

**1.1.3 - Total number of courses having focus on employability/ entrepreneurship/skill development offered by the University during the year**

**List of courses with focus on employability/ entrepreneurship/ skill development**

<b>Name of the Course</b>	<b>Course Code</b>	<b>Year of introduction</b>	<b>Activities/Content with direct bearing on EM/ Entrepreneurship/ Skill development</b>
FEB230101	Civil Engineering Societal & Global Impact	2023-24	EM:Evaluate the potential of Civil Engineering for employment creation and its contribution to the GDP.
FEB230001	Professional Practice, Law and Ethics	2023-24	SD:To familiarize the students to what constitutes professional practice, introduction of various stakeholders and their respective roles; understanding the fundamental ethics governing the profession
FEB230102	Mathematics to Civil Engineering	2023-24	SD: Mathematical concept and various techniques required for the analysis and design structures.
FEB240101	Building Material and Construction	2023-24	EM:To identify selection, basic parts, operation, factors affecting output and selection of different types of Excavating equipment SD: Develop teamwork and problem- solving SDs necessary in the construction industry.
FEB230103	Mechanics of Solid	2023-24	SD: Apply the fundamental principles, concepts and techniques theoretically and practically with emphasis on solution of engineering mechanics and strength of material problems

FEB230104	Building Planning & Drawing	2023-24	SD: Understanding the fundamental concepts of planning, its principles, building bye laws and services EM: Use bye laws and services for generating building layout and making working drawings of buildings. EP : Understand, interpret and prepare working drawings, foundation plans, perspective drawing and other executable drawings and prepare the drawing using software
FEB240103	Fluid Mechanics and Hydraulics	2023-24	SD: Understanding the different type of flow , stability analysis of floating body , calculate the fluid properties and hydrostatic force
FEB230105	Surveying and Geomatics	2023-24	SD: Preparation of map and identifying the area and volume of different shape. Demonstrate different surveying and levelling techniques using standard and modern surveying instruments,
FEB240104	Geology and Geotechnical Engineering	2023-24	SD: Learn the advance properties of soil , their interrelationship and its application in construction project. EM: Experimental Knowledge of determination of advance properties of soil in the laboratory.
FEB240105	Structural Analysis	2023-24	SD: To acquire the SD for the solution of static indeterminate structures using slope deflection , moment distribution and matrix methods and calculation of forces using Influence Line Diagram for moving load.
FEB240001	Disaster preparedness and Planning Management	2023-24	SD: Understanding disaster management concepts

FEB240102	Concrete technology and Maintenance of Concrete Structure	2023-24	SD: Identification of various causes responsible for the deterioration of concrete structures EM: Application of various retrofitting and repairing techniques to deteriorate concrete structures
FEB150001	ENGINEERING ECONOMICS & MANAGEMENT	2018-19	EP: Basic ENand its role in Economical growth/development in India
FEB150101	HYDROLOGY AND WATER RESOURCES ENGINEERING	2018-19	EM: Flood estimation and forcasting using probability plotting methods SD : To evaluate various parameters of Hydrology
FEB150102	SOIL ENGINEERING-I	2018-19	SD: Learn the advance properties of soil , their interrationship and its application in constuction project. EM:Experimental Knowledge of determination of advance properties of soil in the laboratory.
FEB150103	STRUCTURAL ANALYSIS II	2018-19	SD: To acquire the SD for the solution of static indeterminate structures using slope deflection , moment distribution and matrix methods and calculation of forces using Influence Line Diagram for moving load.
FEB150104	TRANSPORTATION ENGINEERING-I	2018-19	SD: Learning concepts of road network design, geometric elements of highway and its design, various materials used for construction of road, design procedure of roads, various types of road construction methodologies, various types of highway economic models, road safety audit procedure, basic fundamentals of traffic and their significance in facility design EP: understanding of geometric design, pavement material, maintenance strategies and traffic fundamentals and their solution leads to start business
FEB150105	Air Pollution Control	2018-19	SD:6. Follow the laws and regulations of air pollution prevention and control at the local, state and country level

FEB150106	INFRASTRUCTURE PLANNING	2018-19	EM: Learning of Planning and appraisal of major infrastructure projects, Scheduling and management of planning activities
FEB160002	REMOTE SENSING AND GIS	2018-19	EM: knowledge of system designed to capture, store, manage, analyze, manipulate, and present geographic or spatial data
FEB160101	ENVIRONMENTAL ENGINEERING	2018-19	SD: Understanding of different pollutions and its impact to the environment EM: Applying different disposal techniques for soil, marine water and solid waste
FEB160103	SOIL ENGINEERING-II	2018-19	SD: Learn the advance properties of soil , their interrelationship and its application in construction project. EM:Experimental Knowledge of determination of advance properties of soil in the laboratory.
FEB160104	TRANSPORTATION ENGINEERING-II	2018-19	SD: Understand the concept of various basic elements of railway and airway their importance, functions EM:knowledge of designing various elements of railway and airway
FEB160105	CONCRETE TECHNOLOGY & REPAIR STRATEGY	2018-19	SD: Identification of various causes responsible for the deterioration of concrete structures EM: Application of various retrofitting and repairing techniques to deteriorate concrete structures
FEB160106	Disaster Assessment using Geospatial Techniques	2018-19	SD:To understand Impacts of Disasters Key Skills
FEB170001	Integrated Personality Development	2018-19	SD:Enhance verbal and non-verbal communication for effective interpersonal interactions.
FEB170002	METRO SYSTEMS AND ENGINEERING	2018-19	EM:It assists in optimization of metro infrastructure investment and running of efficient train services on the network.

FEB170101	PROFESSIONAL PRACTICE AND VALUATION	2018-19	EM: To understand the process of tender and contract SD: Working out detailed quantity estimation, rate analysis and valuation of structure
FEB170102	STRUCTURAL DESIGN -I	2018-19	EM: Understanding various methods of designing as per Indian code provision for design of residential structure, design of retaining wall, etc. & implement into real R.C.C. structure design.
FEB170103	EARTHQUAKE ENGINEERING	2018-19	SD: To acquire the knowledge of structural dynamics of SDOF and MDOF structures. EM: Understanding the design philosophy for the earthquake resistant design of structures.
FEB170104	Urban Transportation Planning	2018-19	SD: 1. Know about urban transportation system planning process, land use planning, different urban mass transit systems-their merits and limitations, different types of transportation surveys, travel demand modeling, urban mass transit system operation and urban goods movement
FEB170105	PROJECT-I	2018-19	SD: Identification of problem statement from the observation EM: Problem solving methodology for complex problem of engineering
FEB180101	CONSTRUCTION MANAGEMENT & EQUIPMENT	2018-19	SD: Understanding the various methods of management for the construction of any kind of structure
FEB180102	Structural Design -II	2018-19	SD: students can learn about various software used in civil engineering
FEB180103	Dock Harbour and Airport Engineering	2018-19	EM: To make students aware of design of runway and taxiways at Airport

FEB180104	IRRIGATION ENGINEERING	2018-19	SD: understand various methods of irrigation. EM: Design of hydraulic structures such as canal and diversion structures.
FEB180105	PROJECT -II	2018-19	SD: Identification of problem statement from the observation EM: Problem solving methodology for complex problem of engineering
FEM110001	RESEARCH SD AND METHODOLOGY	2020-21	SD: To impart the knowledge for writing various statements and research paper, To impart the knowledge about copyright, IPR patent and plagiarism
FEM115201	ADVANCED CONCRETE DESIGN	2020-21	EM: Design and detailing of various structural elements of reinforced concrete structures as per IS code provisions
FEM115202	ADVANCED STRUCTURAL ANALYSIS	2020-21	SD: Analysis of different structural elements using Matrix & Finite Element Method
FEM115203	ANALYTICAL AND NUMERICAL METHODS FOR STRUCTURAL ENGG.	2020-21	SD: Mathematical concept and various techniques required for the analysis and design structures.
FEM115204	Theory of Structural Stability	2020-21	To provide a clear understanding of the principles of structural stability and the behavior of structures under different loading conditions
FEM115205	STRUCTURAL HEALTH MONITORING AND RETROFITTING OF STRUCTURES	2020-21	SD: Understanding the various types of sensors & techniques for the health monitoring of structures. EM: Applying the various types of retrofitting techniques to damaged structures.
FEM115206	Structural Optimization	2020-21	SD : Formulate structural optimization problems in the framework of calculus of variations as well as finite-variable optimization

FEM120001	RESEARCH PAPER WRITING	2020-21	EP: Understanding of various forms of IPR and filing process in India. SD: Identification of the problem statement and thesis writing. Activity: Patent Search And Analysis Report, Patent filing process, Quality Indices, Reference Management Tools
FEM125201	ADVANCED STEEL DESIGN	2020-21	EM: Design of industrial structures and cold form structures.
FEM125202	STRUCTURAL DYNAMICS	2020-21	SD: Structural dynamics required for the earthquake resistant design. Identification of SDOF & MDOF structures subjected to dynamic load.
FEM125203	DESIGN OF HIGH RISE STRUCTURES	2020-21	SD: Learning of Commercially available Software for analysis design of High rise Structures
FEM125204	Design Of Masonary Structure	2020-21	SD;1. Apply knowledge of structural masonry for advanced research and construction procedures
FEM125205	DESIGN OF BRIDGE STRUCTURES	2020-21	EM: Design of different components of bridges as per IS code provisions. Various techniques used for the analysis and design of bridges components.
FEM135202	DISSERTATION	2020-21	EM: The overall development of an individual to identify real-life challenges and work for solutions with available resources related to structural engineering problems.
FEM135203	Industrial Safety	2020-21	SD: Understand Importance of Safety and Important related Ac EM: Apply Maintenance techniques as per requirements and able to compare for with different technique for better performance
FEM135204	Operation Research	2020-21	SD:1. Students should be able to apply the Linear programming techniques to solve problems of real life applications and carry out post optimality analysis

FEM135205	DESIGN OF PRESTRESSED CONCRETE STRUCTURES	2020-21	EM: Application of prestressing techniques for various structural elements and composites structures.
FEM135206	Earthquake Resistant Design of structures	2020-21	EP: Apply the concept of Earthquake Resistant Design & appraise the effect of structural & architectural irregularities of buildings SD:4. Appraise the concepts of ductile detailing for various structural elements in RC structures
FEM115801	HIGHWAY MATERIALS AND CONSTRUCTION TECHNIQUES	2022-23	EM: Understand the properties of the highway material, their testing and change in behavior in reference to changing climatic parameters.
FEM115802	TRAFFIC ENGINEERING& ROAD SAFETY	2022-23	SD: understanding the traffic parameters with their interrelationship and its application in road facility design like signals, intersections, markings, signs etc. EM: Design of traffic signal and intersection design EP: Having Knowledge of various traffic survey procedure can lead to solve traffic problems for the community on effective basis
FEM115803	NUMERICAL METHODS AND STATISTICAL ANALYSIS	2022-23	SD: Mathematical concept and various techniques required for the analysis and design structures.
FEM115804	HIGHWAY GEOMETRIC DESIGN	2022-23	SD: Learning design parameters like LOS and capacity of road. EP: Acquiring knowledge of highway alignment and parameters required for design of traffic facilities like intersection, entrance and exit ramp and parking facilities will generate EM
FEM115806	RAIL TRANSPORTATION SYSTEM PLANNING AND DESIGN	2022-23	SD:1. To enhance the knowledge of Railway Engineering in the context of regional mass transportation systems
FEM125801	PAVEMENT DESIGN, AND EVALUATION	2022-23	SD: Material testing and mix design for Flexible & Rigid pavement EM: Stress analysis and design of various parameters enhance



FEM125802	TRAFFIC FLOW THEORY AND MANAGEMENT	2022-23	SD: understanding the traffic parameters with their interrelationship and its application in road facility design like signals, intersections, markings, signs etc. EM: Design of traffic signal and intersection design EP: Having Knowledge of various traffic survey procedure can lead to solve traffic problems for the community on effective basis
FEM125803	AIRPORT PLANNING AND DESIGN	2022-23	EP: Estimate the environmental and other impacts impended due to Airport projects. EM: Design of runway, taxiway, aprons and cargo facilities with pavement design.
FEM125804	DOCKS AND HARBOUR ENGINEERING	2022-23	SD: Understand the concept of various basic elements of docks & Harbours their importance, functions EM: knowledge of designing various elements of docks & Harbours
FEM125806	APPLICATION OF GIS AND RS FOR TRANSPORTATION	2022-23	SD: understand, analyse and interpret the GIS/RS data and Image. The application of GPS
FEM125807	BEHAVIORAL TRAVEL MODELING	2022-23	SD: 2. To plan transit network, define principles of transit network, classify transit types, geometry and characteristics, transit routes and their characteristics
FEM125808	ECONOMIC EVALUTATION OF TRANSPORTATION PROJECTS	2022-23	SD To analys future cashflow sconsideringalltheconsequencesandhow itcanbebroughtunderacommontimedatumwithoutextendi ngperiod beyondreliableforecasts
FEM115701	FUNDAMENTALS OF WATER AND WASTEWATER TREATMENT	2022-23	SD: To impart the knowledge of water & waste water treatment technologies & process.
FEM115702	ANALYTICAL METHOD & INSTRUMENTATION IN ENVIRONMENTAL	2022-23	SD: To impart the knowledge of an analytical instruments in monitoring and maintaining the quality of water and air for solving real world environmental problem.

FEM115703	COLLECTION AND CONVEYANCE OF WATER AND WASTEWATER	2022-23	SD: To impart the knowledge of collection & conveyance of water & wastewater before reach the water treatment plant & sewage treatment plant.
FEM115704	Environmental Monitoring	2022-23	EP:to develop sampling and analytical skills of the students which are required in environmental monitoring
FEM115705	ENVIRONMENTAL IMPACT ASSESSMENT	2022-23	SD Analyse proposed development project plans for possible environmental effects and prepare appropriate initial studies. EM: Applying for the consultancy work of EIA document regarding environmental projects.
FEM115706	ENVIRONMENTAL MANAGEMENT SYSTEM	2022-23	SD:able to apply tools such life cycle assessment, environmental audits, evaluation of environmental performance for environmental decision-making
FEM125701	AIR AND NOISE POLLUTION: ANALYSIS, TREATMENT & MANAGEMENT	2022-23	SD: To impart the knowledge of Ambient Air Quality Monitoring & stack monitoring at Different locations & evaluate the impacts of air pollution & noise pollution.
FEM125702	SOLID AND HAZARDOUS TREATMENT AND MANAGEMENT	2022-23	SD: To impart the knowledge of solid & hazardous management, waste processing technologies & waste disposal methods.
FEM125703	ENVIRONMENTAL AUDIT	2022-23	SD: To impart the knowledge of environmental auditing, the main components of the environmental auditing process, & methods for auditing specific environmental issues associated with the activities of an organization and product/service. EM: Applying for the state level Environmental Audit Scheme.
FEM125704	ENVIRONMENTAL MODELING AND COMPUTATIONAL METHODS	2022-23	SD: Apply the Knowledge of computing techniques in environmental engineering

FEM125705	ENVIRONMENTAL LEGISLATION AND MANAGEMENT	2022-23	SD: the students will be able to perform quantitative analysis of various physical, chemical and biological parameters involved in water, air, soil and microbiology research.
FEM135704	WASTE TO ENERGY	2022-23	SD a) The objective of the course is to provide insights into waste management options by reducing the waste destined for disposal and encouraging the use of waste as a resource for alternate energy production
FEM135705	ADVANCED WASTEWATER TREATMENT TECHNOLOGIES	2022-23	SD: To impart the knowledge of advanced technologies in Wastewater treatment like membrane processes, advanced oxidation processes, ion exchange etc.
FEM135706	URBAN ENVIRONMENT AND SUSTAINABILITY	2022-23	To study basic concept of sustainability and urban development To study the environmental urban issues and management. Prepare plan strategies to control and reduce Urban environmental pollution
FEM145702	DISSERTATION PHASE II	2022-23	EM: The overall development of an individual to identify real-life challenges and work for solutions with available resources related to environmental engineering problems.
FEB110202	ELEMENTS OF MECHANICAL ENGINEERING	2018-19	SD: Understanding and application of properties of gases, properties of steam, heat engine and steam boilers.  EM: Working and applications of internal combustion engines and Refrigeration and air conditioning systems widely used in industry.
FEB120204	ENGINEERING GRAPHICS	2018-19	EM: Students will learn graphical communication. EP: Visualization and drafting of new product. SD: Learn basic sketching for various engineering applications.

