO Department of Life Sciences**

- The program aims to develop a student-centric learning pedagogical approach, which has been further aimed at being outcome-oriented and curiosity-driven.
- The program develops an understanding towards the molecular logic of a living cell.
- Introduces to the underlying biological mechanisms at the organismic level.
- Helps to understand the adaptability of the organisms to the environment they live in, which reflects as transitions in body plans and biodiversity in animals and plants.
- Develops an understanding about the adaptations of organisms which are often physiological and have a genetic basis.
- Introduces a Comparative approach to Physiology.
- Develops an understanding of Homeostasis, which is due to stress and infections.
- Introduction of various tools of Biostatistics that can be used to manage and analyse Biological data.
- Introduction to Bioinformatics as a tool to manage Molecular data such as nucleotides and proteins and Comparative Genomics study to understand the phylogeny between taxa and species.
- To give students understanding of basic principles and history of Genetic discoveries. Comparison of Genome Organization in Pro and Eukaryotes and the ways in which Gene expression is regulated. Includes tools to understand and manage Molecular Bio-techniques along with Gene Mapping in various organisms.
- The course of Immunology is formulated to provide good knowledge of the immune system, its response and involvement in health and disease, deals with the section of immunology which encompasses the aetiology of various diseases caused by disorders of the immune system either due to its failure (Immunodeficiency), aberrant action (Hypersensitivity, Autoimmunity), or malignant growth of cellular elements (Cancer) and clinical management (Vaccines).
- Introduces to the students the basic concepts of Developmental Biology, which is the process by which animals and plants grow from a single original zygote, explains the molecular and cellular aspects of and the important genes involved in early development. It also looks at the applications of Developmental Biology such as Regeneration, Ageing, Cancer and Assisted Human Reproduction (ART).
- Describes the anatomical organization of the Nervous system and its early development. It also explains the cellular basis of nerve conduction within a neuron and transmission across synapses including a description of the neurotransmitters, also describes the structural and functional features of the various Sensory and Motor systems. It elaborates on some behavioural aspects such as sleep and memory. Examples of diseases that arise due to malfunction of the nervous system are described.

Life Sciences			
Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	US-FLS-101	Life Sciences at the Molecular and Cellular Levels	1. Molecular basis of water and study of Biomolecules- Carbohydrates and Proteins. 2. Concept of Prokaryotic and Eukaryotic cells – Microscopy and structure of Prokaryotic and Eukaryotic Cell. 3. Cell Organelles I-Nucleus, Cytoskeletal elements, Structure of cell wall.
1 <sup>st</sup>	US-FLS-102	Life Sciences as System, Organism at Community Level	1. Multicellularity and specialized function – Classification of organisms, Cell to Organism Level of Organization to study the various Life Processes. 2. Physiological System I - Transport of Nutrients and Circulation, Movement in Plants and Locomotion in Animals. 3. Physiological System II – Respiration, Excretion and Osmoregulation.
2 <sup>nd</sup>	USFLS201	Life Sciences at The Molecular and Cellular Levels	1. Macromolecules-Lipids, Nucleic Acids and Separation techniques. 2. Cell Organelles II – Cell Membrane, Endoplasmic Reticulum, Ribosomes, Golgi Apparatus and Lysosomes. 3. Energy Metabolism and Cell Division Mitochondria, Plastids, Peroxisomes and Glyoxisomes, Mitosis and Meiosis & their significance.
2 <sup>nd</sup>	USFLS202	Life Sciences as System, Organism at Community Level	1. Classical Genetics -Mendelian Inheritance, Chromosomal inheritance. 2. Post Mendelian Genetics - Modification of Mendel's laws Mutations, Principles of Genetic Engineering and its applications. 3. Ecology and Behavior - Principles of Ecology, Intraspecific Interactions, An overview of Ecological succession, Types of Ecosystems, Behavioral Ecology, Biostatistics.
			1. Homeostatic mechanisms and cellular communication, Neuroendocrine glands and their hormones, Structure and functions of Plant Growth Regulators