FEB110206	BASIC WORKSHOP	2018-19	<p>SD: Students will earn practical SDs regarding tools used for mechanical processes.</p> <p>EM: Students will learn the latest technological development in the mechanical engineering field and can get employed.</p> <p>EP: Learning the latest technologies including composite fabrication, 3D printing, and laser cutting will open opportunities for students to establish their own startups.</p>
FEB130202	MANUFACTURING PROCESS-I	2018-19	<p>EM: Student can work as welding engineer plays a crucial role for integrity of buildings, vehicles, machinery and products requiring welds. He or she stays involved in planning, supervising and documenting welding operations. He or she has to apply knowledge of physics, metallurgy and materials engineering, welding, and standards to design as well as evaluate welds.</p> <p>EP: Student can start Foundries are facilities that produce metal castings and offer casting-related services. A foundry is a factory where metal is melted and cast into new shapes. Foundries are responsible for our current standard of living and industrial development, but most of us know next to nothing about them.</p> <p>SD: Student can learn different welding technique and metal casting fundamental.</p>
FEB130203	MECHANICAL MEASUREMENT & METROLOGY	2018-19	<p>EM: Students can learn the Microscopes and the procedure for preparing the specimen for macro and micro examination. Also they can learn any one NDT method.</p> <p>SD: Students can learn the performance of Hardness testing; Heat treatment and NDT Testing which enhance the SD of students</p>

FEB130204	ENGINEERING THERMODYNAMICS	2018-19	<p>SD: Understanding and application of Laws of thermodynamics, Entropy Principle and vapour power cycles.</p> <p>EM: Working of Heat Engine, Refrigerator and Heat Pump, vapour power cycle and exergy analysis to solve problems of various thermal system</p>
FEB140202	FLUID MECHANICS & FLUID MACHINES	2018-19	<p>SD: Performance test and analysis of various operating variables of different fluid machines</p> <p>EM: Application and analysis of various fluid machines helps in industry.</p>
FEB150202	THEORY OF MACHINES	2018-19	<p>EP: Manufacturing considerations in Design, Aesthetic Considerations in Design, Ergonomic Considerations in Design, Concurrent Engineering, Selection of Preferred Sizes</p> <p>EM: Design for Finite and Infinite Life, Design of Helical Springs, Design of Helical Spring, Selection of Flat-belts from Manufacturer's Catalogue.</p>
FEB150203	MANUFACTURING PROCESS - II	2018-19	<p>EM: Student can work as welding engineer plays a crucial role for integrity of buildings, vehicles, machinery and products requiring welds. He or she stays involved in planning, supervising and documenting welding operations. He or she has to apply knowledge of physics, metallurgy and materials engineering, welding, and standards to design as well as evaluate welds ,</p> <p>EP: Student can start Foundries are facilities that produce metal castings and offer casting-related services. A foundry is a factory where metal is melted and cast into new shapes. Foundries are responsible for our current standard of living and industrial development, but most of us know next to nothing about them.</p>

FEB150206	DESIGN OF MACHINE ELEMENTS	2018-19	EM: Understanding and learning of design of cylinder and piston help to get EM in the automobile sector because these are widely used components. SD: Design of spur and helical gears improves the SD of analyzing various forces, arrangement of different gears for various speeds, etc.
FEB160201	DYNAMICS OF MACHINE	2018-19	SD: Students will learn machine dynamics along with associated terminologies. EM: Students are able to design and develop Flywheel for IC engine and force analysis of machine components.
FEB160202	ADVANCED MANUFACTURING PROCESSES	2018-19	SD: Basic Fundamentals of DFM and Material Selection as well as different case studies lead to different SD Enhancement due to more experience, EM: Knowledge of Different DFX, different material selection methods and knowledge of different design rules leads to more chances of employment.
FEB160207	ENERGY CONSERVATION & MANAGEMENT	2018-19	EM: Learning the energy efficient utilities lead to enhance the EM of the students in large scale power plan as energy engineering. EP: Students will able to do the energy audit and prepare the audit report of such energy utilities in industry and buildings SD: Knowing the energy conservation act and energy economy lead to increase the basic SD about the energy and its process.
FEB160204	COMPUTER AIDED DESIGN	2018-19	EM: Computer aided design of induction motor.
FEB160208	PROJECT - II	2018-19	EM: & EP: Solving Industrial or User defined problems by applying engineering principals.
FEB170202	AUTOMATION IN MANUFACTURING	2018-19	EP: Students Can use these modern and Advanced Manufacturing methods for ENdevelopment in future

FEB170204	INTERNAL COMBUSTION ENGINE	2018-19	<p>SD: Understanding of different types of engines and working of their components, performance parameters of engine through experiments.</p> <p>EM: Knowledge of principles of thermodynamics, analysis of engine components, performance analysis of IC engine through different tests.</p> <p>EP: Knowledge of IC engine will help to analyze various fuel supply systems, ignition and governing systems, develop new mechanisms for fuel/air mixing and lower emission levels.</p>
FEB170206	REFRIGERATION & AIR CONDITIONING	2018-19	<p>EM: Understand and analyze the various refrigeration systems for different heating and cooling applications.</p> <p>SD: Load estimation, duct design method and air distribution system for analyzing duct and piping system can be applied for various HVAC system used in commercial and industrial applications.</p>
FEB170207	FINITE ELEMENT ANALYSIS	2018-19	<p>SD: FEA simulation used in various industries during design and development of product.</p> <p>EM: Hands on training on FEM software.</p>
FEB170208	PROJECT - III	2018-19	<p>EM: &amp; EP: Solving Industrial or User defined problems by applying engineering principals.</p>
FEB180201	OPERATION RESEARCH	2018-19	<p>EP: Linear mathematical formulation will help to formulate and analyze the business.</p> <p>EM: Knowledge of Transportation, assignments etc help to get EM in supply chain sector.</p>
FEB180205	POWER PLANT ENGINEERING	2018-19	<p>SD: Students will study basics of power plant, site selection criteria and working of different power plant systems,</p> <p>EM: knowledge of various types of feed water treatments, physics of nuclear power plants.</p>

FEB180203	AUTOMOBILE ENGINEERING	2018-19	EM: Knowledge of principles of thermodynamics, analysis of engine components, performance analysis of IC engine through different tests, EP: Knowledge of IC engine will help to analyze various fuel supply systems, ignition and governing systems, develop new mechanisms for fuel/air mixing and lower emission levels
FEB180207	PROJECT - IV	2018-19	EM: & EP: Solving Industrial or User defined problems by applying engineering principals.
FEM115101	APPLIED COMPUTATIONAL METHOD	2018-19	SD: Coding for the computational Techniques.
FEM115102	ADVANCED THERMODYNAMICS AND HEAT TRANSFER	2018-19	EM: Understand and analysis the fundamentals of advanced thermodynamics and heat transfer mechanisms in fluids and solids and their applications in various heat transfer equipment used in practical engineering problem. SD: Hands on training on ANSYS software for analyzing vaious heat transfer problems.
FEM115105	ADVANCED INTERNAL COMBUSTION ENGINE	2018-19	SD: Understanding of different types of engines and working of their components, performance parameters of engine through experiments. EM: Knowledge of principles of thermodynamics, analysis of engine components, performance analysis of IC engine through different tests. EP: Knowledge of IC engine will help to analyze various fuel supply systems, ignition and governing systems, develop new mechanisms for fuel/air mixing and lower emission levels.
FEM115107	SOLAR ENERGY ENGINEERING	2018-19	SD: Student will learn how to do performance analysis of various solar thermal system. SD: Student will learn how to do performance analysis of various solar thermal system. EP: Student can utilize the concept learned from this subject to design and develop solar thermal system or improve its efficiency".



FEM115108	THERMAL AND NUCLEAR POWER PLANTS	2018-19	EM: Students will be able to understand and analyze the performance of various steam and gas turbine system used at power plants
FEM115110	DESIGN OF HEAT EXCHANGER	2018-19	SD: Students will have understanding of design of various heat exchangers, EM & EP: Students will have knowledge of how to select appropriate heat exchanger for given application.
FEM125101	EXPERIMENTAL TECHNIQUES AND INSTRUMENTATIONS IN THERMAL SYSTEMS	2018-19	SD: Students will have knowledge of various instruments and experimental techniques. EM:& EP: Students will be able to design and analyze mechanical components subjected to static and dynamic loading.
FEM125102	ADVANCED FLUID MECHANICS	2018-19	SD: Student are able to do analysis of subsonic, supersonic flow and flow through nozzle/diffuser.
FEM125103	ADVANCED REFRIGERATION ENGINEERING	2018-19	EM: Understand and analyze the various refrigeration systems for different heating and cooling applications.
FEM125104	DESIGN AND OPTIMIZATION OF THERMAL SYSTEM	2018-19	EM:Students will be able to design and optimize various thermal system. EP: Students will be able to apply the concept of design and its process for engineering enterprise while designing thermal system.
FEM125106	ENERGY CONSERVATION & MANAGEMENT	2018-19	EM:Learning the energy efficient utilities lead to enhance the EM of the students in large scale power plan as energy engineering. EP: Students will able to do the energy audit and prepare the audit report of such energy utilities in industry and buildings SD: Knowing the energy conservation act and energy economy lead to increase the basic SD about the energy and its process.

FEM125107	ADVANCED AIR CONDITIONING ENGINEERING	2018-19	SD: Students will be able to calculate various psychrometric processes and will know how to use tables and monographs to design air distribution systems, EM: & EP: This will help to develop SDs to analyze domestic and industrial requirements of air conditioning systems.
FEM125108	COMPUTATIONAL FLUID DYNAMICS	2018-19	SD: Application of FVM to complex geometry & Numerical modeling and simulation of various fluid mechanics problems EM: Analyze the numerical simulation to solve major engineering design problems involving fluid flow and heat transfer.
FEM135102	DISSERTATION PHASE-I	2018-19	EM: Student can opt IDP/UDP based on their choice and availability of the supervisor in the Institute/Industry SD: Through literature review relevant to topic of dissertation should be carried out to decide Aim, Objectives, and scope of the project work. Students should apply appropriate method of solution and primary results of experiments/computations should be validated against the available standard solution in the open literature.
FEM135108	EXERGY ANALYSIS OF THERMAL SYSTEMS	2018-19	EM: Exergy analysis of thermal system and utilities provide unique opportunities in power sector, and thermal system design.

FEM145102	DISSERTATION PHASE-II	2018-19	<p>EM: M.E dissertation should be socially relevant and research-oriented ones. Each student is expected to do an individual project.</p> <p>SD: Student will be allowed to appear in the final viva voce examination only if he / she has submitted his / her project work in the form of paper for presentation / publication in a conference / Journal and produced the proof of acknowledgement of receipt of paper from the organizers / publishers.</p>
FEB110001	ENGINEERING MATHEMATICS-I	2018-19	<p>SD: Mathematics is the basic building block of Engineering and affect all branches of Engineering across globe.</p> <p>EM: There is a huge demand of mathematics in engineering where mathematical modelling is required.</p>
FEB110202	ELEMENTS OF MECHANICAL ENGINEERING	2018-19	SD:The basic tools are most important to study with their working principles.
FEB110003	COMMUNICATION SD	2018-19	<p>EM: Effective communication give a better career opportunities.</p> <p>SD: Spoken English / Writing Practice / Conversation</p> <p>SDs Development</p>
FEB110304	ELEMENTS OF ELECTRICAL ENGINEERING	2018-19	<p>SD: Numerical Analysis of DC and AC Circuits, Basics of Transformer and Electrical Machines, Residential Electricity Bill and calculations of energy calculations.</p> <p>EM: The knowledge of basic Electrical engineering is required to study for every engineer.</p>
FEB110005	PHYSICS	2018-19	<p>SD: To learn the basic concepts of semiconductor device and their characteristics and Superconductors</p> <p>EM:The knowledge of basic Physics is required to study for every engineer.</p>
FEB110006	Physics	2018-19	<p>EM:Strengthens problem-solving and application of scientific principles in industries. EN: Helps create innovative products and solutions.SD:Enhances analytical thinking and practical problem-solving.</p>

FEB110007	Induction Program	2018-19	EM: Prepares you for industry expectations and work culture.EN:Encourages a mindset for innovation and business opportunities.
FEB130002	Indian Constitution	2018-19	EP: Basic ENand its role in Economical growth/development in India
FEB130201	Engineering Mathematics-III	2018-19	EM:Enhances problem-solving and analytical skills.EN:Aids in data-driven decision-making and optimization.
FEB130205	Engineering Mechanics	2018-19	EM:Fundamental for design, construction, and analysis in mechanical roles.
FEB140001	Essence of Indian Knowledge Tradition	2018-19	SD:Cultivates interdisciplinary knowledge and a creative approach.
FEB140201	Applied Thermodynamics	2018-19	EM:Essential for roles in energy, engines, and HVAC systems.
FEB140203	Instrumentation & Control	2018-19	EM:Key for automation, process control, and instrumentation industries.
FEB140204	Materials Engineering	2018-19	EM:Crucial for material selection, manufacturing, and design.
FEB140205	Strength of Materials	2018-19	EM:Key for structural and mechanical design roles.
FEB150001	Engineering Economics And Management	2018-19	EM: Teaches financial decision-making and project management.SD: Strengthens skills in cost analysis, budgeting, and project planning.
FEB150201	Heat Transfer	2018-19	EM:Key for roles in HVAC, automotive, and energy industries.
FEB150204	Mechanical Engineering Laboratory (Thermal) I	2018-19	EM:Practical experience with thermal systems and instrumentation.
FEB150205	Project I	2018-19	EM:Demonstrates ability to work on real-world engineering problems.
FEB160202	Advanced Manufacturing Processes	2018-19	EM: Prepares for roles in advanced manufacturing and production.
FEB160203	Mechanical Engineering Laboratory (Design) II	2018-19	EM: Provides hands-on design experience for engineering roles.
FEB160204	Computer Aided Design	2018-19	EM: Essential for design roles in engineering and manufacturing.

FEB160205	Composite Materials	2018-19	EM: Important for industries focused on lightweight, durable materials.
FEB160206	Total Quality Management	2018-19	EM: Prepares for roles in quality assurance and process improvement.En: Supports creating efficient, quality-driven businesses.
FEB160207	Energy Conservation & Management	2018-19	EM: Relevant for roles in sustainable energy and environmental sectors.
FEB160208	Project II	2018-19	EM: Demonstrates ability to apply engineering skills in real-world projects.
FEB170201	Industrial Engineering	2018-19	EM: Key for optimizing manufacturing processes and systems.
FEB170202	Automation In Manufacturing	2018-19	EM: Prepares for roles in automation, robotics, and smart manufacturing.
FEB170203	Mechanical Engineering Laboratory (Manufacturing) III	2018-19	EM: Provides hands-on experience in manufacturing processes.SD Builds expertise in machining, fabrication, and assembly.
FEB170204	Internal Combustion Engine	2018-19	EM: Relevant for automotive, energy, and engine design industries.
FEB170205	Process Planning and Cost Estimation	2018-19	EM: Prepares for roles in production planning and cost management.
FEB170206	Refrigeration & Air Conditioning	2018-19	EM: Essential for HVAC, automotive, and energy sectors.SD Builds practical knowledge in thermodynamics and heat transfer.
FEB170208	Project III	2018-19	EM: Demonstrates ability to manage and complete complex engineering projects.
FEB180202	Industrial Safety And Maintenance Engineering	2018-19	EM: Key for safety roles in manufacturing and operations.
FEB180204	Principles of Management	2018-19	EM: Provides essential managerial skills for engineering roles.
FEB180206	Gas Dynamics and Jet Propulsion	2018-19	EM: Key for aerospace, automotive, and propulsion system roles.
FEB110206	BASIC WORKSHOP	2018-19	SD: The knowledge of basic Workshop is required to study for every engineer.

FEB120001	ENGINEERING MATHEMATICS - II	2018-19	SD: Mathematics is the basic building block of Engineering and affect all branches of Engineering across globe. EM: There is a huge demand of mathematics in engineering where mathematical modelling is required.
FEB120302	BASIC ELECTRONICS	2018-19	EP : The people with knowledge of Electronics leads to easy EM as a service provider of electronics items. SD: Special Purpose Diodes & transistors, Digital Electronics (Gates and Logic families)
FEB120403	COMPUTER PROGRAMMING WITH C	2018-19	SD:world is going to be digital day by day and various machine languages needs to be study across the world.
FEB120204	ENGINEERING GRAPHICS	2018-19	SD:The people with knowledge of Engineering Graphics leads to easy EM as a service provider of commercial and residential building desiner and engineer.
FEB120105	ENVIRONMENTAL SCIENCE(MANDATORY COURSE)	2018-19	SD: To acquire the SD for the solution of static determinate structures and calculations of support reactions and stresses in various tpes of beams, columns, arches and cable ans suspension bridges.
FEB130001	EFFECTIVE TECHNICAL COMMUNICATION	2018-19	SD: Preparation of map and identifying the area and volume of different shape. Demonstrate different surveying and levelling techniques using standard and modern surveying instruments,
FEB130002	INDIAN CONSTITUTION	2018-19	EP: Basic ENand its role in Economical growth/development in India
FEB130301	ENGINEERING MATHEMATICS –III (PROBABILITY & STATISTICS)	2018-19	EM: Flood estimation and forcasting using probability plotting methods SD : To evaluate various parameters of Hydrology
FEB130302	ELECTRICAL CIRCUIT ANALYSIS	2018-19	SD: Various theorems and principles of Circuits and synthesis and analysis of circuits.

FEB130303	ANALOG & DIGITAL ELECTRONICS	2018-19	SD:Technology driven study needs to learn this course.
FEB130304	CONTROL SYSTEMS ENGINEERING	2018-19	SD:It comprise of Various control algorithms like bode plot, Nyquist, root locus to check the system stability and its associated principles.
FEB140001	ESSENCE OF INDIAN KNOWLEDGE TRADITION	2018-19	SD:One should know the rituals and traditions where one live.
FEB140301	ELECTRICAL MACHINES-I	2018-19	EM:The knowledge of Electrical machines is most required to get employment in electrical field.
FEB140302	ELECTROMAGNETIC FIELDS	2018-19	EM:The phenomenon and a characteristics of an electron in various field and its effects in electrical fiels is explained.
FEB140303	INTERNET OF THINGS	2018-19	SD:Technology driven study needs to learn this course.
FEB140304	POWER PLANT ENGINEERING	2018-19	EM:The concern about enery saving and generation lead to study this subject.
FEB140305	POWER ELECTRONICS- I	2018-19	EN:Explains the state of the art efficient control of bulk Electrical power through solid semiconductor device and its various configurations.
FEB150001	ENGINEERING ECONOMICS AND MANAGEMENT	2018-19	EN:The knowledge of Economics and how its effects on local, national and international market of engineering is explained along with engineering perspectives.
FEB150301	ELECTRICAL MACHINES – II	2018-19	EN:The knowledge of Electrical machines is most required.
FEB150302	POWER ELECTRONICS- II	2018-19	EN:Power Electronics provide easy way to save electrical energy thus it is important to study it.
FEB150303	MICROPROCESSORS	2018-19	SD:The circuit which in collobration with computers reuired to study microprocessor.
FEB150304	ELEMENTS OF ELECTRICAL DESIGN	2018-19	SD:The knowledge of Electrical design is most required.
FEB150305	ELECTRICAL POWER SYSTEMS -I	2018-19	EN:The efficient generation and transmission of electrical energy it is required to study this course.

FEB160301	ELECTRICAL POWER SYSTEMS - II	2018-19	SDThe efficient generation and transmission of electrical energy it is required to study this course.
FEB160302	ELECTRICAL MEASUREMENTS	2018-19	EN:In enginnering the measurement of any physical quantity plays important role.
FEB160303	ELECTRICAL DRIVES	2018-19	SD:In collobration with electric machine the power electronics drive can save huge amount of energy.
FEB160304	HIGH VOLTAGE ENGINEERING	2018-19	EN:The efficient generation and transmission of high capacity electrical energy it is required to study this course.
FEB160305	ELECTRICAL MACHINE DESIGN- I	2018-19	SD:The knowledge of Electrical machine design is most required.
FEB160001	CYBER SECURITY	2018-19	EM:In this digital era cyber fraud is most prominent so study to avoid it is most required.
FEB170301	ELECTRICAL MACHINE DESIGN- II	2018-19	EM:The knowledge of Electrical machine design is most required.
FEB170302	POWER SYSTEM PROTECTION	2018-19	SD: Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEB170303	SIGNAL AND SYSTEM	2018-19	SD: The knowlwedge of signal and its manipulation to generate desired signal is important to study.
FEB170304	INTER CONNECTED POWER SYSTEM	2018-19	Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEB170305	PROJECT- I	2018-19	The course covered in a programme leads to idea generation and thus the idea needs to be converted to physical working model.
FEB180301	POWER QUALITY AND FACTS	2018-19	EM:Power quality is concerned a lot in digital scenario due to the use of power electronic device and non linear loads. So it is must to lear for electrical engineer.



FEB180302	INDUSTRIAL INSTRUMENTATION	2018-19	SD: Industrial instrumentation is the use of sensors, switches, and valves to measure and control industrial processes. This includes everything from measuring temperatures to controlling fluid levels in a tank
FEB180303	COMPUTER AIDED DESIGN FOR ELECTRICAL ENGINEERING	2018-19	Electrical computer-aided design (ECAD) software systems are used to design and develop electronic systems such as printed circuit boards (PCBs) and integrated circuits (ICs).
FEB180304	PROJECT II	2018-19	EM:The course covered in a programme leads to idea generation and thus the idea needs to be converted to physical working model.
FEM115301	NUMERICAL TECHNIQUES	2020-21	EN: Mathematics is the basic building block of Engineering and affect all branches of Engineering across globe.
FEM115302	ADVANCED POWER ELECTRONICS	2020-21	EN: Power Electronics provide easy way to save electrical energy thus it is important to study it.
FEM115303	COMPUTER METHODS IN POWER SYSTEM ANALYSIS	2020-21	SD: Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEM115304	.ADVANCED POWER SYSTEM PROTECTION AND SWITCHGEAR	2020-21	EN: Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEM115305	ELECTRICAL DRIVES	2020-21	EM:In collobration with electric machine the power electronics drive can save huge amount of energy.
FEM110001	RESEARCH SD & METHODOLOGY	2020-21	EN: Reseach SD is important to acquire.
FEM110002	DISASTER MANAGEMENT (MANDATORY COURSE)	2020-21	SD: An engineer should be able to defeat the undisired condition.
FEM125301	MODERN CONTROL SYSTEMS	2020-21	SD: It comprise of Various control algoriths like bode plot, Nyquist, root locus to check the system stability and its associated principles.
FEM125302	ELECTRICAL MACHINE MODELING AND ANALYSIS	2020-21	EM: The knowledge of Electrical machine design is most required.

FEM125302	FACTS	2020-21	SD: The distribution method of generated power needs to study FACTS.
FEM125304	POWER SYSTEM MANAGEMENT & OPTIMIZATION (PS)	2020-21	EM: The distribution method of generated power needs to study FACTS.
FEM125305	ADVANCED POWER CONVERTORS	2020-21	EN: In collaboration with electric machine the power electronics drive can save huge amount of energy so the converter study is important.
FEM125306	ADVANCED ELECTRICAL DRIVES	2020-21	SD: In collaboration with electric machine the power electronics drive can save huge amount of energy.
FEM125307	ARTIFICIAL INTELLIGENT APPLICATION TO POWER SYSTEM	2020-21	EM: Technology driven study needs to learn this course.
FEM125308	MODERN POWER SYSTEM PROTECTION	2020-21	EN: Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEM125309	APPLICATION OF POWER ELECTRONICS TO POWER SYSTEM	2020-21	EN: Power Electronics provide easy way to save electrical energy thus it is important to study it.
FEM125310	INDUSTRIAL ELECTRONICS AND INSTRUMENTATION	2020-21	EM: Technology driven study needs to learn this course.
FEM125311	MINI PROJECT AND SEMINAR	2020-21	EN: The students are given mini project so their gain knowledge can be utilised to make prototype.
FEM120001	RESEARCH PAPER WRITING	2020-21	SD: One's expertise is measured through its research paper writing skill.
FEM135301	DISSERTATION PHASE- I	2020-21	EN: One's expertise is measured through its research paper writings and dissertation SD.
FEM135302	INTERNAL REVIEW-I	2020-21	EM: the progress of student project is measured through IR-I and II.
FEM135303	POWER SYSTEM DYNAMICS AND CONTROL	2020-21	SD: Power system often observes fluctuation thus requires to study its dynamic characteristics.
FEM135304	POWER QUALITY ISSUES AND THEIR MITIGATION TECHNIQUES	2020-21	EN: Due to utilisation of non linear load, harmonic is generated and to mitigate it the study of power quality is important.

FEM135305	ADVANCED CONTROL TECHNIQUES FOR ELECTRICAL MACHINES (PE) (FEM135305)	2020-21	EN: Control system study is required for process automation and industrial application.
FEM135306	MODELING AND ANALYSIS OF POWER CONVERTERS	2020-21	EM: Generally power system is connected with various grid and loads so the study of power system protection is most required.
FEM135307	ECONOMICS OF ENERGY GENERATION & SUPPLY	2020-21	EN: After all energy economics is playing a pivotal role.
FEM135308	DIGITAL SIGNAL PROCESSING FOR POWER ELECTRONICS (	2020-21	SD: The knowledge of signal and its manipulation to generate desired signal is important to study.
FEM145301	DISSERTATION PHASE- II	2020-21	EN: One's expertise is measured through its research paper writings and dissertation SD.
FEM145302	INTERNAL REVIEW-II	2020-21	EM: the progress of student project is measured through IR-I and II.
FEB120403	COMPUTER PROGRAMMING WITH C	2018-19	SD: C programming language helps understand the different variables, data types, etc. EM: C is typically used for writing code for embedded systems.
FEB150402	OBJECT ORIENTED PROGRAMMING WITH JAVA	2018-20	SD: Java is one of the most in-demand languages EM: they will, because no matter what changes could happen in the IT industry, many business applications are built using Java, and companies will maintain them anyway.
FEB140405	DATABASE MANAGEMENT SYSTEMS	2018-19	SD: A database management system (DBMS) is software to create and manage databases, allowing users to create, read, update and delete data in a database. EM: A database management system (DBMS) is software to create and manage databases, allowing users to create, read, update and delete data in a database.

FEB150404	WEB TECHNOLOGY	2018-19	<p>SD: Web Technology refers to the various tools and techniques that are utilized in the process of communication between different types of devices over the Internet.</p> <p>EM: There is a high demand for SDed web developers, and this demand is only expected to increase in the future. According to the Bureau of Labor Statistics, employment of web developers is projected to grow 8 percent from 2020 to 2030</p>
FEB160001	CYBER SECURITY	2018-19	<p>SD:An in-depth understanding of networking is required to start a career in cybersecurity. Learning networking will help you understand data transmission's technical aspects, which will help you secure your data.</p> <p>EM:Cyber security has a high demand for SDed professionals and is growing gradually. Global cyber security spending is expected to rise from US \$170 billion in 2017 to US \$202 billion by 2023.</p>
FEB170402	DATA MINING & BUSINESS INTELLIGENCE	2018-19	<p>SD:Data mining is the process of sorting through large data sets to identify patterns and relationships that can help solve business problems through data analysis.</p> <p>EM:Data mining specialists are just one specialization in the diverse data science career landscape, one of the hottest growing fields in the world today. In fact, the U.S. Bureau of Labor Statistics projects a 36% growth in data science occupations through 2031.</p>

FEB180401	ARTIFICIAL INTELLIGENCE	2018-19	<p>SD: Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, and speech recognition and machine vision.</p> <p>EM: Salaries for Top Roles in Artificial Intelligence Are Excellent. If you stick with it and work your way up into the top job roles for AI professionals, you'll have a good chance of earning a considerable salary.</p>
FEB180405	CLOUD COMPUTING	2018-19	<p>SD: cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence—over the Internet (“the cloud”) to offer faster innovation, flexible resources, and economies of scale.</p> <p>EM: A cloud computing career is highly rewarding. Fortunately, there are several cloud computing job openings and opportunities within the field that may be right for you, from DevOps engineers to data analysts and more.</p>
FEB160503	MOBILE APPLICATION DEVELOPMENT	2022-23	<p>SD: Mobile application development is the process of creating software applications that run on a mobile device, and a typical mobile application utilizes a network connection to work with remote computing resources.</p> <p>EM: A mobile app developer uses programming languages and development SDs to create, test, and develop applications on mobile devices. They work in popular operating system environments like iOS and Android and often take into account UI and UX principles when creating applications.</p>

FEB170405	.NET TECHNOLOGY	2022-23	<p>SD: . NET is an open-source platform for building desktop, web, and mobile applications that can run natively on any operating system. The . NET system includes tools, libraries, and languages that support modern, scalable, and high-performance software development.</p> <p>EM: . NET can be a lucrative professional path. The demand for . NET developer salary remains high, with many businesses relying on the framework for software development.</p>
FEB170408	PYTHON PROGRAMMING	2022-23	<p>SD:Python is a general-purpose coding language; unlike HTML, CSS, and JavaScript. It can be used for other programming types besides web development</p> <p>EM:Python is easy to understand and once you do, you can use those SDs to land a wonderful career in the rapidly developing data science industry.</p>
FEM115406	MACHINE LEARNING	2020-21	<p>SD:The essential concepts in machine learning often involve statistical analysis and mathematical data manipulation. Machine learning requires software engineering, data science, communication, and problem-solving proficiency.</p> <p>EM:Machine Learning in India and around the world has a much higher potential than other career disciplines when it comes to work prospects. It is predicted that by 2022, there will be 2.3 million jobs in the field of AI and ML.</p>

FEM115404	DATA SCIENCE	2020-21	<p>SD: Data science is the domain of study that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and make business decisions.</p> <p>EM: You may need to start in an entry-level field as a data analyst, but with a proficiency as in-demand as data science, you'll get your chance to make your move, and once you've shown you can do the job, you'll have your pick of top companies and top positions in the profession.</p>
FEM125402	IMAGE PROCESSING	2020-21	<p>SD: Image processing is the process of transforming an image into a digital form and performing certain operations to get some useful information from it.</p> <p>EM: The growth of deep learning technologies has led to the rapid acceleration of computer vision in open source projects, which has only increased the need for image processing tools. The demand for professionals with key SDs in deep learning technologies is growing at a rapid pace every year.</p>
FEM125407	GLOBAL INFORMATION & POSITIONING SYSTEM	2020-21	<p>SD: The Global Positioning System (GPS) is a U.S.-owned utility that provides users with positioning, navigation, and timing (PNT) services.</p> <p>EM: Number of employees in IT. As per National Association of Software and Services Companies (NASSCOM), Indian Information Technology (IT) Industry directly employs around 51 lakh persons in FY 2021-22, most of which are IT SDeD.</p>
MMIC101DSC	CELL BIOLOGY	2020-2021	SD: To Evaluate and apply knowledge of modern techniques in cellular biology.
MMIC102DSC	MOLECULAR BIOLOGY AND GENETICS	2020-2021	EM: Can apply in pharmaceutical industries and molecular laboratory
MMIC103DSC	BIODIVERSITY AND ECOLOGY	2020-2021	EM: To work in forest department as well as in fisheries departments

MMIC104DSC	MICROBIAL TAXONOMY	2020-2021	SD: To evaluate the new species name during research work
MMIC101SE	BIOINFORMATICS PART 1	2020-2021	EM: Able to work in bioinformatics lab and work as Data analyst
MMIC201DSC	BIOCHEMISTRY	2020-2021	EM: Able to utilize the new compounds and mechanisms in biochemistry lab
MMIC202DSC	INSTRUMENTATION AND ANALYTICAL TECHNIQUES	2020-2021	SD: To enhance the operating system of instruments that utilized in different industries
MMIC203DSC	BIostatISTICS AND RESEARCH METHODOLOGY	2020-2021	SD: Help to enhance the ability of research writing and statistical analysis
MMIC204DSC	BIOPROCESS AND BIOCHEMICAL ENGINEERING	2020-2021	EN: Able to develop their own different kinds of industry
MMIC201SE	BIOINFORMATICS PART 2	2020-2021	EM: To able to work in bioinformatics lab and work as Data analyst
MMIC301DSC	BACTERIOLOGY AND VIROLOGY	2021-2022	SD: To evaluate and understand the new species name during research work
MMIC302DSC	GENETICS OF BACTERIA AND VIRUS	2021-2022	EM: To work in genetic engineering laboratory and RND department of various industries
MMIC303DSC	MICROBIAL PHYSIOLOGY AND DEVELOPMENT	2021-2022	SD: Explain microbial growth, growth kinetics and factors affecting growth. Define basic concept of microbial physiology.
MMIC304DSC	IMMUNOLOGY	2021-2022	EM: Interpret the concept of immunogen and disease
MMIC301SE	MICROBIAL DIVERSITY AND EXTREMOPHILES	2021-2022	EM: To work in forest department as well as in marine departments
MMIC401DSC	RECOMBINANT DNA TECHNOLOGY	2021-2022	SD: An understanding on application of genetic engineering techniques in basic and applied experimental biology.
MMIC402DSC	MEDICAL MICROBIOLOGY	2021-2022	EM: The student will be able to evaluate methods used to identify infectious agents in the clinical microbiology lab.
MMIC403DSC	FOOD TECHNOLOGY	2021-2022	EN: Understanding the process of fermentation of milk and other food products and start up the food industry



MMIC404DSC	AIR AND WATER MICROBIOLOGY	2021-2022	SD: Understand various physical and chemical means of sterilization and also learn various techniques for isolation of pure cultures
MMIC401SE	DRUG DISCOVERY AND CLINICAL RESEARCH	2021-2022	SD: Identify and resolve drug related problems and detect, assess and monitor adverse drug reaction
MBOT111DSC	STUDY OF LIFE FORMS - I AND PLANT PATHOLOGY	2021-22	SD: To Evaluate and apply knowledge of microbes.
MBOT112DSC	PRINCIPLES OF BIOCHEMISTRY	2021-22	EM: To able to work in biochemicals.
MBOT113DSC	PRINCIPLES OF CELL BIOLOGY	2021-22	SD: To identify and Research on different between cell organism
MBOT114DSC	GENETICS AND EVOLUTION	2021-22	EM: Help to inhance genetic materials and Evaluated.
MBOT115SE	BIODIVERSITY	2021-22	EM: Able to identify different plant Species.
MBOT121DSC	STUDY OF LIFE FORMS II	2021-22	SD: To able to Work of identify between different plants.
MBOT122DSC	PLANT REPRODUCTIVE & DEVELOPMENT BIOLOGY	2021-22	SD: To able to Work of Reproduction and development of plant
MBOT123DSC	INSTRUMENTAL METHOD FOR BIOLOGICAL SCIENCE & BIOSTATISTICS	2021-22	SD: Help to inhance the ability of statatcal analysis.
MBOT124DSC	PLANT RESOURCES UTILIZATION AND CONSERVATION	2022-23	SD: Able to Resource Utilise and Conservation
MBOT125SE	HERBAL MEDICINE	2022-23	EM: To work in forest department
MBOT211DSC	PLANT MOLECULAR BIOLOGY	2022-23	EM: Can apply in pharmaceutical industry and molecular laboratories.
MBOT212DSC	PLANT PHYSIOLOGY	2022-23	SD: To work on physiological topics.
MBOT213DSC	PLANT ECOLOGY	2022-23	EM: Able to utilize the new Ecological Plants.
MBOT214DSC	ANGIOSPERM TAXONOMY	2022-23	SD: To evaluate the new specieces name during research work
MBOT215SE	BIOFERTILIZER	2022-23	EM: Able to utilize the Plant waste.
MBOT221DSC	PLANT BIOTECHNOLOGY	2022-23	SD: Help to inhance the ability of Bioinformative technology.
MBOT222DSC	ETHNOBOTANY	2022-23	SD: To Evaluate different plant utilise in daily life.