3 <sup>rd</sup>	USLSC 301- Paper I	Comparative Physiology	2. Control and Coordination in plants and animals: Human nervous system and behaviour and behavioural adaptations and plant movements. 3. Developmental Biology: Reproduction and Development, Gametogenesis and early development.
3 <sup>rd</sup>	USLSC302 Paper II	Life processes at the tissue, organ and organism levels: A Biochemical Approach	1. Basic biochemical processes in cells and tissues and their regulation and integration are the central component of a normal functional cell. 2. Enzymes and their environment. 3. Metabolism of Carbohydrates and its Bioenergetics 4. Catabolism of Lipids and Proteins
3 <sup>rd</sup>	USLSC 303- Paper III	Population approach: population and communities as regulatory unit	1. Evolutionary concepts and Population studies. Quantification is an important aspect of modern biology. A clear understanding of how to handle measurements and biological variation in a variety of experimental setups is obligatory. 2. Includes fundamentals of Biostatistics and Bioinformatics. 3. Elementary Bioinformatics has been added to introduce students to 'in silico' laboratories available
4 <sup>th</sup>	USLSC 401- Paper I	Altered Homeostasis due to stress and infections	1. Homeostasis to stress- Thermal physiology, Fuel Homeostasis during exercise and Stress 2. Homeostasis during infections-Host-parasite relationship, Defence mechanism in plants, defence mechanism in animals 3. Infectious Diseases-Vector borne, Viral disease, Bacterial disease, Fungal disease 4. Infection in plants
4 <sup>th</sup>	USLSC 402- Paper II	Life processes at the tissue, organ and organism levels: A Biochemical Approach	1. Metabolism – Carbohydrate anabolism, Lipid anabolism, Protein anabolism and Photosynthesis 2. Chemistry of nucleic acids, Transcription and Reverse transcription 3. Regulation of gene expression and Integration of metabolism- Translation, regulation of gene expression and its significance.
4 <sup>th</sup>	USLSC 403- Paper III	Population approach: Population and communities as regulatory unit	1. Evolution and its consequences-Origin of species, Human evolution and Evolution and Society 2. Biostatistics-Hypothesis and its types, errors in testing and its types, level of significance 3. Bioinformatics- DNA sequence Data analysis, Phylogenetic Analysis
5 <sup>th</sup>	USLSC 501- Paper I	Genetics and Immunology	1. The Genetic material- Discovery of the Genetic material, Organization of Eukaryotic and Prokaryotic Genome, Gene regulation in eukaryotes 2. Mechanisms of Inheritance and Variation- Inheritance pattern of Genetic Disorders in Humans, Introduction to Genetic Recombination, Mutational Variation 3. Overview and Cells and Organs of Immune System- Historical Perspective and overview of Immune System, Antigens and Antibodies and their Interactions 4. Antigen recognition and Effector Mechanisms- Recognition of antigens, Major Histocompatibility Complex, Maturation and activation of Lymphocytes, Immune Effector Mechanisms
5 <sup>th</sup>	USLSC 501- Paper II	Developmental Biology and Neurobiology	1. Developmental biology: Concepts, Model organisms and Techniques- History of Concepts in Development, Life Histories of Model Organisms highlighting some important concepts, Experimental approaches to studying development, Transgenic techniques and Gene silencing 2. Animal and Plant Development – Basic Cellular aspects- Development in Animals, Amphibian and Chick Development, Plant Development- Life Cycle and Development and Differentiation in <i>Arabidopsis thaliana</i> 3. General organization of Nervous System- Comparative overview of vertebrate and invertebrate nervous system, Development of the nervous system 4. Cellular organization of the Nervous System-Typical nerve cell, Types of cells, Chemical Basis of Neural transmission, Action Potential & propagation, Synaptic potential and synaptic integration, Synapse and synaptic transmission, Neurotransmitters
6 <sup>th</sup>	USLSC 601- Paper I	Genetics and Immunology-II	1. Organisms and techniques used in the understanding of Genetics - Genetic recombination and Gene mapping in Bacteria, Maize and Drosophila. Human Genetic Mapping and Human Genome Project. 2. Tools and Techniques in Molecular Genetic- Principle and Methodology of PAGE, RE, PCR, DNA Sequencing, FISH, Cloning of Insulin Gene 3. Hypersensitivity, Infectious diseases, Vaccines and Immunodeficiency- Hypersensitivity, Infectious Diseases and Vaccines, Passive and Active Immunization, Immuno deficiencies 4. Transplantation, Tumour Immunology, Tolerance and Autoimmunity- Types of Grafts, Tissue typing, Tumour specific and associated antigens, Establishment and maintenance of tolerance, Autoimmunity
6 <sup>th</sup>	USLSC 602- Paper II	Developmental Biology and Neurobiology-II	1. Animal and Plant Development – Basic Cellular and Molecular aspects- Potency: Totipotency, Pluripotency, Multipotency, Oligopotency, Differentiation, Molecular Basis of Development, Role of Homeotic Genes in Plant Development, Plant Genome project 2. Applications of Developmental Biology- Assisted Human Reproduction(ART), Regeneration, Aging, Cell Cycle, Apoptosis, Cancer 3. Sensory and Motor Systems- Introduction to Human Sense organs: receptors, receptor mechanisms and pathways, Motor System 4. Neurobiological basis of Behaviour-Sleep, Stages of sleep, Short term memory and Long term Memory, Neurobiological basis of diseases

**Program: B.Sc.**

**Specific Program: B.Sc. Mathematics**

**Program Specific Outcome (PSO):**

1. The learners' ability to mathematically formulate problems arising in other subjects like Physics, Statistics, Operations Research, Law, Economics etc. will get enhanced
2. The introduction of the self-learning of certain topics will enhance the learners' ability to understand, apply and experiment. This will give him the ability to think differently.
3. The theory of Mathematics applied using CAS techniques and numerical methods will teach the learner how to use Mathematics as a tool in real life problems without
4. The learner will be ready with the knowledge and working of computer software which will enhance his job opportunities.
5. The learner will start developing affinity for the subject of Mathematics and will like to pursue higher studies in the subject of Mathematics.

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	US-FMA-101	Calculus I	1. After studying the topic of Real numbers learner will understand how Mathematical structures are developed from axioms and some of them will start developing affinity for the subject of Pure Mathematics. 2. Learners' problem-solving skills in the basic mathematical concepts in Calculus like sequences, differential equation will get enhanced.
I	US-FMA-102	Discrete Mathematics I	1. The learner's understanding and problem-solving skills in the basic mathematical concepts of Discrete Mathematics will get enhanced and as a result he will start developing affinity for the subject. 2. The learner's mathematical abilities will be enhanced due to in depth and proper study of Logic and thus he will gradually be able to use appropriate mathematical language: notations, symbols and terminology, in both oral and written explanations.
II	US-FMA-201	Calculus II	1. Learners' problem-solving skills in the basic mathematical concepts in Calculus like Continuity, differentiation, curve sketching will get enhanced. 2. The learner will be introduced to numerical methods, for problem solving.
II	US-FMA-202	Discrete Mathematics II	1. The counting Principles studied in units 1 and 2 will help the learner master quantitative techniques required for many competitive examinations. 2. In unit3: Graph Theory, the learner is introduced to the study of graphs which have applications in many diverse areas like ecology, chemistry, information technology, computer science, electronics, statistics, sociology and management to name a few.
III	SMT 301	Calculus III	1. In this course on multivariable calculus, learners will understand how the concepts of neighbourhood of a point and limit of a function will be generalised to two and three dimensions. 2. Apart from theoretical background learners will be able to apply the concepts to find maxima and minima of functions of two variables, level curves, tangent planes and normal line to the surfaces in $\mathbb{R}^3$ .
III	SMT 302	Algebra III	1. In this course, the learner will gradually understand the connection between Linear Algebra and Euclidean Geometry. 2. The learner will understand the inter-relation between the three topics of system of equations, matrices and determinants which he has been learning from school days. 3. The learner will start from the Euclidean Geometry on $\mathbb{R}^2$ and $\mathbb{R}^3$ and be introduced to a special class of vector spaces with the concepts of length, angle and distance defined in the language of Linear Algebra.
			1. The learner's understanding and problem-solving skills on the basic mathematical concepts of Discrete Mathematics will get enhanced and they will start developing affinity for the subject of Mathematics.