MBOT223DSC	PLANT BIOINFORMATICS & RESEARCH METHEDOLOGY	2022-23	SD: To Evaluate and apply knowledge of modern techniques in Research methology.
MBOT224DSC	HORTICULTURE AND PLANT BREEDING	2022-23	EM: Able to utilize the new Plants and Breeding.
MBOT225DSC	THE ENVIRONMENT POLLUTION & CLIMATE CHANGE	2022-23	EM: To work in Environment as well as in Climate change
MMAT111DSC	DIFFERENTIAL EQUATION	2018-19	SD: To explain the conept of differential equation with respect to their order and linearity.
MMAT112DSC	GENERAL TOPOLOGY	2018-19	SD: To apply knowledge of general topology to formulate and slove problems of s topological nature in mathematics and other fields where topological issues arise.
MMAT113DSC	ABSTRACT ALGEBRA	2018-19	EN: Applying the concept of group action to real life problem such as counting
MMAT114DSC	NUMBER THEORY	2018-19	SD: To explain some of the concepats of number theory, a primary area of mathematics, using examples.
MMAT115SE	GRAPH THEORY	2018-19	SD: To present information quickly and easily
MMAT211DSC	PARTIAL DIFFERENTIAL EQUATION	2018-19	SD: apply the concept of linearity to solve non homogenous PDEs by the method of linear superposition
MMAT212DSC	DIFFERENTIAL GEOMETRY	2018-19	SD: To understand the fundamental theorem for plane curve and evolutes of space curves with the help of examples
MMAT213DSC	COMPLEX ANALYSIS	2018-19	EN: Demonstrate accurate and efficient use of complex analysis techniques
MMAT214DSC	OPERATION RESEARCH	2018-19	SD: Understand variety of problem such as assignment, tranportation, travelling, salesman etc
MMAT215SE	INTEGRAL TRANSFORM	2018-19	SD: Understand fourier transform and its properties and will be able to solve the examples based on it
MMAT311DSC	ALGEBRA-II(FIELD THEPRY)	2019-20	SD: To use diverse properties of field extensions in various areas.

MMAT312DSC	FUNCTIONAL ANALYSIS-I	2019-20	SD: To build an understanding of mathematical analysis through the use of mathematical proof
MMAT313DSC	ADVANCE LINEAR ALGEBRA	2019-20	EN: carry out and convey reasoning with abstract algebraic objects.
MMAT314DSC	MATHEMATICAL STATISTICS -I	2019-20	SD: to analyze statistical data using measures of central tendency, dispersion and location
MMAT315SE	INTEGRAL EQUATION	2019-20	SD: Solve integral equation of several types.
MMAT411DSC	REAL ANALYSIS	2019-20	EN: Appreciate how abstract ideas and rigorous methods in real analysis can be applied to important practical problems,
MMAT412DSC	FUNCTIONAL ANALYSIS-II	2019-20	EN: To discuss knowledge of central concepts from functional analysis.
MMAT413DSC	NUMERICAL ANALYSIS	2019-20	SD: Understanding the theoretical and practical aspects of the use of numerical methods
MMAT414DSC	MATHEMATICAL STATISTICS -II	2019-20	EN: frame problem using multiple mathematical and statistical representations of relevant structure and solve using standard techniques.
MMAT415SE	RESEARCH METHODOLOGY	2019-20	SD: Develop SDs in qualitative and quantitative data analysis and presentation
MCHE101UDSC	INORGANIC CHEMISTRY	2018-19	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
MCHE102UDSC	ORGANIC CHEMISTRY	2018-19	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE103UDSC	PHYSICAL CHEMISTRY	2018-19	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc

MCHE104UDSC	ANALYTICAL CHEMISTRY	2018-19	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results
MCHE101USE	SPECTROSCOPY AND DIFFRACTION METHOD/ PHOTOINORGANIC CHEMISTRY	2018-19	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE201UDSC	INORGANIC CHEMISTRY	2018-19	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
MCHE202UDSC	ORGANIC CHEMISTRY	2018-19	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE203UDSC	PHYSICAL CHEMISTRY	2018-19	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE204UDSC	ANALYTICAL CHEMISTRY	2018-19	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results
MCHE201USE	BIOLOGY FOR CHEMIST/ COMPUTATIONAL CHEMISTRY	2018-19	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
MCHE301UDSC	NATURAL PRODUCTS	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc

MCHE302UDSC	MEDICINAL CHEMISTRY-I	2019-20	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
MCHE303UDSC	INDUSTRIAL CHEMISTRY-I	2019-20	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results
MCHE304UDSC	ADVANCED ORGANIC CHEMISTRY-I	2019-20	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
MCHE301USE	ENVIRONMENTAL CHEMISTRY/ RESEARCH METHODOLOGY	2019-20	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
MCHE401UDSC	HETEROCYCLIC CHEMISTRY AND ORGANIC REACTION MECHANISM	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE402UDSC	MEDICINAL CHEMISTRY-II	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
MCHE403UDSC	INDUSTRIAL CHEMISTRY-II	2019-20	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
MCHE404UDSC	ADVANCED ORGANIC CHEMISTRY-II	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc

MCHE401USE	ORGANOMETALLIC COMPOUNDS/ NANO CHEMISTRY	2019-20	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results
MPHY111DSC	MATHEMATICAL PHYSICS-I & PROGRAMMING IN C-I	2019-20	SD: students gain the knowledge of function of a complex variable, integral transforms, decision making and looping, arrays, character arrays and strings, functions, EM : to get employment in sector of programming and robotics
MPHY112DSC	CLASSICAL MECHANICS-I & ELECTRODYNAMICS-I	2019-20	SD: students gain the knowledge of canonical transformation, small oscillation and rotating frame, electromagnetic waves, poynting vector and the flow of power, guided waves EM: to get employment in sector of electronics and communication
MPHY113DSC	QUANTUM MECHANICS-I & SOLID STATE PHYSICS-I	2019-20	SD: students will gain the knowledge of the function of a complex variable, representation of quantum states, angular momentum, energy bands, semiconductor crystals
MPHY114DSC	ELECTRONICS-I	2019-20	EM: to get employment in sector of electronics SD: students will gain the knowledge of fet amplifiers, multivibrators, power amplifier, wave shaping circuit, ic fabrication, timer 555 ic.
MPHY117SE	SPACE PHYSICS	2019-20	SD: Students will gain the Knowledge of the fundamentals of different kind atmospheric layers in brief, and aurora and airglow
MPHY211DSC	MATHEMATICAL PHYSICS-II & PROGRAMMING IN C-II	2019-20	SD: students will gain the knowledge of tensor analysis, group theory, structures and unions, pointers, file management in c, developing a c program. EM: to get employment in computer programming sector

MPHY212DSC	STATISTICAL MECHANICS-II & COMPUTER-II	2019-20	EM: to get employment in sector of electronics and communication SD: students will gain the knowledge of basic concept in statistical mechanics and quantum statistics, ideal Bose and Fermi system, windows and power point, micro-soft word.
MPHY213DSC	QUANTUM MECHANICS-II & SOLID STATE PHYSICS-II	2019-20	SD: students gain the knowledge of approximation methods for stationary states, the variation method, wkb approximation, evolution with time, fermi surfaces and metals, diamagnetism and paramagnetism.
MPHY214DSC	ELECTRONICS-II	2019-20	SD: students gain the knowledge of operational amplifier, digital electronics, microprocessor – i, microprocessors architecture and its operational, logic devices for interfacing, the 8085 mpu, microprocessor – ii.
MPHY217SE	SYNTHESIS OF MATERIAL	2019-20	SD: Students gain the Knowledge of the fundamentals of different kind Physical methods, thin film synthesis, Chemical routes, and Different crystal growth techniques
MPHY311DSC	NUCLEAR PHYSICS-I & INSTRUMENTS	2020-21	SD: students will gain the knowledge of nuclear properties, two-body forces, nuclear reactions, microscopy, uv-vis. EM: to get employment in nuclear power station
MPHY312DSC	STATISTICAL MECHANICS-III & COMPUTER-III	2020-21	EM: to get employment in sector of electronics and communication SD: students will gain the knowledge of phase equilibria, transport phenomena, micro-soft excel, computer network, internet and virus.
MPHY313DSC	QUANTUM MECHANICS–III & SOLID STATE PHYSICS-III	2020-21	SD: students gain the knowledge of scattering theory, partial wave analysis, ferromagnetism & anti ferromagnetism, magnetic resonance.

MPHY314DSC	ELECTRONICS-III	2020-21	SD: students gain the knowledge of pulse modulation, digital carrier systems, demodulation, remote sensing, fundamental of power electronics, basic of electrical machines, converts.
MPHY317SE	RESEARCH METHODOLOGY	2020-21	SD: Students gain the Knowledge of What is research, Literature Collection, Components of Research Report/Thesis, Research Report/Thesis –Formatting and Typing (Computing).
MPHY411DSC	NUCLEAR PHYSICS-II & BIO-PHYSICS	2020-21	SD: students gain the knowledge of nuclear model, elementary particles, separation techniques, biomechanics of body, neurobiophysics. EM: to get employment in nuclear power station & medical instrumentation manufacturing sector
MPHY412DSC	CLASSICAL MECHANICS-II & ELECTRODYNAMICS-II	2020-21	SD: students gain the knowledge of non linear oscillations and chaos, relativistic electrodynamics, wave guide, radiation,
MZOO101DSC	CELL STRUCTURE AND FUNCTIONS	2021-22	SD- Explain the role of compartmentalization and signalling in cellular biology; Interpret and explain key experiments in the history of cell biology; Evaluate and apply knowledge of modern techniques in cellular biology.
MZOO102DSC	EVOLUTIONARY BIOLOGY AND BIOIVERSITY	2021-22	SD- The Evolution and Biodiversity theme deals primarily with the evolutionary processes that generate and maintain (or limit) organismal and genetic diversity, patterns of species biodiversity in time and space, and the biology and evolutionary relationships within the specific organismal groups.
MZOO103DSC	MOLECULAR BIOLOGY AND GENETICS	2021-22	SD- demonstrate ability to use evolutionary theory and related equations to model and predict population change or stability.



MZOO104DSC	ANIMAL TAXONOMY-1	2021-22	SD- It motivates us to study plant and animal traits. It denotes the demand for the actual sequence of events. The taxonomy provides an overview of the local fauna and flora, which aids in the identification of endemic species.
MZOO105SE	WILDLIFE BIOLOGY - 1	2021-22	SD- Build up scientific knowledge on wildlife resources. 2. Carry out research relevant to management including the development of techniques appropriate to Indian conditions.
MZOO201DSC	BIOCHEMISTRY	2021-22	SD- Be able to frame a scientific question or problem. Be able to undertake investigations and perform analyses that provide information about biochemical questions and help to solve biochemical problems. Be able to demonstrate accurate quantitative analysis and computer literacy.
MZOO202DSC	INSTRUMENTATION AND ANALYTICAL TECHNIQUES	2021-22	SD- Instrumental analysis investigates the use of scientific instruments to study systems. Typical topics that are included within this area are spectroscopy, nuclear spectroscopy, mass spectrometry, crystallography, electrochemical analysis, thermal analysis, separations, and Microscopy.
MZOO203DSC	BIostatistics and Research Methodology	2021-22	SD- Demonstrate the ability to choose methods appropriate to research aims and objectives. Understand the limitations of particular research methods.
MZOO204DSC	ANIMAL TAXONOMY -2	2021-22	SD- It motivates us to study plant and animal traits. It denotes the demand for the actual sequence of events. The taxonomy provides an overview of the local fauna and flora, which aids in the identification of endemic species.

MZOO206SE	WILDLIFE BIOLOGY - 2	2021-22	SD- Build up scientific knowledge on wildlife resources. 2. Carry out research relevant to management including the development of techniques appropriate to Indian conditions.
MZOO301DSC	ANIMAL PHYSIOLOGY	2022-23	SD- learn about the structures and functions that allow animals to adapt and survive in different ecosystems around the world.
MZOO302DSC	IMMUNOLOGY	2022-23	SD- better understand how the immune system functions. With better understanding, more effective medications, therapies, and scientific techniques can be developed to diagnose and treat immune-mediated diseases.
MZOO303DSC	DEVELOPMENTAL BIOLOGY AND ADAPTATION	2022-23	SD- This ability to rapidly adapt to varying environmental conditions has made it possible for us to survive in most regions of the world. We live successfully in humid tropical forests, harsh deserts, arctic wastelands, and even densely populated cities with considerable amounts of pollution.
MZOO304DSC	ADVANCE TECHNIQUES IN ZOOLOGY	2022-23	SD- Zoology SDs include an ability to think critically, or use sound reasoning, to draw conclusions from test results and scientific observations. They also need to find the best solutions to disease, habitat loss and other wildlife threats. They must apply logic to find the strengths and weaknesses in ideas.
MZOO306SE	WILDLIFE BIOLOGY- 3	2022-23	SD- Build up scientific knowledge on wildlife resources. 2. Carry out research relevant to management including the development of techniques appropriate to Indian conditions.

MZOO401DSC	HISTOLOGY, HISTOCHEMISTRY AND PARASITOLOGY	2022-23	SD- Often called microscopic anatomy and histochemistry, histology allows for the visualization of tissue structure and characteristic changes the tissue may have undergone. Because of this, it is utilized in medical diagnosis, scientific study, autopsy, and forensic investigation.
MZOO402DSC	ANIMAL BEHAVIOUR	2022-23	SD- Gain a deeper understanding of animal behaviour. ... Make a positive impact on animal welfare. ... A range of career opportunities. ... Contribute to scientific research
MZOO403DSC	TOXICOLOGY AND ENVIRONMENTAL BIOLOGY	2022-23	ED-Environmental Toxicology encompasses the study of the toxic properties of virtually all chemicals (both naturally occurring and man---made), including their effects on humans and other species as well as their movement and fate in the environment.
MZOO404DSC	ENTOMOLOGY	2022-23	SD- Attain a solid foundation in insect biology, including general entomology, basic systematics, morphology, physiology, and biodiversity. 2. Understand evolution and biodiversity generation through macro- and micro-evolutionary processes, including how these processes have formed and diversified insects.
MZOO405SE	WILDLIFE BIOLOGY- 4	2022-23	SD- Build up scientific knowledge on wildlife resources. 2. Carry out research relevant to management including the development of techniques appropriate to Indian conditions.
CPMIC101DSC	INTRODUCTION TO MICROBIAL WORLD	2023-24	SD: Demonstrate theory in microscopy and their handling techniques and staining procedure. Know Various characteristics of microorganisms and also understand various physical and chemical means of sterilization.

CPMIC201DSC	SYSTEMATIC BACTERIOLOGY	2023-24	SD:Students will gain knowledge about bacterial cell size , shape, arrangement, detail structure of flagella, pilli, cell wall, cell membrane.Students will gain knowledge about sexual and asexual bacterial reproduction, Bacterial Growthcurve, Different type of culture media.
BMIC301UDSC	MICROBIAL PHYSIOLOGY AND METABOLISM	2019-20	SD:Students will study about role of microorganisms in soil, role of microorganisms in sulphar cycle,iron cycle, phosphorus cycle, nitrogen cycle.Students will also learn about Quantitative & Qualitative analysis of drinking water , filtration, sedimentation, Primary and secondary waste water treatment procedure.
BMIC302UDSC	SOIL AND WATER MICROBIOLOGY	2019-20	SD:Students will study about role of microorganisms in soil, role of microorganisms in sulphar cycle,iron cycle, phosphorus cycle, nitrogen cycle.Students will also learn about Quantitative & Qualitative analysis of drinking water , filtration,sedimentation, Primary and secondary waste water treatment procedure.
BMIC301USE	MICROBIAL ANALYSIS OF AIR AND WATER	2019-20	SD:Demonstrate theory in Laboratory for SPC, MPN, Membrane filter technique. Students will gain knowledge about air born microorganisms impact on human health, its importance in pharma and food industries and inactivation mechanisms (UV light, desiccation etc) , water born diseases.
BMIC401UDSC	MICROBIAL BIODIVERSITY	2019-20	SD: Students will gain knowledge of evolution and origin of biodiversity, Biochemical, Molecular,Genomic and metabolice cultural methods, Evolutionary tree. Students will Study Physiological, metabolic, Morphological, Cellular and ecological diversity,Lichens.