III	SMT 303	Discrete Mathematics III	2. The counting Principles studied in unit 1,2 will make the learner master in the quantitative techniques required for many competitive Examinations.
IV	SMT 401	Calculus IV	1. After studying the topic of Integration with Newton's/Leibnitz definition of integral as an anti-derivative in the higher Secondary school, the learner is first time introduced to a new definition which gives integral of functions which are not continuous. 2. The learners are introduced to many applications of integration and Beta, Gamma functions which are the mathematical tools to get values for various integrals directly.
IV	SMT 402	Algebra IV	1. In this course on group theory, learners will be introduced to the relatively modern branch of mathematics namely, abstract algebra. 2. Learners will be introduced to the problems on symmetric groups, groups of symmetries of regular $n$ -gon, cyclic groups, generators of cyclic group, group isomorphism, and thereby classifications of all groups of order less than 8 up to isomorphism.
IV	SMT 403	Ordinary Differential Equation	1. This subject is a natural goal of elementary calculus. 2. It is the most important part of mathematics for understanding the physical sciences. 3. It is the source of most of the ideas and theories which constitute higher analysis. 3. 4.The topic of differential Equation has applications in economics, physics, chemistry, biological sciences and sociology to name a few.
3 <sup>rd</sup>	Not applicable		

**Program: B. Sc.  
PSO Microbiology**

1. Understanding the importance of microorganisms as they carry out diverse activities ranging from causing diseases in humans, animals and plants to production of highly useful products like antibiotics, enzymes, alcohol, fermented foods, and recycling of dead and decaying organic matter in the environment.

2. Gives a holistic understanding that explains the interconnected natures of different disciplines of Microbiology like Genetics, Virology, Immunology, Medical Microbiology, Environmental Microbiology, Biochemistry, Healthcare and Diagnostics, Applied and Industrial Microbiology.

3. Developing required attributes of knowledge, skills, temperament and ethics related to the subject of Microbiology for Career in Research and Industry.

**CO Microbiology**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	US-FMB-101	Basics of Microbiology, Cell - structure and function	1. Describe the fields and scope of Microbiology 2. To identify various prokaryotic and eukaryotic cells & their structures. 3. To understand & experimentally detect macromolecules found in a cell – Nucleic acids, Carbohydrates, Protein, and Lipids etc.
	US-FMB-102	Diagnostic and Clinical Microbiology	1. Able to identify the different parts of the microscope and understand the functions of the same. 2. To describe the use of stains, microscopy and culturing for identifying microorganisms and studying their growth patterns. 3. To apply various microscopes and staining processes in diagnosis of infection. 4. Understand the importance of Biocontainment and its methods.
	US-FMB-201	Study of Microbial diversity, Growth and Biostatistics	1. Introduces students to Biostatistics and Bioinformatics. 2. To identify the types of microorganisms and their role in the environment and industry. 3. Able to perform tests to identify bacteria and fungi, and studying microbial growth control method
2 <sup>nd</sup>	US-FMB-202	Microbial interactions and Instrumentation	1. Describe the interactions of microorganism with each other and humans. 2. To understand the role of microbes in human infections and environment. 3. Build a foundation on the concept of host defence and basics of immunology. 4. Understand the use of Instruments in diagnosis.
	USMB- 301	Biomolecules and Microbial taxonomy	1. Describe methodologies used for bacterial taxonomy and use of Bergey's manual of systematic bacteriology in classification. 2. Describe biomolecules in the biological system 3. Experimentally estimate the elements & macromolecules.
	USMB- 302	Environmental Microbiology	1. Understand existence of various microorganisms in the biosphere. 2. Explain the role of microorganisms in various ecological niches. 3. Learn the methods to study various ecological niches. 4. A deeper understanding of air, soil and aquatic habitats. 5. Describe the biogeochemical cycles and state the significance of each cycle. 6. Understand water and air quality standards
3 <sup>rd</sup>	USMB- 303	Introduction to Clinical Microbiology	1. Deeper understanding on microbes and their growth 2. Choose a suitable culture medium needed for cultivation and study of microorganisms. 3. Explain physical and chemical methods in microbial control 4. Describe the anatomy and explain the common infections of human respiratory, digestive, skin & nervous system 5. Understand epidemiology and importance of public health awareness
	USMB- 401	Metabolism and Basic Analytical Techniques	1. Understand the relevance of thermodynamics in the biological system and principle involved in Bioenergetics. 2. Discuss the link between anabolism and catabolism. 3. Gain knowledge of basic concepts related to enzymes such as mechanisms, activity, inhibition and regulation. 4. Understand basic principle, working of various analytical techniques and gain knowledge about its applications.
	USMB- 402	Applied Microbiology	1. Describe the cells and organs of the immune system; physical and chemical barriers used by the human body to prevent infection; process of phagocytosis and inflammation. 2. Understand interaction of microorganism in food, milk & milk products as well as factors affecting their growth in food. 3. Describe milk and food -borne pathogens and discuss the role of microorganisms in food spoilage. 4. Explain methods of preservation of various food products.
4 <sup>th</sup>	USMB- 403	Fermented foods, Sanitation and Microbial Ecology	1. Describe the microorganisms used in production of fermented foods and the process of fermentation with examples. 2. Gain knowledge of Food Safety and discuss techniques involved in ensuring food quality. 3. Understand behavior & activities of microorganisms in their natural environments. 4. Gain insight into important tools & techniques in Microbial Ecology.
	USMB- 501	Microbial Genetics	1. DNA Replication: The learner will understand the sequence of events, mechanism, enzymes and proteins involved in replication of DNA in prokaryotes and eukaryotes. 2. Transcription, Genetic Code and Translation: The student will know the central dogma of biology its two-step transcription and translation, maturation of RNA. 3. Mutation and DNA repair: The learner will know the concept of mutation, its types, causes and their effects. This module will also make them understand types of mutagens, damage to DNA due to mutagenesis, various mechanisms of DNA repair. 4. Genetic exchange: The student shall understand the various mechanisms of gene transfer in bacteria and genetic recombination. 5. Practicals: The students will acquire skill to perform the laboratory techniques and experiments based on the above topics.
	USMB- 502	Medical Microbiology and Immunology: Part- I	The students should be able to 1. Give details of the virulence factors and other features of the pathogen. 2. Correlate these virulence factors with the pathogenesis and clinical features of the disease. 3. Comment on the mode of transmission, and therefore modes of prophylaxis of these diseases Comment on the methods of diagnosis of the disease. 4. Conceptualize how the adaptive immune responses coordinate to fight invading pathogens and the organs and tissue involved 5. Correlate the structure & functions of immunoglobulin Understand the importance of cytokines, MHC, APCs, Cytokines, and the role in adaptive immunity. Understand the various antigen-antibody reactions.
5 <sup>th</sup>	USMB- 503	Microbial Biochemistry: Part – I	The students should be able to 1. Understand the architecture of the membrane and how solute is transported inside the cell. 2. Describe and explain the electron transport chains in prokaryotes and mitochondria and understand the mechanism of ATP synthesis. 3. Explain bioluminescence mechanism and its significance. 4. Discuss the experimental aspect of studying catabolism and anabolism and the various pathways for the breakdown of carbohydrates along with reactions in amphibolic pathways. 5. Describe various other pathways which produce different end products. 6. Describe anabolic reactions in carbohydrate synthesis. 7. Apply the concepts of energetics and catabolism in biodegradation of various substrates.
	USMB- 504	Bioprocess Technology: Part – I	The students should be able to 1. Describe the applications of microbes and its strain improvement in Industrial Microbiology. 2. Apply kinetic formula to determine growth and productivity parameters of batch, continuous, fed batch and solid substrate fermentations. 3. Describe the design of bioreactors for different applications and its process parameters. 4. Design media, growth conditions and techniques for producing and recovering different types of products of commercial value. 5. Learner will be well-versed with the containment and levels of containment.
			1. rDNA technology: This module will make the student understand the methods to construct recombinant DNA molecules, also know the tools required like vectors, restriction enzymes 2. Application of rDNA technology and Bioinformatics: The learner will know about applications of r DNA technology, through bioinformatics the student will understand the use of databases and software tools for understanding biological data.

6 <sup>th</sup>	USMB- 601	dDNA Technology, Bioinformatics and Virology	<p>3. Gene Regulation and Basic Virology: The student will know about gene expression in prokaryotes, operon as a unit of gene regulation, regulation of gene expression in prokaryotes and bacteriophages. The student will also understand about general structure, life cycle and classification of viruses.</p> <p>4. Advanced Virology: The learner will understand the basic structure and life cycle of different viruses and their cultivation. The student will get basic knowledge on Prions, Virioids and viruses causing cancer.</p> <p>5. Practicals: The students will acquire skill to perform the laboratory techniques and experiments based on the above topics. The students will understand computational biology and insilico analytical techniques.</p>
	USMB- 602	Medical Microbiology and Immunology: Part- II	<p>1. Give details of the virulence factors and morphological and cultural features of the pathogen.</p> <p>2. Correlate these virulence factors with the pathogenesis and clinical features of the disease.</p> <p>3. Comment on the mode of transmission, and modes of prophylaxis of these diseases.</p> <p>4. Given a few key clinical features, identify the likely causative agent.</p> <p>5. Comment on the methods of diagnosis of the disease.</p> <p>6. Understand the structure and role of T and B cells in generating adaptive immunity and thereby study effector responses in both Humoral &amp; Cell Mediated Immunity Acquire an understanding of the role of immune system in disease.</p> <p>7. Understand the activation of complement system.</p> <p>8. Apply the concept of immunity to prevention of disease by development of vaccines.</p>
	USMB- 603	Microbial Biochemistry: Part – II	<p>Understanding of the following metabolic process and their significance.</p> <ol style="list-style-type: none"> <li>1. Metabolism of Lipids, Fatty acids, Nucleotides and Amino acids</li> <li>2. Catabolism of Protein and aliphatic hydrocarbons</li> <li>3. Regulation of metabolic process at various levels</li> <li>4. Photosynthesis</li> <li>5. Metabolism of inorganic molecules with special reference to nitrate and sulfate</li> <li>6. Biological Nitrogen fixation</li> <li>7. Lithotrophy</li> </ol> <p>Acquire the following practical skills:</p> <ol style="list-style-type: none"> <li>8. Screening of microorganisms producing lipase, PHB and protease</li> <li>9. Detection of activity of enzymes which play an important role in amino acid and nitrate metabolism.</li> <li>10. Quantitative detection of important metabolic products such as protein and uric acid.</li> <li>11. Quantitative detection of an important metabolic enzymes-protease</li> </ol>
	USMB- 604	Bioprocess Technology: Part – II	<ol style="list-style-type: none"> <li>1. Understand the actual process involved in fermentations of important products.</li> <li>2. To apply the knowledge of applications of animal and plant tissue culture techniques.</li> <li>3. Learn the applications of immobilized enzymes in various fields.</li> <li>4. Understand the working of important instruments used in biochemical analysis and bioassay.</li> <li>5. Learn the salient features of quality management and regulatory procedures.</li> </ol> <p>Acquire the following practical skills:</p> <ol style="list-style-type: none"> <li>6. Techniques involved in running a bioassay, immobilization of cells &amp; sterility testing</li> <li>7. Preliminary techniques in animal &amp; plant tissue culture.</li> </ol>

<b>Program: B. Sc.</b> <b>Specific Program: F.Y.B.Sc. Zoology</b> <b>Program Specific Outcome (PSO):</b> 1. The program aims to offer the basic understanding about the Animal Kingdom and their functioning of various physiological, metabolic, biochemical aspects. 2. This Course takes the students through the fascinating world of animals and their habitats. 3. It also explains Economic and Ecological importance of the Animals and the Conservation Strategies. 4. Along with the Classical Zoology it also includes Biodiversity, Various aspects of Animal Biotechnology and understanding the principles of Instrumentation. 5. The course also brings an understanding of Population Studies which enables the students to strengthen their knowledge in Animal Sciences and helps to develop and understanding of scope			
Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	US-F-ZO-101	Diversity and Wonders of Animal Kingdom-I	<ul style="list-style-type: none"> <li>• Curiosity will be ignited in the mind of learners, to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology.</li> <li>• Learners would know and appreciate the treasure of Biodiversity, its importance and hence would contribute their best for its conservation.</li> </ul>
1 <sup>st</sup>	US-F-ZO-102	Laboratory Safety, Units of Measurement, Instrumentation and Animal Biotechnology	<ul style="list-style-type: none"> <li>• Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions.</li> <li>• Learners would understand recent advances in the subject and their applications for the betterment of mankind; and that the young minds would be tuned to think out of the box.</li> <li>• Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.</li> </ul>
2 <sup>nd</sup>	US-F-ZO-201	Diversity and Wonders of Animal Kingdom, Population Ecology and Wild Life Management	<ul style="list-style-type: none"> <li>• Curiosity will be ignited in the mind of learners, to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology.</li> <li>• This unit would allow learners to study about nature of animal population, specific factors affecting its growth and its impact on the population of other life form.</li> <li>• Learners would be inspired to choose career options in the field of wild life conservation, research, photography and ecotourism</li> </ul>
2 <sup>nd</sup>	US-F-ZO-202	Nutrition, Public Health and Hygiene and Common Diseases	<ul style="list-style-type: none"> <li>• Healthy dietary habits would be inculcated in the life style of learners in order to prevent risk of developing health hazards in younger generation due to faulty eating habits.</li> <li>• Promoting optimum conservation of water, encouragement for maintaining adequate personal hygiene, optimum use of electronic gadgets, avoiding addiction, thus facilitating achievement of the goal of healthy young India in true sense.</li> <li>• Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions which would lead to psychologically strong mind set promoting positive attitude important for academics and would be able to acquire knowledge of cause, symptoms and precautions of infectious diseases.</li> </ul>