BMIC402UDSC	FOOD AND DAIRY MICROBIOLOGY	2019-20	SD: Students will learn about microbial flora of food , Major food born disease, Pasteurization, Students will gain knowledge about Staphylococcus aureus food poisoning, Botulism, Biochemical changes in food by microbes, Role of microbes in kefir , kumiss, pickles, importance of probiotics. Bacteriological analysis of food by CFU and MPN.
BMIC401USE	FOOD FERMENTATION TECHNIQUES	2019-20	SD: Students will gain knowledge about respiratory diseases, urinary tract infection, GI tract, nervous system diseases, Types of diseases, its route and outbreaks of diseases. Know Various infectious and non infectious diseases , prevention of disease causing agents transmitted by various foods, insects and direct contacts.
BMIC501DSC	MOLECULAR BIOLOGY	2020-21	EM: Will gain knowledge about Genetic engineering techniques and transgenic plants and animals. SD: Students will gain knowledge about basics of DNA replication, Transcription and Translation process and Role of various enzymes involved in Molecular biology techniques.
BMIC502DSC	IMMUNOLOGY	2020-21	SD: Students will learn relationship about antigen and antibody and Students will gain knowledge about innate and adaptive immunity, Immunological Techniques.
BMIC503DSC	CLASSICAL GENETICS	2020-21	SD: Students will gain knowledge about basics of gene, genome, Chromosomes and its types, centromere, sex determination in drosophila, Mitosis, meiosis, types of crossing over, tetrad analysis. Students will learn relationship between genes and traits, various fields, law of dominance, independent inheritance, monohybrid and dihybrid cross, law of segregation, Probability, chi-square analysis.

BMIC504DSC	GENE TRANSFER TECHNIQUES	2020-21	SD:Students will learn Molecular mechanisms of transformation, Types of transduction, specialized transducing particle formation from lysogen, Hfr transfer, Rec A protein and its function.Students will gain knowledge about principle of recombination and its types, and their molecular mechanisms, in vitro plasmid transfer and plasmid replication, Various plasmids and its properties.
BMIC501SE	HEMATOLOGY AND BLOOD BANKING	2020-21	SD: Students will gain knowledge about Plasma and serum,Red blood cells,White blood cells & plateles and also learn about Blood transfusion and Transfusion reactions,Erythroblastosis Foetalis and Major and minor cross matching.
BMIC601DSC	MEDICAL MICROBIOLOGY	2020-21	SD: Students will learn about Immunization, vaccine, adjuvant, serum, antiserum, anamnesis, toxoids , Recognition of Epidemic,antigenic shift and drift, Herd Immunity. Students will gain knowledge about Pathology, Infection, intoxication and disease, symptoms, sign, syndrome, prophylaxis Normal flora of skin, oral cavity, Gastrointestinal tract, and other body region.
BMIC602DSC	RECOMBINANT DNA TECHNOLOGY	2020-21	SD: Students will learn about methods of gene transfer such as Physical (Electroporation, Gene gun- particle bombardment, Microinjection- divert transformation, transformation by ultra sonication -liposome mediated- gene transfer)
BMIC603DSC	INDUSTRIAL MICROBIOLOGY	2020-21	SD: Students will gain knowledge about Concept of Fermentation (definition and applications),Range of fermentation processes & component parts of fermentation process and also learn about Chromatography, Membrane processes and ultra-filtration Drying & Crystallization Quality Assurance- Bioassay.

BMIC604DSC	BIOPROCESS TECHNOLOGY	2020-21	SD: Students will learn about SCP, Yeast and fermentation economics in industry and also gain information about Biosensors and microorganisms involved in Biofertilizer and Bioinsecticides. Students also know about Microbial enhanced oil recovery (MEOR).
BMIC601SE	INSTRUMENTATION AND BIOTECHNIQUES	2020-21	SD: Students will gain knowledge about Chromatography ,paper chromatography, Thin layer chromatography, column packing and filtration collection, Gel filtration chromatography, ion exchange chromatography and affinity chromatography GLC, HPLC, Spectrophotometry and centrifugation, Electrophoresis and SDS-PAGE, 2D gel electrophoresis, Isoelectric focusing, agarose gel electrophoresis.
BMIC602SE	ENVIRONMENTAL SCIENCE	2020-21	SD: Students will gain knowledge about Environmental Science, Community, Genecology-Concept of species, Ecotype, Niche, and Conservation-Introduction, Endangered species (IUCN categories), Forest research work in India, Wild life sanctuaries in India.
CPBOT101DSC	INTRODUCTION TO PLANT WORLD	2023-24	SD: To learn the basic concept about plants and conduct experiment using SDs appropriate to subdivisions
CPBOT201DSC	MORPHOLOGY AND TISSUE SYSTEM IN PLANT	2023-24	SD: The student Develop understanding on chemical bonding among molecules. Identify the concept that explains chemical composition and structure of cell organelles.
BBOT301UDSC	MYCOLOGY AND PHYTOPATHOLOGY	2022-23	SD: Demonstrate SDs in laboratory, field and glasshouse work related to Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies mycology and plant pathology.

BBOT302UDSC	ARCHEGONIAE	2022-23	SD: The student understands, Demonstrate an understanding of archegoniate, Bryophytes, Pteridophytes and Gymnosperms. Understanding of plant evolution and their transition to land habitat. Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, Gymnosperms
BBOT301USE	PLANT DIVERSITY AND HUMAN WELFARE	2022-23	SD: Identify the causes and implications of loss of biodiversity. EM: Apply SDs to manage plant biodiversity.
BBOT401UDSC	ANATOMY OF ANGIOSPERMS	2022-23	SD: Examine the internal anatomy of plant systems and organs. Develop critical understanding on the evolution of concept of organization of shoot and root apex.
BBOT402UDSC	ECONOMIC BOTANY	2022-23	SD: Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
BBOT401USE	PLANT BREEDING	2022-23	EM: Reflect upon the role of various non- conventional methods used in crop improvement. SD: Familiarize with genetic basis of heterosis.
BBOT501DSC	ALGAE, FUNGI AND PLANT PATHOLOGY	2020-21	SD: Identify true fungi and demonstrate the principles and application of plant pathology in the control of plant disease. Demonstrate SDs in laboratory, field and glasshouse work related to mycology and plant pathology.
BBOT502DSC	BRYOPHYTES, PTERIDOPHYTES AND GYMNOSPERMS	2020-21	SD: The student understands, Demonstrate an understanding of archegoniate, Bryophytes, Pteridophytes and Gymnosperms. Understanding of plant evolution and their transition to land habitat.



BBOT503DSC	ANGIOSPERM FAMILIES, PLANT ECOLOGY AND PLANT ANATOMY	2020-21	SD: The student understands the concept of important results on understand core concepts of biotic and abiotic. Classify the soils on the basis of physical, chemical and biological components Assess the adaptation of plants in relation to light, temperature, water, wind and fire.
BBOT504DSC	CELL BIOLOGY & GENETICS, MICROBIOLOGY AND BIOSTATISTICS	2020-21	SD: Develop understanding on the concept of microbial nutrition. Increase the awareness and appreciation of human friendly viruses and bacteria their economic importance.
BBOT501SE	AIR POLLUTION	2020-21	SD: The student understands the concept of Understand the fundamental issues of environment Analyze different sources of environmental problems and methods of measurement of pollution. Examine economic growth and quality of life.
BBOT501DSC	MOLECULAR BIOLOGY, PLANT PATHOLOGY & LICHENS AND ANGIOSPERM FAMILIES	2020-21	SD: The student understands the concept of Identify the principles and application of plant pathology in the control of plant disease, differentiate the main types of prokaryotes through their grouping abilities and their characteristic.
BBOT502DSC	BIOCHEMISTRY AND PLANT PHYSIOLOGY	2020-21	SD: To discuss important results on Lipid, Vitamins, Enzymes, Translocation of Food in Plants, Path of Carbon in Photosynthesis, Respiration, Respiration, Seed Dormancy and Physiological role of Phytohormones.
BBOT503DSC	ECONOMIC BOTANY, PLANT TISSUE CULTURE & BIOTECHNOLOGY AND GENETICS & PLANT ECOLOGY	2020-21	SD: The student understands the concept of Understand the core concepts and fundamentals of plant biotechnology and genetic engineering. Develop their competency on different types of plant tissue culture. EM: In Plant tissue culture laboratory.

BBOT504DSC	PLANT ANATOMY AND PLANT BREEDING	2020-21	SD: 2. Examine the internal anatomy of plant systems and organs. Develop critical understanding on the evolution of concept of organization of shoot and root apex. Analyze the composition of different parts of plants and their relationships. Evaluate the adaptive and protective systems of plants.
BBOT501SE	FRESH WATER ECOLOGY	2020-21	SD: 1. The student understands the concept of Reflect upon the values and uses of aquatic plans Develop their understanding on commonly occurring marine and limnetic planktons of Indian coasts along with the current understanding of its biology. EM: AS a Plant ecologist.
CPMAT101DSC	DIFFERENTIAL CALCULUS	2023-24	SD: Construct mathematical expressions and graphs involving functions and their derivatives.
CPMAT201DSC	INTEGRAL CALCULUS & DIFFERENTIAL EQUATION	2023-24	SD: Analyze functions using limits, derivative, and integrals.
BMAT301UDSC	LINEAR ALGEBRA AND CALCULUS	2019-20	SD: Construct mathematical expressions and graphs involving functions and their derivatives.
BMAT302UDSC	NUMERICAL ANALYSIS	2019-20	SD: An introduction to a broad range of numerical methods for solving mathematical problems that arise in Science and Engineering.
BMAT301USE	BUSINESS MATHEMATICS-III	2019-20	EN: Reconcile and analyze various banking statements and services.
BMAT401UDSC	ADVANCED CALCULUS	2019-20	SD: To provide the student with the SDs of vector calculus operations which are needed for further study in mathematics.
BMAT402UDSC	ADVANCED LINEAR ALGEBRA	2019-20	EN: Approximate a function using an appropriate numerical method.
BMAT401USE	BUSINESS MATHEMATICS-IV	2019-20	EN: Analyzing data appropriate to the problem.
BMAT501UDSC.	GROUP THEORY-I	2020-21	EN: It was understand the solutions to polynomial equation.
BMAT502UDSC	MATHEMATICAL ANALYSIS-I	2020-21	SD: To discuss important results on number system.
BMAT503UDSC	DIFFERENTIAL EQUATION	2020-21	SD: To discuss importance of differential equation.

BMAT504UDSC	OPERATION RESEARCH-I	2020-21	SD: To discuss about linear programming problem, and method of solution for LPP, duality theory and integer programming.
BMAT501USE	BUSINESS MATHEMATICS-V	2020-21	SD: To discuss about basic concept of mathematics.
BMAT601UDSC	RING THEORY	2020-21	EN: It was understand the solutions to polynomial equation.
BMAT602UDSC	MATHEMATICAL ANALYSIS-II	2020-21	EN: Use technology appropriately to investigate and solve mathematical and statistical problems.
BMAT603UDSC	TOPOLOGY	2020-21	SD: Topology has been used to study various biological systems including molecules and nanostructure.
BMAT604UDSC	OPERATION RESEARCH-II	2020-21	SD: To discuss about Transportation problem and method of solution for T.P., Sequencing problem and Game theory.
BMAT601USE	BUSINESS MATHEMATICS-VII	2020-21	SD: To discuss correlation and regression analysis.
CPCHE101DSC	GENERAL CHEMISTRY I	2023-24	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
CPCHE201DSC	GENERAL CHEMISTRY II	2023-24	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
BCHE301UDSC	INORGANIC AND ORGANIC CHEMISTRY	2019-20	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
BCHE302UDSC	PHYSICAL CHEMISTRY	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc

BCHE301USE	ENVIRONMENTAL POLLUTION	2019-20	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
BCHE401UDSC	INORGANIC AND ORGANIC CHEMISTRY	2019-20	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
BCHE402UDSC	PHYSICAL CHEMISTRY AND SPECTROSCOPY	2019-20	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
BCHE401USE	GREEN CHEMISTRY	2019-20	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
BCHE501UDSC	INORGANIC CHEMISTRY	2020-21	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
BCHE502DSC	ORGANIC CHEMISTRY	2020-21	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
BCHE503DSC	PHYSICAL CHEMISTRY	2020-21	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
BCHE504DSC	ANALYTICAL CHEMISTRY	2020-21	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results

BCHE501SE	SYNTHETIC DYES/ PHARMACEUTICAL CHEMISTRY	2020-21	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
BCHE601UDSC	INORGANIC CHEMISTRY	2020-21	EM-The student will be able to relate different kind of chemical bonding and structure of various chemicals. They will be able to explain various bonding of a various groups.
BCHE602DSC	ORGANIC CHEMISTRY	2020-21	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
BCHE603DSC	PHYSICAL CHEMISTRY	2020-21	EM-Student after learning this course can seek employment in areas of Agriculture, farms, Educational Institutes etc as Junior Scientist, Assistant Professor, Content Developer, and Researcher etc
BCHE604DSC	ANALYTICAL CHEMISTRY	2020-21	SD- Develop basic communication SDs through working in groups in performing the laboratory experiments and by interpreting the results
BCHE601SE	POLYMER CHEMISTRY/ FOOD ADDITIVES	2020-21	EN-This course opens a wide range of job opportunities such as in research, development, or production in the chemical process industries or to undertake research or teaching certificates
CPPHY101DSC	MECHANICS AND BASIC ELECTRONICS(MAE)	2023-24	SD: Students Will gain the Knowledge of the fundamentals of electronics and major functioning of electronic devices can assist a mechanical engineer to better communicate with electrical and electronics
CPPHY201DSC	WAVE, OPTICS, ELECTRONICS & SEMICONDUCTOR DEVICE(WOES)	2023-24	SD: Students will learn the concepts of light and its wave optics will help in the all-round development of students Knowledge of the Sound & Ultrasonic Waves and Thermodynamics

BPHY301UDSC	OPTICS,MODERN PHYSICS & LASER(OMPL)	2019-20	SD: Students gain the Knowledge of the fundamentals of Optics and Modern Physics functioning of Optical devices can assist a every human being to better communicate with optical instrument EM: modern physical phenomena's collaborating for the design/manufacturing of these systems.
BPHY302UDSC	SOLID STATE,NUCLEAR & MATHEMATICAL PHYSICS(SSNM)	2019-20	SD: Student gain the knowledge of Clear concepts of atomic cohesion and crystal binding, atomic spectra, elementary particles, detectors, radioactivity, Q-Equation, Fourier series and co-Ordinator transformation can assist to better communicate for the understand about atom binding, its structure, different types of element, and its transformation methods to understand it. EM: To get employment in nuclear power station
BPHY301USE	SPACE PHYSICS	2019-20	SD: Students gain the Knowledge of the fundamentals of Sun and solar radiation, cosmic rays and high energy astrophysics. EM : To get employment in a space agencies like isro,barc etc..
BPHY401UDSC	ELECTROMAGNETISM,ELECTRONICS & PLASMA PHYSICS (EMEP)	2019-20	SD: Students will gain the Knowledge of the fundamentals of electronics and major functioning of electronic devices can assist a mechanical engineer to better communicate with electrical and electronics engineers

BPHY402UDSC	QUANTUM MECHANICS, SOLID STATE & THERMODYNAMICS(QMSST)	2019-20	SD: Students will learn about Schrodinger Equations, The operator correspondence and the Schrodinger equation for a particle subject to forces , Normalization and Probability Interpretation, Non-Normalizable Wave functions and Box Normalization, Conservation of Probability, Crystal Structure, Some importance crystal structure, Face Centered Cubic Structure, Wigner-Seitz Cells, Miller Indices , Newtonian Relativity, Relativity of Simultaneity, Heat and Thermodynamics, The Helmholtz and Gibb's function, Maxwell's Distribution Law of Velocities.
BPHY401USE	VACUUM PUMPS, PRESSURE GUAGES AND INSTRUMENTS	2019-20	SD: Students gain the Knowledge of the different types of Exhaust Pumps and their characteristics, Types of errors, Errors of observations, and Optical Instruments.
BPHY501DSC	MATHEMATICAL PHYSICS, CLASSICAL MECHANICS & QUANTUM MECHANICS(MCQM-01)	2020-21	SD: Students will gain the Knowledge of the fundamentals of Mathematical physics, Classical mechanics and Quantum mechanics by its use he/she can solve out the complex problem of physics agenda.
BPHY502DSC	MOLECULAR SPECTRA, STATISTICAL MECHANICS & SOLID STATE PHYSICS(MSSP)	2020-21	SD: Students will gain the Knowledge of the fundamentals of Pure Rotational and Vibrational - Rotational Spectra, Raman and Electronic Spectra, Some Application of Statistical Mechanics, Bose Einstein and Fermi Dirac Distributions, Free Electron Theory of Metal, Application to Plasmons, Polaritons and Polarons
BPHY503DSC	ELECTROMAGNETISM AND PLASMA PHYSICS(EMPP)	2020-21	SD: Students will gain the Knowledge of the Boundary Value Problems in Electrostatic Fields :Special Techniques, Electromagnetic Induction, Electromagnetic Waves, Characteristics of a Plasma in a Magnetic field, Applications of Plasma