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I [2014-2017]	4.4	Archeology of India	1. Creating awareness about the theoretical foundations of Archeology 2. Teaching basics of field Archeology 3. Understanding the variation in Archeological data in context 4. Methods of interpretation of Archeological data and analyses
I [2017-2018]	4.15	Introduction to Archeology	no course outcomes have been listed in the mumbai university website
II [2014-17]	4.4	Museology of India	1. Creating awareness about the theoretical foundations of Museology 2. Understanding various functions and scope of the Museum 3. Understanding relation between Museum and society
II[2017-18]	4.15	Cultural History of Mumbai	No course outcomes have been listed in the Mumbai University website
III	UAAIC 301	India through the Ages	1. Study of Cultural History of India. 2. Understanding various phases in and the process of the evolution of Indian Culture. 3. Review of the Theoretical framework in which the Indian Culture has been understood by the scholars.
III	UAAIC 302	Social history of India	1. Study of Basic Structure of Indian Society. 2. Study of principles guiding the Indian Social Institution. 3. Study of important feature of Indian Society.
IV	UAAIC401	India through the Ages II	1. Study of Cultural History of India. 2. Understanding various phases in and the process of the evolution of Indian Culture. 3. Review of the Theoretical framework in which the Indian Culture has been understood by the scholars.
IV	UAAIC 402	Economic history of India	1. Study of Basic Structure of Ancient Indian Economic Institution. 2. Study of principles guiding the set up. 3. Study of important feature of Ancient Indian Economic Institutions.

**Program: B. A.**

**Specific Program: B.A. Economics**

**Program Specific Outcome (PSO):**

1. Develops an understanding of the core micro and macroeconomic principles and models and how they apply to a wide range of real-world issues.
2. Enhances the ability to critique and create economic research by mastering the theoretical and applied tools.
3. Familiarise with the salient developments in the Indian and world economy, in both present-day and historical contexts.
4. Develops research and advocacy skills through critical pedagogies in the classroom and through individual and group applied projects.

**Program: Mass Media****Specific Program: BAFTNMP****Program Specific Outcome (PSO):**

- 1.Introduces a critical, intersectional lens to analyse institutional structures and social realities.
- 2.Maps the complexities and nuances of social processes and social structures with particular reference to India
- 3.Gives a holistic understanding that explains the interconnected natures of oppressions and underlines the importance of institutional accountability
- 4.Develops research and advocacy skills through critical pedagogies in the classroom and through individual and group applied projects
- 5.Develops an overall and well-rounded understanding of sociology through theoretical paradigms, methodological debates and the study of substantive domains
- 6.Build's skills that enhance prospects for employment in various fields like governance and policy, development and intervention, electronic visual and print media, human resource and personnel management, nongovernmental organizations.

**Course Outcome (COs):**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
I	UHFFT101	Effective Communication	<ul style="list-style-type: none"><li>▪ To make the students aware of functional and operational use of language in media.</li><li>▪ To equip or enhance students with structural and analytical reading, writing and thinking skills.</li><li>▪ To introduce key concepts of communications.</li></ul>
I	UHFFT102	Foundation Course I	To introduce students to the overview of the Indian Society. To help them understand the constitution of India. <ul style="list-style-type: none"><li>▪ To acquaint them with the socio-political problems of India</li></ul>
I	UHFFT103	Fundamentals of Mass Communication	To introduce students to the history, evolution, and the development of Mass Communication in the world with special reference to India. To study the evolution of Mass Media as an important social institution. To understand the development of Mass Communication models. To develop a critical understanding of Mass Media. <ul style="list-style-type: none"><li>▪ To understand the concept of New Media and Media Convergence and its implications.</li></ul>
I	UHFFT104	History of Arts	<ul style="list-style-type: none"><li>▪ To understand the basics and genres of Music, dance and theatre.</li><li>▪ To learn the basics of various acting schools and the art of drama.</li><li>▪ To learn the evolution of visual techniques from painting to cinema &amp; the relationship between music and dance in relation to Filmmaking.</li></ul> Students should be exposed to the canonical text of Natyashastra from where all the traditional performing arts have emerged in India
I	UHFFT105	Basic Photography	<ul style="list-style-type: none"><li>▪ To learn the basics of art of Photography.</li><li>▪ To develop basic photographic sense and knowledge.</li><li>▪ To understand the basic intricacies &amp; aesthetics involved in taking a photograph.</li></ul> To understand what makes a good picture.
			To help learners understand basics of visual communication

I	UHFFT106	Technology in Media I	<p>To aid learners understand the basics of graphic designing</p> <p>To prepare learners with introductory knowledge of design software used in media industry</p> <ul style="list-style-type: none"> <li>To help learners work on small scale projects with hands-on training of computer-aided technology</li> </ul>
II	UHFFT201	Introduction to Literature and Creative Writing	<p>To introduce basic tenets of Indian literature including regional literature</p> <p>To introduce and appreciate various forms of literature (Novel, Poetry, Drama, Essay)</p> <p>To help build skills for creative writing</p> <p>To help understand the structure of Story, poetry and drama</p> <p>To introduce writing for internet</p>
II	UHFFT202	Foundation Course - II	<p>To acquaint the students with fundamental political concepts essential for understanding political systems and theories.</p> <p>To orient the students to the Indian Constitution and the functioning of the Indian political system.</p> <p>To provide the students with a strong base in the 'Indian Political System' and to expose them to its dynamics and complexities.</p> <p>To establish a link between Politics and Media</p>
II	UHFFT203	Film Appreciation	<p>To introduce students to the history, evolution and the development of Mass Communication in the world with special reference to India.</p> <p>To study the evolution of Mass Media as an important social institution.</p> <p>To understand the development of Mass Communication models.</p> <p>To develop a critical understanding of Mass Media.</p> <p>To understand the concept of New Media and Media Convergence and its implications.</p>
II	UHFFT204	Basics of Cinematography	<p>To understand the importance of cinematography in film making</p> <p>To enhance the basic knowledge about lighting and its use</p> <p>To understand various equipment's required for various form of lighting</p> <p>To understand the basics of various camera, lenses and digital cinematography</p>
II	UHFFT205	Introduction to Non-Fiction Films	<p>To understand non-fiction as a form of storytelling</p> <p>To be familiar history of non-fiction film</p> <p>To explore key issues in the ethics of documentary representation</p> <p>To learn to critically analyse non-fiction films</p>
II	UHFFT206	Technology in Media-II	<p>To introduce editing software used in media industry</p> <p>To help learners understand the importance of editing in multimedia</p> <p>To prepare learners with basic knowledge of sound and video editing</p> <p>To help learners work on small scale projects with hands-on training of computer-aided technology</p>
III		Introduction to Direction for Television	<p>Understanding of the process of Direction for Television</p> <p>Theoretical framework and practical approach to Direction</p> <p>Creating Ads for various categories</p>
III		Basics of Cinematography-2	<p>To understand the basic structure of film and digital camera</p> <p>To enhance the basic knowledge about lighting and its use</p> <p>To understand various equipments required for various form of mood lighting</p> <p>To understand basics of various digital cameras, lenses and digital cinematography</p> <p>To learn the basics of special effects cinematography</p>

			To understand the needs of co-creators
III		Understanding TV formats & Genres	To understand how television programming works To learn about TRPs and drama creation To study the impact of niche programming To learn about various genres of television programming
III		Concepts of Story Boarding	To understand the need for storyboarding To learn the fundamentals of shoot taking and Division To understand various storyboarding techniques To understand the importance of perspective and lighting while storyboarding
III		Graphics and Post production - Flash, Editing software, After effects	
III		Production/Ad film making	To introduce the process of 25 mins Television series making To understand the production pipeline of 25 mins Television series making process   To understand the entire workflow 25 mins Television series making process To gain exposure on various cameras and software used for production of 25mins Television series making
IV		Introduction to Direction for Film	To understand the need for direction in films To understand the role played by a director To understand the Qualities required to be a director To learn how to manage creativity and creative team To learn about drama and continuity for films To learn the details, involve in the production of a feature films
IV		Basics of Visual Communication	To understand Basic concepts in Visual Communication To understand the nuances of visual literacy, <ul style="list-style-type: none"> <li>• Methods used for analyzing visual media,</li> <li>• Theories on the relationship between visual communication and culture.</li> </ul>
IV		Drama Production	<ul style="list-style-type: none"> <li>• to provide an introduction to the process of digital short film production for the purpose of making works of drama and fiction.</li> <li>• To enable the development of the practical and theoretical skills in pitching, planning, writing, shooting and editing .</li> <li>• To finally produce a coherent and competent fictional moving image project.</li> </ul>
IV		Intermediate Practical Film Making (Ad and Short Fiction Film)	To understand the production pipeline of film making process in advertisement film making To introduce the process of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film making To understand the entire workflow in Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film To gain exposure on various cameras and software used for production of Advertisement Film (product as well as PSU) Corporate AV and In-depth Multiple Characters Single Multiple Location Short Film



V		Laws related to Films, TV and Internet	<ul style="list-style-type: none"> <li>To understand the various laws pertaining to media</li> <li>To understand the need and importance of Copyright</li> <li>To learn about intellectual property rights</li> <li>To understand about media business ethics and issues pertaining to it</li> </ul>
V		New Media Theory and Practice (With advanced Web design and app making)	To learn the latest software for creating websites, including Adobe Dreamweaver and Java To learn Audio and Video streaming and how to embed audio and video content in web pages Frames, Layers & SEO Creating Vernacular language websites New Media, Gaming and Social Media
V		Understanding Indian Contemporary Cinema	To understand the evolution and growth of Cinema as a medium of Mass Communication in India . To study the relevance of Indian Cinema and its different genres amongst audiences To Study the contemporary mainstream and art house Indian films , regional language films , film directors and their contribution to the Indian film world To understand trends in film making & marketing
V		Introduction to Media Project Management	To educate about the basics involved in a media project management To educate about the basic projectproduction workflow and management To educate about the role of a project manager To help understand the details involving a new business project or proposal
V		Basics of Marketing and Publicity	To introduce the basics of marketing and publicity design To educate about the importance of marketing in today's world To help understand the various tools needed for marketing and publicity design To learn about the marketing plan and market research To help get insight into consumer consumption behavior
V		Advanced Practical Film Making - Music Videos	To introduce the process of Music Video To understand the production pipeline of Music Video To understand the entire workflow in Music Video making process To gain exposure on various cameras and software used for production of Music Video
VI		Final Project-Short Film (30 minutes)	<ul style="list-style-type: none"> <li>Making a Comprehensive film</li> <li>Writing an original story , producing ,directing the film and distribution of the film</li> <li>To learn to create a blog, FB page and website for the film.</li> </ul>

**Program: Bachelors of Arts**

**Specific Program: B.A. in Multimedia and Mass Communication**

**Program Specific Outcome (PSO):**

1. To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions in Media to simple and complex problems related to human, technology and environmental factors.
2. To appreciate the interdisciplinary aspect of Media and
- 3 .To work effectively as a part of a media team to achieve a common stated goal.
4. To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. in Media
- 5 .To develop an aptitude to engage in continuing educational and professional development related to Media
6. Most Media courses keep evolving and so do the courses, the above mentioned are some of the objectives that need to be adhered to by students in Media academics.

The syllabus spanning three years covers the industry endorsed relevant courses. The students will be ready for the jobs available in different fields of media.