BPHY504DSC	ELECTRONICS	2020-21	SD: Students will gain the Knowledge of the basic knowledge of network transformation. Must have some basic knowledge about basic Karnaugh map, amplifiers, and transistor oscillator
BPHY501SE	INSTRUMENTS	2020-21	SD: Students gain knowledge about how to operate and take measurement by C.R.O., Babinet compensator, etc. EM: TO get employment in sector of instrument measurement
BPHY601DSC	MATHEMATICAL PHYSICS, CLASSICAL MECHANICS & QUANTUM MECHANICS(MCQM-02)	2020-21	SD: Students gain the Knowledge of the fundamentals of Mathematical physics, Classical mechanics and Quantum mechanics by its use he/she can solve out the complex problem of physics agenda with further more techniques.
BPHY602DSC	NUCLEAR PHYSICS(NP)	2020-21	SD: Students gain the knowledge of Alpha Rays: Spectra and Decay, Beta Rays: Spectra and Decay, Gamma-Ray Emission , The liquid drop model of the nucleus, Nuclear Energy, Elementary Particles, EM: To get employment in nuclear power station
BPHY603DSC	STATISTICAL MECHANICS, SOLID STATE PHYSICS & OPTICS(SSPO)	2020-21	SD: Students are aware with that the Solid-state physics is the most important branch of condensed matter physics. It helps to investigate how the large-scale properties of solid materials result from their atomic-scale properties. Thus, physics forms a theoretical basis of materials science. EM: To get employment in optics sector



BPHY604DSC	ELECTRONICS & C-PROGRAMMING	2020-21	SD: Students will gain the Knowledge of the fundamentals of Modulation, Regulated DC Power supply, C Language and some Photo electric Devices. They get knowledge of the basic Constants, Variables, Data Types, Operators, and Expressions. Learn the Photo electric devices and Thyristors. EM : To get employment in sector of programming and robotics
BPHY602SE	ATMOSPHERIC SCIENCE	2020-21	SD: Students gain the Knowledge of the fundamentals of different kind atmospheric layers, and aerosols.
BZOO101UDSC	NON-CHORDATES I: PROTISTA TO PSEUDOCOELOMATES	2021-22	SD- To Understand the structure and fucation Porifera, Coelenterata, Ctenophora, Platyhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca, Echinodermata and Hemichordata
BZOO201USE	WETLAND ECOLOGY	2021-22	SD- Wetlands play an integral role in the ecology of the watershed. The combination of shallow water, high levels of nutrients and primary productivity is ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects.
BZOO201USE	ENVIRONMENTAL POLLUTION AND CLIMATE CHANGE	2021-22	ED- To know about Environmental pollution & climate change
BZOO301UDSC	PRINCIPLES OF ECOLOGY	2022-23	SD- To develop knowledge of ecology. To develop knowledge about type of interactions between organisms To develop basic understanding of aquatic ecosystems.

BZOO302UDSC	CHORDATES- I	2022-23	SD- To understand the grades of general body organization general characteristics of phylum protozoa. To understand the general characteristics of phylum porifera To understand the general characteristics of phylum Platyhelminthes To understand the infestation, symptoms and treatment of diseases caused by protozoans.
BZOO302USE	POULTRY SCIENCE	2022-23	SD- To develop basic understanding of poultry science. To develop knowledge about the disease of poultry and poultry farming in India and Gujarat.
BZOO401UDSC	COMPARATIVE ANATOMY OF VERTEBRATES	2022-23	SD- To develop basic understanding of vertebrate morphology. To develop knowledge of comparative account of skeletal system in vertebrates. To develop knowledge of comparative account of heart in vertebrates.
BZOO402UDSC	CHORDATES II	2022-23	SD- To develop basic knowledge of characteristics and classification of phylum Mollusca. To develop basic knowledge of characteristics and classification of phylum Annelida. To develop basic knowledge of characteristics and classification of phylum Arthropoda.
BZOO401USE	LIMNOLOGY	2022-23	SD- To develop knowledge about limnology. 2. To develop knowledge about different characteristics of freshwater ecosystem.
BZOO501UDSC	CELL AND MOLECULAR BIOLOGY	2023-24	SD- To understand the structures and functions of basic components of prokaryotic and eukaryotic cell. To develop knowledge of the organization of nucleus.
BZOO502UDSC	DEVELOPMENTAL BIOLOGY	2023-24	SD- To develop knowledge about early developmental stages in animals. To develop knowledge about later developmental stages in animals.

BZOO503UDSC	BIOSTATISTICS, TOOLS AND TECHNIQUES IN ZOOLOGY	2023-24	SD- To develop knowledge about light microscopy. To develop basic understanding of laboratory practice and common lab instruments.
BZOO504UDSC	BIODIVERSITY AND CONSERVATION BIOLOGY	2023-24	SD- To develop knowledge of biodiversity hotspots and protected areas. To develop knowledge about conservation strategies for wildlife of India.
BZOO501USE	FISHERY SCIENCE	2023-24	SD- To ensure conservation of fishes and their environment. To develop and execute fisheries development plan.
BZOO601UDSC	BIOCHEMISTRY	2023-24	SD- To develop basic knowledge of bonding between Atoms, Elements and Molecules. To develop basic knowledge of carbohydrates and Lipids. To develop basic knowledge of proteins.
BZOO602UDSC	GENETICS	2023-24	SD- To develop basic understanding of structure, organization and types of chromosome. To develop knowledge of human genetics.
BZOO603UDSC	ANIMAL BEHAVIOUR AND EVOLUTION	2023-24	SD- To develop basic knowledge of animal communication. To develop basic knowledge of evolution.
BZOO604UDSC	ECONOMIC ZOOLOGY & TOXICOLOGY	2023-24	SD- To develop basic knowledge of economic communication. To develop basic knowledge of toxicology.
BZOO603USE	WILDLIFE BIOLOGY	2023-24	SD- Build up scientific knowledge on wildlife resources. 2. Carry out research relevant to management including the development of techniques appropriate to Indian conditions.
FCB210101	MICRO ECONOMICS	2018-2019	EM: Utilize micro economic concepts and techniques to take business decisions.
FCB210104	BUSINESS COMMUNICATION - I	2018-2019	SD: Students will enhance their communication SDs in english in bussiness context.

FCB210105	FINANCIAL ACCOUNTING - I	2018-2019	EM: Preparation and use of financial statement of different types of organisations.
FCB210106	COMPUTER APPLICATION - I	2018-2019	SD: Competence in msoffice and other software.
FCB220101	MACRO ECONOMICS	2018-2019	EM: Apply macroeconomic perspective to solve business issues and take appropriate policy decision.
FCB220102	BUSINESS ENVIRONMENT	2018-2019	EM: Analyse business environment and take appropriate decision.
FCB220104	BUSINESS COMMUNICATION - II	2018-2019	SD: Students will enhance their communication SDs in english in bussiness context.
FCB220105	FINANCIAL ACCOUNTING - II	2018-2019	EM: Preparation and use of financial statement of different types of organisations.
FCB220106	COMPUTER APPLICATION - II	2018-2019	SD: Competence in msoffice and other software.
FCB230101	MANAGERIAL ECONOMICS	2018-2019	EM: Analysis of demand, supply, production,market; Application of different economic paradigms using Microeconomics concepts.
FCB230102	HUMAN RESOURCE MANAGEMENT	2018-2019	EM: Interpretation complex marketing issues facing by a variety of enterprises.
FCB230103	TAXATION - I	2018-2019	EM: Can handle computation of heads of income and taxable income, TDS, advance tax etc.
FCB230104	COST ACCOUNTING – I	2018-2019	EM: Preparation of cost sheet and analysis of financial statements.
FCB230105	COMMERCIAL COMMUNICATION	2018-2019	SD: Competence in oral, written, and visual communication: EM, Use current technology Practicals.
FCB240101	INDIAN ECONOMICS	2018-2019	SD: To provide students with a basic understanding of the economic principles, methodologies and analytical tools that can be used in business decision making problems.
FCB240103	TAXATION - II	2018-2019	EM: Can handle computation of heads of income and taxable income, TDS, advance tax etc.
FCB240104	COST ACCOUNTING – II	2018-2019	EM: Preparation of cost sheet and analysis of financial statements.

FCB240105	ORGANIZATIONAL COMMUNICATION	2018-2019	SD: Competence in oral, written, and visual communication: EM, Use current technology Practicals.
FCB240106	PRODUCTION MANAGEMENT	2018-2019	EM: Developing aggregate capacity plans and MPS in operation environments.
FCB250101	STATISTICS	2018-2019	EM: Use statistical tools for managerial decisionmaking.
FCB250103	COST & FINANCIAL ACCOUNTING	2018-2019	EM: Preparation of cost sheet and analysis of financial statements.
FCB250105	PORTFOLIO MANAGEMENT	2018-2019	EM: Use methods of valuations of financial instruments and evaluation of risk as well as return of an individual security and portfolio.
FCB250106	MONEY FINANCIAL SYSTEM & INDIAN ECONOMY - I	2018-2019	EM: Understand the financial system, How financial systems works and different sources of raising fund.
FCB260105	MONEY FINANCIAL SYSTEM & INDIAN ECONOMY - II	2018-2019	EM: Understand the financial system, How financial systems works and different sources of raising fund.
FCB260106	MANAGEMENT OF ORGANIZED MARKET	2018-2019	EM: Use techniques for raising funds from capital market and from different sources.
FCM210102	BUSINESS ENVIRONMENT & POLICY	2018-2019	EM: Equipping students with a profound understanding of the dynamic business environment and the formulation of strategic policies for organizational success.
FCM210103	FINANCIAL MANAGEMENT	2018-2019	EM: Enhancing financial decision-making proficiency for optimal resource allocation and organizational sustainability.
FCM220101	MARKETING MANAGEMENT	2018-2019	EM: Equips students with the SDs to strategically plan, implement, and analyze marketing initiatives for organizational success
FCM220103	COST ACCOUNTING	2018-2019	SD: Developing proficiency in cost accounting to facilitate informed financial decision-making and optimize resource allocation in business.

FCM220104	TAX PLANNING & MANAGEMENT	2018-2019	EM: Develop proficiency in strategic tax planning and management to optimize financial outcomes for individuals and businesses.
FCM 230101	BUSINESS RESEARCH & METHODS	2018-2019	SD: To enable students to proficiently design, conduct, and analyze business research, fostering evidence-based decision-making in the corporate landscape.
FCM 230105	SECURITY ANALYSIS & PORTFOLIO MANAGEMENT	2018-2019	EM: Enhances the ability to analyze securities and construct portfolios for optimal investment returns and risk management
FCM 240101	MARKETING RESEARCH	2018-2019	SD: Proficiency in conducting comprehensive market research to inform strategic business decisions
FCM 240102	FINANCIAL MARKETS	2018-2019	SD: Develops a comprehensive understanding of financial markets and their dynamics, enabling informed investment decisions.
FCM 240103	ACCOUNTING FOR MANAGERS	2018-2019	SD: Equipping managers with the financial acumen to make informed business decisions and strategize effectively.
FCM 240105	STRATEGIC MANAGEMENT	2018-2019	SD: Empowering individuals to formulate and execute effective business strategies for sustainable organizational success.
FMB210101	MICRO OF ECONOMICS	2018-2019	EM: Utilize micro economic concepts and techniques to take business decisions.
FMB210104	BUSINESS COMMUNICATION - I	2018-2019	SD: Students will enhance their communication SDs in english in bussiness context.
FMB210105	FINANCIAL ACCOUNTING - I	2018-2019	EM: Preparation and use of financial statement of different types of organisations.
FMB210106	COMPUTER APPLICATION - I	2018-2019	SD: Competence in ms office and other software.
FMB220101	MACRO ECONOMICS	2018-2019	EM: Apply macroeconomic perspective to solve business issues and take appropriate policy decision.
FMB220102	BUSINESS ENVIRONMENT	2018-2019	EM: Analyse business environment and take appropriate decision.

FMB220104	BUSINESS COMMUNICATION - II	2018-2019	SD: Students will enhance their communication SDs in english in bussiness context.
FMB220105	FINANCIAL ACCOUNTING - II	2018-2019	EM: Preparation and use of financial statement of different types of organisations.
FMB220106	COMPUTER APPLICATION - II	2018-2019	SD: Competence in msoffice and other software.
FMB230102	HUMAN RESOURCE MANAGEMENT	2018-2019	EM: give the knowledge, understanding and key SDs that are required by today's HR professionals and to enable students to effectively contribute to dynamic organisations.
FMB230103	TAXATION - I	2018-2019	EM: Can handle computation of heads of income and taxable income, TDS, advance tax etc.
FMB230104	COST ACCOUNTING – I	2018-2019	EM: Preparation of cost sheet and analysis of financial statements.
FMB230105	INTRODUCTION TO ENTREPRENEURSHIP	2018-2019	EP: Understand the meaning of ENand its different classifications.
FMB240103	TAXATION - II	2018-2019	EM: Can handle computation of heads of income and taxable income, TDS, advance tax etc.
FMB240104	COST ACCOUNTING – II	2018-2019	EM: Preparation of cost sheet and analysis of financial statements.
FMB240105	BUSINESS RESEARCH AND METHODOLOGY	2018-2019	SD: Understand advanced design, methodologies and analysis in business research methods, including key terms, classifications and systematic applications to the research data and design of a research project.
FMB250101	BUSINESS STRATEGY FOR ENTREPRENEURSHIP	2018-2019	EP: Key concepts underpinning innovation and the issues associated with developing and sustaining innovation within organizations.
FMB250105	PORTFOLIO MANAGEMENT	2018-2019	EM: Use methods of valuations of financial instruments and evaluation of risk as well as return of an individual security and portfolio.
FMB260102	AUDITING	2018-2019	EM: Evaluate the methods of depreciation, Rights, duties & liabilities of an auditor, various types of auditing.

FMB260105	PROJECTS	2018-2019	SD: enhancing project development SDs using various theoretical and technical tools.
FMM110403	MANAGERIAL COMMUNICATION (MC)	2021-2022	SD: Students will enhance their communication SDs in english in bussiness context.
FMM110405	QUANTITATIVE TECHNIQUES FOR MANAGEMENT (MP&OB)	2021-2022	SD: To provide students with a basic understanding of the quantitative approaches, methodologies and analytical tools that can be used in business decision making problems.
FMM120401	COST & MANAGEMENT ACCOUNTING	2021-2022	EM: Preparation of cost sheet and analysis of financial statements.
FMM120406	ENTREPRENEURSHIP	2021-2022	EP: Analyse business environment and take appropriate decision to establish and improve business orngaisation.
FMM130401	SUMMER INTERNSHIP PROJECT (SIP)	2021-2022	EM: Practical experience to improve students EM and knowledge.
FMM130406	DIGITAL& SOCIAL MEDIA MARKETING (DS&MM) MARKETING	2021-2022	EM: Enable the students learn tools and techniques of social media marketing for an effective reach out approach.
FMM140401	COMPREHENSIVE PROJECT	2021-2022	EM: Practical experience to improve students EM and knowledge. An experiential learning which will help the students prepare for job life.
FCAB111101	FUNDAMENTALS OF PROGRAMMING LANGUAGE 'C'	2021-22	SD: C Programming Basics, Control Structure and Looping, Array and String, Functions and Pointers, Structure and Union, Dynamic Memory Allocation, File Management
FCAB111102	DATABASE MANAGEMENT SYSTEM	2021-22	EM: Relational Model, Entity-Relationship model, Relational Database design, Query Processing & Query Optimization, Transaction Management, SQL Concepts, PL/SQL Concepts



FCAB111103	DIGITAL COMPUTER SYSTEM ARCHITECTURE	2021-22	SD-Computer system architecture involves a complex interplay between hardware and software, with advancements continuously shaping the field to enhance performance, efficiency, and capabilities of digital systems
FCAB111104	COMMUNICATION SDS	2021-22	SD-Communication SDS are a fundamental set of abilities that enable effective interaction, understanding, and conveyance of ideas between individuals or groups
FCAB111105	PRACTICAL - FUNDAMENTALS OF PROGRAMMING LANGUAGE 'C'	2021-22	SD-The fundamentals of the C programming language form the backbone of software development and system programming.
FCAB111106	PRACTICAL – DBMS & OFFICE	2021-22	SD-Many office software suites provide tutorials and guides that can be valuable for learning these practical SDS
FCAB121107	ADVANCE PROGRAMMING LANGUAGE 'C'	2021-22	SD-Advanced programming in C involves mastering more complex concepts and techniques beyond the basics
FCAB121108	INTERNET & WEB DESIGN	2021-22	SD-Start with the basics, practice by building simple web pages, and gradually progress to more complex projects
FCAB121109	MATHEMATICS	2021-22	SD-Mathematics is used to develop a SD in maths.
FCAB121110	SYSTEM ANALYSIS	2021-22	SD-System analysis involves a structured approach to understanding and designing systems
FCAB121111	PRACTICAL - ADVANCE PROGRAMMING LANGUAGE 'C'	2021-22	SD-Advance C programming language involves tackling more complex concepts and techniques of program
FCAB121112	PRACTICAL – WEB DESIGN	2021-22	SD-Start with basic projects and gradually move towards more complex ones. The key is to practice, experiment, and learn from the process
FCAB131101	OBJECT ORIENTED PROGRAMMING USING C++	2022-23	SD-C++ involves understanding these principles and applying them practically in coding exercises and projects