**Course Outcome (COs):**

Semester	Course-Code	Course Title	Course Outcome (in bullets)
1 <sup>st</sup>	UHFMMEC-101	EFFECTIVE COMMUNICATION-I	1. To make the students aware of functional and operational use of language in media. 2.To equip or enhance students with structural and analytical reading, writing and thinking skills. 3. To introduce key concepts of communications
	UHFMMFC-102	FOUNDATION COURSE FOR MEDIA-I	1. To introduce students to the overview of the Society with special reference to India
	UHFMMCM-103	COMPUTERS & MULTIMEDIA -I	1. To help learners make media industry ready. This will help learners to be aware of the minimum requirement of the software when stepping out in the industry. 2. To introduce the media software to make the learners understand what goes behind the scene and help them choose their stream. 3. To prepare learners skilled enough for independency during project papers in TY sem VI. 4. To help learners work on small scale projects during the academic period
	UHFMMFMC-104	FUNDAMENTALS OF MASS COMMUNICATION	1.To introduce students to the history, evolution and the development of Mass Communication in the world with special reference to India. 2.To study the evolution of Mass Media as an important social institution. 3.To understand the development of Mass Communication models. 4. To develop a critical understanding of Mass Media. 5. To understand the concept of New Media and Media Convergence and its implications.
	UHFMMHP-105	INDIAN & WORLD HISTORICAL PERSPECTIVES AND MEDIA	1. To acquaint the student with global happenings which have made historical milestones, changing power equations. 2. To help the student understand the role of media in these events. 3. To understand from global events - Africa in modern times, refugee problems, humanitarian work, human rights violation, Asian perspective and of course, India.
	UHFMMECO-106	INTRODUCTION TO ECONOMICS & MEDIA	1.To introduce the basic concepts of Micro & Macro Economics 2. To provide a basic understanding of the Indian economy is crucial for media students. 3. To sensitise the learners on economic issues relevant to India, 4. To understand the augmenting importance of the media in highlighting and debating economic concerns,
Semester	Course-Code	Course Title	Course Outcome (in bullets)
2 <sup>nd</sup>	UHFMMEC -201	EFFECTIVE COMMUNICATION -II- CONTENT WRITING	1. To provide students with tools that would help them communicate effectively. 2. The learn to write good content across Media
	UHFMMFC-202	FOUNDATION COURSE -II	1. To introduce students to the overview of the Indian Political System & the Political Dynamics in India. 2.To help them understand the constitution of India.
	UHFMMMP-203	INTRODUCTION TO MEDIA PSYCHOLOGY	1. To impart knowledge of the basic concepts and modern trends in psychology. 2. To provide an interdisciplinary study of concepts in the field of media, communication and psychology. 3. To expose students to a multicultural understanding, use, influence and impact of media.

	UHFMMEL-204	INTRODUCTION TO ENGLISH LITERATURE	1. To give exposure to media students to various forms of Literature 2. To make them understand how literature reflects contemporary period 3. To identify relation between Literature and Media
	UHFMMPM-205	PRINCIPLES OF MARKETING & MANAGEMENT	1. To understand the basic concepts of marketing 2. To understand how advertising & other media are an integral part of marketing 3. To understand marketing in a globalized world 4. To understand the basic principles of management & its application in media & media Organizations
	UHFMMCMM-206	COMPUTER & MULTIMEDIA - II	1. To help learner be media industry ready. 2. To introduce the different media software to make the learner understand what goes behind the scene and help them choose their stream. 3. To prepare learner enough skills to work independently during project papers in TY Sem.VI.
<b>Semester</b>	<b>Course-Code</b>	<b>Course Title</b>	<b>Course Outcome (in bullets)</b>
3rd	BAMMIMS -301	INTRODUCTION TO MEDIA STUDIES	1. To understand Media Theories an their application in today's world. 2.To understand the evolution and development of media studies and theory over the years. 3. To create a sound foundation for the Media papers
	BAMMICS-302	INTRODUCTION TO CULTURAL STUDIES	1. To understand the relevance of cultural studies in Media 2. To understand the evolution and development of cultural studies and theory over the years. 3. To create a sound foundation of Culture in Media papers
	BAMM IFS- 303	INTRODUCTION TO FILM STUDIES	1. To understand the evolution and growth of Cinema as a medium of Mass Communication 2. To study the relevance of Cinema and the different genres in Cinema over the years. 3.A Study of prominent International and Indian films , film directors and their contribution to the film world 4. To understand trends in film making & marketing
	BAMMIPR- 304	IINTRODUCTION TO PUBLIC RELATIONS	1. To understand the evolution and growth of Public Relations as a medium of Mass Communication 2. The relevance of Public Relations as a Corporate Communications tool 3. To understand emerging trends in Public Relations in India and Globally
	BAMM ICW- 305	INTRODUCTION TO CREATIVE WRITING	1. To understand the concepts and genres in Creative Writing 2. To understand the existing and evolving trends in Creative Writing 3. To understand the application of Creative Writing in Media
	BAMMITH- 306	INTRODUCTION TO THEATRE	1, To understand the relevance of theatre as a medium of Mass Communication 2. To understand the evolution and development of Theatre over the years 3. To learn and appreciate the different genres and current trends in Theatre
<b>Semester</b>	<b>Course code</b>	<b>Course Title</b>	<b>Course Outcome (in bullets)</b>
4th	BAMMIAD- 401	INTRODUCTION TO ADVERTISING	1. To understand the concepts ,terminology and nuances of Advertising 2. To understand the evolution and development of Advertising over the years as a medium of mass communication 3. To understand the current and future trends in Advertising.
	BAMMIJO-402	INTRODUCTION TO JOURNALISM	1.To understand the concepts ,terminology and nuances of Journalism 2. To understand the evolution and development of Journalism over the years as a medium of mass communication 3. To understand the current and future trends in Journalism

	BAMMMMR-403	INTRODUCTION TO MASS MEDIA RESEARCH	1. To understand the concepts ,terminology and basic foundation of Mass media research 2. To understand the evolution and development of Mass media research over the years 3. To understand the need for good research in Media
	BAMMRTV-404	INTRODUCTION TO RADIO & TELEVISION	To understand the concepts ,terminology and nuances of Radio and Television 2. To understand the evolution and development of Radio and Television over the years as media of Mass Communication 3. To understand the current and evolving trends in Radio and Television
	BAMMORB-405	ORGANIZATIONAL BEHAVIOUR	1. To understand and appreciate the need for a human approach in different organisations. 2. To study the growth and development of organizations and the different theories. 3. To study the impact of hierarchy, groups and leadership qualities for a successful organization
	BAMMPHG-406	INTRODUCTION TO PHOTOGRAPHY	1. To understand the concepts ,terminology and nuances of Photography 2. To understand the evolution and development of Photography over the years as a medium of mass communication 3. To understand the relevance of Lighting, angles and optimum use of camera. 4. To understand the current and evolving trends in Photography
<b>Semester</b>	<b>Advertising Specialization</b>	<b>Course code</b> <b>Advertising Specialization</b>	<b>Course Title</b> <b>Advertising Specialization</b> <b>Course Outcome (in bullets)</b> <b>Advertising Specialization</b>
5th	BAMMBP -501	MEDIA PLANNING AND BUYING	1.To develop knowledge of various characteristics of media. 2.To understand procedures, requirements, and techniques of media planning and buying. 3.To learn the various media mix and its implementation 4.To understand budget allocation for a Media plan
	BAMMCOB-502	CONSUMER BEHAVIOUR	1.To understand role of marketing in influencing consumer behaviour. 2.To analyze the role of marketer& the consumer in advertising. 3. To sensitize the students to the changing trends in consumer behaviour.
	BAMMBRB-503	BRAND BUILDING	1.To study the concept of Brands 2.To study the process of building brands 3.To study its importance to the consumer and advertisers
	BAMMCPW-504	COPYWRITING	1.To familiarize the students with the concept of copywriting as selling through writing 2.To learn the process of creating original, strategic, compelling copy for various media 3. To learn the rudimentary techniques of advertising - headline and body copywriting.
	BAMMACS-505	ADVERTISING IN CONTEMPORARY SOCIETY	1.To understand the different environments in countries across the globe 2.To understand Liberalization and its impact on the economy 3. To study contemporary advertising, impact of culture &society

	BAMMADD-506	ADVERTISING DESIGN	1.To make students understand the process of planning & production of advertisement 2.To highlight the importance of visual communication 3.To provide practical training in the field of advertising	
Semester	Advertising Specialization	Course code Advertising Specialization	Course Title Advertising Specialization	Course Outcome (in bullets) Advertising Specialization
6th	BAMMMBP -601	ADVERTISING & MARKETING RESEARCH	1.To inculcate the analytical abilities and research skills among the students. 2.To understand research methodologies – Qualitative vs Quantitative 3.To discuss the foundations of Research and audience analysis that is imperative to successful advertising. 4.To understand the scope and techniques of Advertising and Marketing research, and their utility	
	BAMMCOB-602	LEGAL ENVIRONMENT & ADVERTISING ETHICS	1.To acquaint students to the Legal Environment in contemporary India highlighting the relevance of the same with reference to Advertising media. 2. To emphasise & reiterate the need to have ethical practices in the field of advertising media both in India & internationally. 3.To appreciate the role of advertising in contemporary consumerism, the need for consumer awareness & consumer protection	
	BAMMFIM-603	FINANCIAL MANAGEMENT	1.To provide a brief over view of the basic concepts, goals functions and types of finance available for new and existing business and marketing units. 2.To enable the understanding of the need for financial planning through Budgets and their benefits. 3. To enable students to evaluate the financial implications of marketing decisions through simple analytical tools.	
	BAMMAGM-604	AGENCY MANAGEMENT	1.To acquaint the students with concepts, techniques for developing an effective advertising campaign. 2.To familiarize students with the different aspects of running an ad agency 3.To inculcate competencies to undertake professional work in the field of advertising.	
	BAMMDDM-605	DIRECT AND DIGITAL MARKETING	1.Understand digital marketing platform 2.Understand the key goals and stages of digital campaigns 3.Understand the use of key digital marketing tools 4. Learn to develop digital marketing plans	
	BAMMCOI -606	CONTEMPORARY ISSUES	1.To understand and analyse some of the present day environmental, political, economic and social concerns and issues . 2.To highlight the importance of human rights and its implementation in India. 3.To understand the present day problems and challenges and its implications on development.	

Semester	Journalism Specialization	Course code Journalism Specialization	Course Title Journalism Specialization	Course Outcome (in bullets) Journalism Specialization
5th		BAMMREP-501	REPORTING	1.To enable students to become Reporters, which is supposed to be a prerequisite while entering into the field of Journalism. 2.To make them understand basic ethos of the news and news-gathering. 3.To prepare them to write or present the copy in the format of news. 4. To train them to acquire the skills of news-gathering with traditional as well as modern tools.
		BAMMEDT-502	EDITING	1.As an important segment of newspaper production, editing is a vital function. The syllabus lays stress on language skill improvement 2.The syllabus encompasses the current trends of digital media as well as writing for e editions of papers. 3.Editing of editorials, columns, etc is included to acquaint the students about responsible journalism.
		BAMMJPO-503	JOURNALISM & PUBLIC OPINION	1.To assess the importance of the media vis a vis the public 2.To project a fair idea of the role of the media in creating and influencing Public Opinion 3. To analyze the impact of the media on public opinion on socio political issues
		BAMMFOP-504	FEATURE & OPINION	1.Understanding the differences between reporting and feature writing 2.Understanding the relevance of op-ed , columns , reviews in newspapers and magazines 3.Learning the skills for writing features/ opinion/soft stories and of interviewing
		BAMMIRJ-505	INDIAN REGIONAL JOURNALISM	1.Study of the history and role of Indian press other than in English. 2.Understand the contribution and role of certain publications and stalwarts 3.Study of the regional press and television of today.
		BAMMNMM-506	NEWSPAPER & MAGAZINE MAKING	1. To study the design, elements of the newspaper and magazine 2.To study space distribution 3.To get exposure to the latest design software 4.To study the process of planning and production of newspaper and magazine
Semester	Journalism Specialization	Course code Journalism Specialization	Course Title Journalism Specialization	Course Outcome (in bullets) Journalism Specialization
6th		BAMMPRL-501	PRESS LAWS	1. To understand the Indian legal Hierarchy, The Constitutional Laws 2. To study media laws with respect to the Press and other Media Laws
		BAMMBRJ-502	BROADCAST JOURNALISM	1. To understand the Indian legal Hierarchy, The Constitutional Laws 2. To study media laws with respect to the Press and other Media Laws 3.To introduce Social Media - Convergence,Multimedia,Online Journalism.
		BAMMMBJ-503	MAGAZINE AND BUSINESS JOURNALISM	1. To understand the nuances of business journalism and an overview of the economy 2.To study the magazine sector and its specialization
		BAMMIGM-504	ISSUES OF GLOBAL MEDIA	1.Study the role of media in the 21 <sup>st</sup> Century and the challenges facing traditional media 2. Familiarize students about regional versus global media 3. Highlight social media's relevance in information dissemination