FCAB131102	ADVANCE DATABASE MANAGEMENT SYSTEM	2022-23	EM-Proficiency in these advanced concepts is vital for managing large-scale, diverse, and high-performance databases in various industries and applications
FCAB131103	OPERATING SYSTEM	2022-23	SD-Operating systems (OS) are the core software that manages computer hardware and provides services for computer programs
FCAB131104	COMPUTER NETWORK	2022-23	EM-Networking plays a vital role in modern computing, enabling communication, resource sharing, and access to information across various devices and platforms
FCAB131105	PRACTICAL- OBJECT ORIENTED PROGRAMMING USING C++	2022-23	SD- By practicing these steps and gradually building more complex projects, you'll gain a deeper understanding of object-oriented programming using C++. Start with small projects and progressively move towards more comprehensive applications to strengthen your SDs.SD-
FCAB131106	PRACTICAL -ADVANCE DATABASE MANAGEMENT SYSTEM	2022-23	EM-By working on practical projects and experimenting with advanced database concepts, you'll gain a deeper understanding of the intricacies of managing complex data scenarios and optimizing database performance in real-world scenarios.
FCAB141107	MULTIMEDIA AND DESIGN	2022-23	EN-you'll enhance your SDs in multimedia and design. These SDs are versatile and applicable across industries, from digital marketing to entertainment and beyond
FCAB141108	DATA STRUCTURE	2022-23	EM-Data structures are fundamental components in computer science used to organize and store data efficiently.
FCAB141109	DATA MINING AND DATA WARE HOUSING	2022-23	EM-Data mining and data warehousing are essential components of managing and analyzing vast amounts of data

FCAB141110	E-COMMERCE	2022-23	EM-e-commerce involves various aspects from website development to customer management and marketing strategies
FCAB141111	PRACTICAL - MULTIMEDIA AND DESIGN	2022-23	EN-Practicing multimedia and design involves hands-on experience with various tools and creative techniques
FCAB141112	PRACTICAL- DATA STRUCTURE	2022-23	EM-Data structures are fundamental components in computer science used to organize and store data efficiently.
FCAM110301	COMMUNICATION SDS	2022-23	SD-Communication SDs are a fundamental set of abilities that enable effective interaction, understanding, and conveyance of ideas between individuals or groups
FCAM110302	INTRODUCTION TO PROGRAMMING LANGUAGE	2022-23	SD: C Programming Basics, Control Structure and Looping, Array and String, Functions and Pointers, Structure and Union, Dynamic Memory Allocation, File Management
FCAM110303	INTERNET & WEB DESIGN	2022-23	SD-Start with the basics, practice by building simple web pages, and gradually progress to more complex projects
FCAM110304	DIGITAL ELECTRONICS	2022-23	SD-Understanding digital electronics involves learning about circuits, logic gates, and digital systems
FCAM110305	PRACTICAL -INTRODUCTION TO PROGRAMMING LANGUAGE	2022-23	SD-The fundamentals of the C programming language form the backbone of software development and system programming.
FCAM110306	PRACTICAL - INTERNET & WEB DESIGN	2022-23	SD-Start with the basics, practice by building simple web pages, and gradually progress to more complex projects
FCAM120307	DATA COMMUNICATIONS & NETWORKING	2022-23	EM-Networking plays a vital role in modern computing, enabling communication, resource sharing, and access to information across various devices and platforms

FCAM120308	OBJECT TECHNOLOGY(JAVA)	2022-23	EM-Learning Java and object-oriented programming involves understanding the language features of java and applying them practically
FCAM120309	WEB DEVELOPMENT & DATABASE MANAGEMENT SYSTEM	2022-23	SD-Start with the basics, practice by building simple web pages, and gradually progress to more complex projects
FCAM120310	OPERATING SYSTEM	2022-23	SD-An operating system (OS) is a crucial software component that acts as an intermediary between computer hardware and user applications
FCAM120311	PRACTICAL -OBJECT TECHNOLOGY(JAVA)	2022-23	EM-Practical experience with object-oriented programming (OOP) and Java involves hands-on coding, building projects, and understanding core concepts
FCAM120312	PRACTICAL-WEB DEVELOPMENT & DATABASE MANAGEMENT SYSTEM	2022-23	SD-Start with the basics, practice by building simple web pages, and gradually progress to more complex projects
FPB140101	PHYSIOTHERAPY IN NEUROLOGICAL CONDITIONS	2021-22	SD: acquire knowledge of normal neurodevelopment with specific references to locomotion. plan and prescribe and execute short term and long term treatment.
FPB140102	PHYSIOTHERAPY IN MUSCULO-SKELETAL CONDITIONS	2021-22	SD: identify, discuss and analyze the musculoskeletal dysfunctions in term of biomechanical and biophysical basis and correlate the same with the provisional diagnosis and routine radiological and electro physiological investigations and treatment
FPB140103	PHYSIOTHERAPY IN CARDIO RESPIRATORY & MEDICAL SURGICAL CONDITIONS	2021-22	SD: identify, discuss and analyze the pulmonary dysfunctions based on pathophysiological principles and arrived at appropriate physical and functional diagnosis.
FPB140104	COMMUNITY PHYSIOTHERAPY REHABILITATION AND ASSISTIVE TECHNOLOGIES	2021-22	SD: Describe the evaluation of disability and planning for prevention, promotion and rehabilitation.

FPM110204	ELECTIVE PAPER( ORTHOPAEDICS)	2021-22	EM: To prepare students to adress problems related to health education and community physiotherapy.
BP101T	HUMAN ANATOMY AND PHYSIOLOGY I– THEORY	2023-24	SD-EM- Hand on practice on various clinical aspects of human physiology and also able to perform different types of experiments
BP102T	PHARMACEUTICAL ANALYSIS I – THEORY	2023-24	SD-EM-Use the techniques, SDs, and modern pharmaceutical instruments and tools necessary for pharmacy profession
BP103T	PHARMACEUTICS I – THEORY	2023-24	SD- EM- EN -Understand the impact of pharmaceutical solutions in a global, economic, environmental, and societal context
BP104T	PHARMACEUTICAL INORGANIC CHEMISTRY – THEORY	2023-24	SD- EM- Students can prepare various Pharmaceutical dosage form
BP105T	COMMUNICATION SDS – THEORY *	2023-24	SD- Students can improve their coomunication SD
BP107P	HUMAN ANATOMY AND PHYSIOLOGY – PRACTICAL	2023-24	SD-allows Students to verification of physiological processes discussed in theory classes through experiments on living tissue, intact animals or normal human beings
BP108P	PHARMACEUTICAL ANALYSIS I – PRACTICAL	2023-24	SD- EM- Students can assay ,preparaed and standarized various Heavy metals and Chemicals
BP109P	PHARMACEUTICS I – PRACTICAL	2023-24	SD- EM- Students can prepare various Pharmaceutical dosage form
BP110P	PHARMACEUTICAL INORGANIC CHEMISTRY – PRACTICAL	2023-24	SD- Students can perform purity test on drugs or chemicals
BP111P	COMMUNICATION SDS – PRACTICAL*	2023-24	SD- Students can improve their coomunication SD

BP112RBP	REMEDIAL BIOLOGY – PRACTICAL*	2023-24	SD- Students can learn about structure and functional system of plant and animal kingdom
BP201T	HUMAN ANATOMY AND PHYSIOLOGY II – THEORY	2023-24	SD-EM- Hand on practice on various clinical aspects of human physiology and also able to perform different types of experiments
BP202T	PHARMACEUTICAL ORGANIC CHEMISTRY I – THEORY	2023-24	SD-EM- synthesis, characterization of synthetic formulation and solve complex pharmaceutical problems in research and development sector.
BP203T	Pharmaceutical Engineering	2023-24	SD- EM- Students can understand various Pharmaceutical instruments
BP204T	Computer Applications in Pharmacy*	2023-24	SD- Pharmacists should be able to use basic computer tools and software, such as email, data entry tools, presentation software, document editing, and management.
BP205T	ENVIRONMENTAL SCIENCES – THEORY *	2023-24	EM- student get to know about basic knowledge about the environment and its allied problems
BP206P	HUMAN ANATOMY AND PHYSIOLOGY II –PRACTICAL	2023-24	SD- allow the verification of physiological processes discussed in theory classes through experiments on living tissue, intact animals or normal human beings
BP207P	PHARMACEUTICAL ORGANIC CHEMISTRY I– PRACTICAL	2023-24	SD-Students can do qualitative analysis and synthesis of Organic Compound

BP209P	COMPUTER APPLICATIONS IN PHARMACY – PRACTICAL*	2023-24	SD-Allows students to details with Database, Database Management system, computer application in clinical studies and use of databases
BP301T	Pharmaceutical Organic Chemistry II	2023-24	SD-EM- synthesis, characterization of synthetic formulation and solve complex pharmaceutical problems in research and development sector.
BP302T	Physical Pharmaceutics I	2023-24	EM:students gain insight into formulation research and development, and stability studies.
BP303T	Biochemistry	2023-24	Em:the course helps students learn real-world problem-solving strategies, process creation, data analysis, and project management.
BP304T	PATHOPHYSIOLOGY – THEORY	2023-24	SD-EM-student get to know about various communicable diseases and pathophysiology along with all the techniques for screening test .
BP305T	Pharmacognosy and Phytochemistry I	2023-24	EM:a field that studies the properties of natural drugs and their potential uses in medicine. It also involves the search for new drugs from natural sources.
BP306P	Pharmaceutical Organic Chemistry II	2023-24	SD-EM- synthesis, characterization of synthetic formulation and solve complex pharmaceutical problems in research and development sector.
BP307P	Physical Pharmaceutics I	2023-24	EM:students gain insight into formulation research and development, and stability studies.
BP308P	BIOCHEMISTRY – PRACTICAL	2023-24	SD- Students can demonstrate different Biochemical Test
BP309P	Pharmacognosy and Phytochemistry I	2023-24	EM:a field that studies the properties of natural drugs and their potential uses in medicine. It also involves the search for new drugs from natural sources.

FAB110101	PADARTHA VIJNANAM	2019	SD - IN RESEARCH ACTIVITIES
FAB110105	SAMHITA ADHYAYAN	2019	E- -BIOMEDICAL KNOWLEDGE GIVE TO COMMON MAN
FAB110103	KRIYA SHARIRA	2019	SD- HEALTH EXAMINATION
FAB110104	RACHANA SHARIRA	2019	SD - SD DEVELOPMENT ON DISSECTION OF DEAD BODY
FAB110102	SAMSKRITAM EVAM AYURVEDA ITHIHAS	2019	SD - BIOMEDICNE KNOWLEDGE CONVERT TO CURRENT ACCEPTING KNOWLEDGE
AyUG-PV	PADARTHA VIJNANAM	2021	SD - IN RESEARCH ACTIVITIES
AyUG-SA1	SAMHITA ADHYAYAN	2021	E- -BIOMEDICAL KNOWLEDGE GIVE TO COMMON MAN
AyUG-KS	KRIYA SHARIRA	2021	SD HEALTH EXAMINATION
AyUG-RS	RACHANA SHARIRA	2021	SD - SD DEVELOPMENT ON DISSECTION OF DEAD BODY
AyUG-SN&AI	SAMSKRITAM EVAM AYURVEDA ITHIHAS	2021	SD - BIOMEDICNE KNOWLEDGE CONVERT TO CURRENT ACCEPTING KNOWLEDGE
FAB120101	DRAVYAGUNA VIJYANA	2020	SD - PLANT IDENTIFICATION AND ENTERNPRINERSHIP FOR MEDICINE MANIFACTOURE
FAB120102	ROGA NIDAN	2020	SD BIOLOGICAL TESTS
FAB120103	RASA SHASTRA EVUM BHAISHAJYA KALPANA	2020	E - HERBAL MEDICNE INDUSTRY
FAB120104	CHARAKA SAMHITA	2020	E- -BIOMEDICAL KNOWLEDGE GIVE TO COMMON MAN
FAB130101	AGAD TANTRA	2021	E - AYUSH MEDICINE MARKET
FAB130102	SWASTHAVRITTA	2021	Spiritual Entrepreneurship
FAB130103	PRASUTI TANTRA EVUM STRI ROGA	2021	E -PREVENTIVE DEATH RATIO AND HEALTHY CHILD
FAB130104	KAUMARBHRITYA	2021	E CHILD FEEDING AND SAMSKAR TRAINER
FAB130105	CHARAKA SAMHITA (UTTARARDHA)	2021	E- -BIOMEDICAL KNOWLEDGE GIVE TO COMMON MAN
FAB140101	KAYA CHIKITSA	2022	E- AS A PRACTISIONER
FAB140102	PANCHAKARMA	2022	SD -FOR PANCHKARMA



FAB140103	SHALYA TANTRA	2022	SD AS WELL AS E- FOR ANORECTAL SURGERY
FAB140104	SHALAKYA TANTRA	2022	E- EYE AND ENT CARE TECHNIQUES
FAB140105	RESEARCH METHODOLOGY AND MEDICAL STATISTICS	2022	E- NEW RESEARCH PRODUCT SPECIALLY FOR NCD
FNB110404	NURSING FOUNDATION	2021-22	SD :- To Develop understanding about the concept of health, illness and scope of nursing within health care services.& Apply values, code of ethics and professional conduct in professional life.
FNB120403	NURSING INFORMATICS& TECHNOLOGY	2021-22	EM :- To Develop a basic understanding of computer application in patient care and nursing practice.
FNB130403	ADULT HEALTH NURSING I	2021-22	SD :- To Explain the etiology, pathophysiology, manifestations, diagnostic studies, treatments and complications of common medical and surgical disorders.
FNB150401	CHILD HEALTH NURSING	2021-22	SD :- To Develop understanding of the history and modern concepts of child health and child-care.
FNB150405	INTRODUCTION TO FORENSIC NURSING AND INDIAN LAWS	2021-22	SD :- Identify forensic nursing as an emerging specialty in healthcare and nursing practice
FNB170403	OBSTETRICS AND GYNAECOLOGY (OBG) NURSING	2021-22	SD :- Demonstrate professional accountability for the delivery of nursing care as per INC standards/ICM competencies that are consistent with moral, altruistic, legal, ethical, regulatory and humanistic principles in midwifery practice.
FNB150402	MENTAL HEALTH NURSING	2021-22	SD :- Apply nursing process in providing care to patients with substance use disorders, and personality and sexual disorders.
FLLB110101	CONSTITUTION LAW-I	2018-19	EM : Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles

FLLB110102	LAW OF CONTRACT	2018-19	EM :Contract Law cultivates EM and ENby equipping students with essential contractual knowledge and negotiation SDs, crucial for thriving in diverse legal and business environments.
FLLB110103	LAW OF TORTS, MOTOR VEHICLES ACT & CONSUMER PROTECTION ACTS	2018-19	EM :The Law of Torts, Motor Vehicles Act, and Consumer Protection Acts are pivotal legal frameworks shaping EM, entrepreneurship, and SD development.
FLLB110104	BANKING LAW	2018-19	EM :Banking Law is key for professionals, offering enhanced EM in finance, aiding entrepreneurs in regulatory navigation, and contributing to SD development in legal compliance within the dynamic banking sector.
FLLB110105	LAW OF CRIMES - I (INDIAN PENAL CODE)	2018-19	EN : Understanding Law of Crimes - I (Indian Penal Code) enhances EM in law enforcement, aids entrepreneurs in legal compliance, and requires SD development in interpreting and navigating criminal laws.
FLLB120106	CONSTITUTION LAW-II	2018-19	EN :Constitution Law-II proficiency boosts EM in legal and governmental sectors, aiding entrepreneurs in ensuring compliance and ethical business practices. SD development in constitutional law is essential for navigating legal complexities and making informed decisions.
FLLB120107	SPECIAL CONTRACT	2018-19	EM: Participatory learning through conduct of Case study relating to Sale of goods Act., SD: Role play on Essentials of a valid contract
FLLB120108	LAW OF CRIME – II (CR.P.C)	2018-19	SD : Student studies criminal procedure code, IPC, IEA, constitutions of India, acts pertaining to socio- economic and environmental crimes

FLLB120109	CIVIL PROCEDURE CODE	2018-19	SD :The Civil Procedure Code (CPC) and Law of Limitation are pivotal in governing civil litigation, providing procedural guidelines and time constraints essential for fair and efficient resolution of legal disputes.
FLLB120110	LAW OF EVIDENCE	2018-19	EM : The Law of Evidence is essential for ensuring the fair administration of justice by establishing rules and standards for the admissibility and presentation of evidence in legal proceedings.
FLLB130411	JURISPRUDENCE	2019-20	EM :Jurisprudence is crucial as it provides a theoretical foundation for understanding, interpreting, and shaping the principles and philosophy underlying the law.
FLLB130412	LABOUR & INDUSTRIAL LAW-1	2019-20	EM : Providing a comprehensive understanding of legal frameworks governing labor relations, equipping individuals to navigate the complexities of employment law and contribute effectively to industrial environments.
FLLB130413	LABOUR & INDUSTRIAL LAW-2	2019-20	EM Providing a comprehensive understanding of legal frameworks governing labor relations, equipping individuals to navigate the complexities of employment law and contribute effectively to industrial environments.
FLLB130414	PROPERTY LAW	2019-20	EM & EN Equipping individuals with a comprehensive understanding of real estate regulations, facilitating effective legal navigation in property transactions and fostering entrepreneurial opportunities in the real estate sector.
FLLB130415	ADMINISTRATIVE LAW	2019-20	EM Administrative Law is vital for ensuring accountability, fairness, and legality in the actions of government agencies, playing a crucial role in upholding the rule of law and protecting citizens' rights.

FLLB140416	FAMILY LAW-1	2019-20	EM Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLLB140417	FAMILY LAW-2	2019-20	EM Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLLB140418	COMPANY LAW	2019-20	EM: Mind map on different kinds of companies. EN: Discuss on case studies- Legal documents for establishment of a company
FLLB140419	PUBLIC INTERNATIONAL LAW	2019-20	EN Equipping individuals with a profound understanding of international and domestic human rights principles, fostering the SDs needed to advocate for justice and equality in diverse legal settings.
FLLB140420	TAXATION	2019-20	EM: Profit or Loss - Activity on Computation of Income prepare students to be industry ready, EN: E-Filing of Returns enables them to serve as Tax Consultants SD: Workshop on E-filing of Returns throw light on taking up filing on their own
FLLB150421	ENVIRONMENT LAW	2020-21	EN Environmental Law curriculum integrates practical case studies and regulatory compliance training, enhancing EM by preparing legal professionals to navigate complex environmental regulations and compliance frameworks
FLLB150422	TRUST AND RTI ACT	2020-21	EN The Trust Law curriculum emphasizes practical application, incorporating case studies and drafting exercises to enhance EM by equipping legal professionals with the SDs needed for effective trust management and administration.

FLLB150423	INTERPRETATION OF STATUTES	2020-21	SD EM is enhanced through specialized training in the interpretation of statutes, equipping legal professionals with the analytical SDs required to decipher and apply complex legislative provisions in various legal settings.
FLLB150424	HUMAN RIGHTS LAW	2020-21	EN Human Rights Law curriculum incorporates real-world case simulations and advocacy exercises, enhancing EM by cultivating the practical SDs needed to address human rights issues and engage in impactful legal advocacy.
FLLB150425	INTELLECTUAL PROPERTY RIGHTS	2020-21	SD The clear information about the patent laws, intellectual property rights and drug regulation in India and abroad is gained by the students -SD development
FLLB160426	DRAFTING, PLEADING AND CONVEYANCE	2020-21	EM EM is heightened through hands-on drafting exercises within legal education, equipping professionals with the essential SDs to prepare precise legal documents, enhancing their value in law firms and corporate legal departments.
FLLB160427	PROFESSIONAL ETHICS	2020-21	EM EM is bolstered through specialized training in professional ethics, providing legal professionals with a strong ethical foundation, crucial for building trust with clients and employers in diverse professional settings.
FLLB150428	ALTERNATIVE DISPUTE RESOLUTION	2020-21	EM EM is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.

FLLB150429	Moot Court	2020-21	SD: Focus on drafting legal documents and enhancing advocacy for litigation careers. EM: Practical training in case preparation, court procedures, and oral arguments. EP: Teaches legal frameworks for startups, contracts, and compliance essentials.
FLLB150430	Legal Language	2020-21	SD : Enhances precision in legal writing, drafting, and oral advocacy for professional settings. EM: Focuses on the interpretation of legal texts, statutes, and case law for effective practice. EP: Develops expertise in legal vocabulary and drafting skills essential for EM.
FLLM110401	INDIAN CONSTITUTIONAL LAW : THE NEW CHALLENGES	2018-19	EN Studying constitutional law in LL.B enhances EM and EN by providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
FLLM110402	LEGAL EDUCATION AND RESEARCH METHODOLOGY	2018-19	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
FLLM110403	PENOLOGY : TREATMENT OF OFFENDERS	2018-19	EM EM is strengthened through experiential training in penology, providing legal professionals with an understanding of rehabilitative practices and correctional policies, enhancing their ability to contribute to criminal justice reform.
FLLM110404	DRUG ADDICTION, CRIMINAL JUSTICE AND HUMAN RIGHTS	2018-19	EM EN is encouraged by integrating case studies on drug addiction within legal clinics, empowering individuals to establish businesses that focus on rehabilitation, harm reduction, and legal compliance in the context of substance abuse treatment.
FLLM110405	COMMUNICATION SD	2018-19	EM EM is elevated through targeted communication SDs training, focusing on effective written and verbal communication, essential for professional success in any field.

FLLM120406	JURISPRUDENCE	2018-19	EM EM is enriched through advanced studies in jurisprudence, providing legal professionals with a deep understanding of legal theory and philosophical foundations, enhancing their analytical SDs and critical thinking in diverse legal contexts.
FLLM120407	LAW & SOCIAL TRANSFORMATION IN INDIA	2018-19	EN ENis fostered through legal clinics focused on social justice initiatives, empowering individuals to establish ventures that drive positive social change and sustainable development, integrating legal strategies for impactful entrepreneurship.
FLLM120408	JUVENILE DELINQUENCY	2018-19	EM ENis encouraged by integrating legal clinics focused on juvenile justice, empowering individuals to establish programs addressing juvenile delinquency prevention, rehabilitation, and community reintegration, fostering entrepreneurial initiatives with a social impact.
FLLM120409	PRIVILEGED CLASS DEVIANCE	2018-19	EM ENis fostered by integrating case studies on privileged class deviance within legal clinics, empowering individuals to establish businesses with a commitment to ethical practices, corporate responsibility, and legal compliance.
FLLM120410	WELL-BEING OF TRIBES AND ANY NEEDFUL CLASS	2018-19	EM SD development initiatives include practical exercises in tribal law and community engagement, preparing legal practitioners to effectively navigate legal complexities, promote social justice, and contribute to the well-being of marginalized classes.
FLLM130411	JUDICIAL PROCESS	2019-20	EM EM is enriched through advanced studies in jurisprudence, providing legal professionals with a deep understanding of legal theory and philosophical foundations, enhancing their analytical SDs and critical thinking in diverse legal contexts.

FLLM130412	PRINCIPLES OF HUMAN RIGHTS	2019-20	EN ENis fostered through legal clinics focused on social justice initiatives, empowering individuals to establish ventures that drive positive social change and sustainable development, integrating legal strategies for impactful entrepreneurship.
FLLM130413	PRACTICAL - I	2019-20	EM ENis encouraged by integrating legal clinics focused on juvenile justice, empowering individuals to establish programs addressing juvenile delinquency prevention, rehabilitation, and community reintegration, fostering entrepreneurial initiatives with a social impact.
FLLM130414	COLLECTIVE VIOLENCE AND CRIMINAL JUSTICE SYSTEM	2019-20	EM ENis fostered by integrating case studies on privileged class deviance within legal clinics, empowering individuals to establish businesses with a commitment to ethical practices, corporate responsibility, and legal compliance.
FLLM130415	GENERAL PRINCIPAL OF LAW OF TORTS	2019-20	EM SD development initiatives include practical exercises in tribal law and community engagement, preparing legal practitioners to effectively navigate legal complexities, promote social justice, and contribute to the well-being of marginalized classes.
FLLM130416	SOFT SD- NEWS REPORTING AND ANALYSIS	2019-20	EM ENis fostered by integrating business law clinics with a focus on the judicial process, empowering aspiring entrepreneurs to navigate legal complexities related to business litigation, contracts, and dispute resolution.
FLLM140417	THE INFORMATION TECHNOLOGY ACT,2000	2019-20	SD SD development initiatives in human rights include practical exercises in human rights impact assessments and advocacy strategies, preparing legal practitioners to navigate complex human rights issues and contribute to positive social change.



FLLM140418	PRACTICAL - II	2019-20	EM ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
FLLM140419	DISSERTATION	2019-20	SD ENis encouraged by integrating real-world case studies on collective violence into legal clinics, empowering individuals to establish businesses that prioritize conflict resolution and community-building in the aftermath of violence.
FLLM140420	SPECIFIC TORTS	2019-20	EN ENis fostered by integrating case studies on collective violence and its legal implications within legal clinics, empowering individuals to establish businesses with a focus on conflict resolution, risk mitigation, and legal compliance.
FLLM140421	SOFT SD - CASE STUDY	2019-20	EN ENis encouraged by incorporating entrepreneurial journalism modules, empowering individuals to establish media ventures with a focus on insightful news reporting and analysis, fostering innovation in the rapidly evolving media landscape.
FLLM110301	INDIAN CONSTITUTIONAL LAW : THE NEW CHALLENGES	2018-19	EN Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
FLLM110302	LEGAL EDUCATION AND RESEARCH METHODOLOGY	2018-19	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
FLLM110303	LAW OF EXPORT IMPORT REGULATION	2018-19	SD ENis fostered by incorporating export-import law modules within business programs, empowering individuals to establish international ventures with a focus on legal compliance, risk management, and efficient cross-border transactions.

FLLM110304	LAW OF INDUSTRIAL AND INTELLECTUAL PROPERTY	2018-19	EN ENis fostered by incorporating IP law clinics within business programs, empowering aspiring entrepreneurs to protect their innovations, brands, and creative works, fostering a legal foundation crucial for entrepreneurial ventures.
FLLM110305	COMMUNICATION SD	2018-19	SD EM is elevated through targeted communication SDs training, focusing on effective written and verbal communication, essential for professional success in any field.
FLLM120306	JURISPRUDENCE	2018-19	EN Jurisprudence is crucial as it provides a theoretical foundation for understanding, interpreting, and shaping the principles and philosophy underlying the law.
FLLM120307	LAW & SOCIAL TRANSFORMATION IN INDIA	2018-19	EN ENis fostered through legal clinics focused on social justice initiatives, empowering individuals to establish ventures that drive positive social change and sustainable development, integrating legal strategies for impactful entrepreneurship.
FLLM120308	BANKING LAW	2018-19	EM Banking Law is key for professionals, offering enhanced EM in finance, aiding entrepreneurs in regulatory navigation, and contributing to SD development in legal compliance within the dynamic banking sector.
FLLM120309	INSURANCE LAW	2018-19	EM : ENis fostered by incorporating insurance law modules within business programs, empowering individuals to establish ventures with a focus on risk management, insurance compliance, and effective dispute resolution.
FLLM120310	COMPUTER AWARENESS	2018-19	EM ENis fostered by incorporating computer awareness modules within business programs, empowering individuals to leverage technology for business innovation, digital marketing, and efficient operations.

FLLM130311	JUDICIAL PROCESS	2019-20	EM ENis fostered by integrating business law clinics with a focus on the judicial process, empowering aspiring entrepreneurs to navigate legal complexities related to business litigation, contracts, and dispute resolution.
FLLM130312	PRINCIPLES OF HUMAN RIGHTS	2019-20	EM SD development initiatives in human rights include practical exercises in human rights impact assessments and advocacy strategies, preparing legal practitioners to navigate complex human rights issues and contribute to positive social change.
FLLM130313	PRACTICAL - I	2019-20	SD ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
FLLM130314	LEGAL REGULATION ON ECONOMIC ENTERPRISE	2019-20	SD ENis empowered by incorporating legal regulations content into business programs, enabling aspiring entrepreneurs to navigate legal complexities, structure businesses, and manage compliance, fostering responsible and sustainable entrepreneurship.
FLLM130315	CORPORATE FINANCE	2019-20	EM SD development initiatives include practical exercises in financial modeling, investment analysis, and financial planning, equipping individuals with the expertise needed to navigate the complexities of corporate finance and contribute effectively to both employment and entrepreneurial settings.
FLLM130316	NEWS REPORTING AND ANALYSIS	2019-20	EN ENis encouraged by incorporating entrepreneurial journalism modules, empowering individuals to establish media ventures with a focus on insightful news reporting and analysis, fostering innovation in the rapidly evolving media landscape.

FLLM140317	THE INFORMATION TECHNOLOGY ACT,2000	2019-20	EN ENis fostered by incorporating IT Act-focused legal clinics, enabling aspiring entrepreneurs to navigate the legal aspects of online businesses, data protection, and electronic transactions, promoting legal compliance in tech ventures.
FLLM140318	DIRECT TAXATION	2019-20	EM: Profit or Loss - Activity on Computation of Built6siV6o Income prepare students to be industry ready, EN: E-Filing of Returns enables them to serve as Tax Consultants SD: Workshop on E-fihing of Returns throw light on taking up filing on their own
FLLM140319	DISSERTATION	2019-20	SD : Dissertation and viva are critical in academia for evaluating a student's depth of knowledge, research SDs, and analytical capabilities, shaping future experts in their respective fields.
FLLM140320	PRACTICAL - II	2019-20	SD ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
FLLM140321	SOFT SD - CASE STUDY	2019-20	EM EM is enhanced through case study-focused soft SD training, cultivating critical thinking, problem-solving, and analytical abilities, essential for professionals to excel in diverse work environments.
ADR110101	RESEARCH METHODS AND LEGAL WRITING	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
ADR110102	COMPARATIVE PUBLIC LAW	2022-23	EN ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.

ADR110103	CLINICAL PAPER - 1 (DOCTRINAL, NON-DOCTRINAL, CLINICAL LEGAL RESEARCH)	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
ADR110104	EVOLUTION, CONCEPT AND DEVELOPMENT OF ADR	2022-23	EN The concept of ADR has developed over time to encompass various mechanisms such as mediation, arbitration, and negotiation, emphasizing parties' autonomy, flexibility, and a quicker resolution compared to lengthy court proceedings.
ADR110105	LAW OF ARBITRATION	2022-23	EN The concept of ADR has developed over time to encompass various mechanisms such as mediation, arbitration, and negotiation, emphasizing parties' autonomy, flexibility, and a quicker resolution compared to lengthy court proceedings.
ADR110106	INTERNATIONAL COMMERCIAL ARBITRATION	2022-23	EN The concept of ADR has developed over time to encompass various mechanisms such as mediation, arbitration, and negotiation, emphasizing parties' autonomy, flexibility, and a quicker resolution compared to lengthy court proceedings.
ADR120107	LAW AND JUSTICE IN A GLOBALIZING WORLD	2022-23	EN ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.
ADR120108	CLINICAL PAPER : 2(LEGAL AID & TEACHING PRACTICE)	2022-23	EN ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
ADR120109	RESEARCH PROJECT DISSERTATION	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis

ADR120110	LAW ON MEDIATION, CONCILIATION AND NEGOTIATION	2022-23	EM EM is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.
ADR120111	ONLINE DISPUTE RESOLUTION	2022-23	SD SD development is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.
ADR120112	FAMILY DISPUTE RESOLUTION	2022-23	SD: is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.
CAL110201	RESEARCH METHODS AND LEGAL WRITING	2022-23	EN Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
CAL110202	COMPARATIVE PUBLIC LAW	2022-23	EN ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.
CAL110203	CLINICAL PAPER - 1 (DOCTRINAL, NON-DOCTRINAL, CLINICAL LEGAL RESEARCH)	2022-23	EN ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
CAL110204	CENTRE – STATE RELATIONS AND CONSTITUTIONAL GOVERNANCE	2022-23	SD Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles

CAL110205	FUNDAMENTAL RIGHTS AND DIRECTIVE PRINCIPLES OF STATE POLICIES	2022-23	EN Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
CAL110206	PUBLIC POLICY DEVELOPMENT	2022-23	EN Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
CAL120207	LAW AND JUSTICE IN A GLOBALIZING WORLD	2022-23	EN The concept emphasizes the need for a nuanced understanding of diverse legal systems, fostering international cooperation and legal standards to ensure justice and equity on a global scale.
CAL120208	CLINICAL PAPER : 2 (LEGAL AID & TEACHING PRACTICE)	2022-23	EN ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
CAL120209	RESEARCH PROJECT DISSERTATION	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
CAL120210	ADMINISTRATIVE LAW	2022-23	SD Administrative Law is vital for ensuring accountability, fairness, and legality in the actions of government agencies, playing a crucial role in upholding the rule of law and protecting citizens' rights.
CAL120211	LOCAL SELF-GOVERNMENT AND FEDERAL GOVERNANCE	2022-23	EN Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
CAL120212	POLICE SECURITY AND ADMINISTRATION	2022-23	SD Studying constitutional law in LL.B enhances EM and ENby providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles

CSL110301	RESEARCH METHODS AND LEGAL WRITING	2022-23	EN Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
CSL110302	COMPARATIVE PUBLIC LAW	2022-23	SD : ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.
CSL110303	CLINICAL PAPER - 1 (DOCTRINAL, NON-DOCTRINAL, CLINICAL LEGAL RESEARCH)	2022-23	EN Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
CSL110304	CRIMINOLOGY, PENOLOGY AND VICTIMOLOGY	2022-23	EN Criminology is the study of criminal behavior, investigating its causes, patterns, and societal impact, providing insights for crime prevention and criminal justice policy.
CSL110305	CRIMINAL JUSTICE AND HUMAN RIGHTS	2022-23	EN ENis encouraged by integrating case studies on drug addiction within legal clinics, empowering individuals to establish businesses that focus on rehabilitation, harm reduction, and legal compliance in the context of substance abuse treatment.
CSL110306	POLICE LAW AND ADMINISTRATION	2022-23	SD This field focuses on the organizational and managerial aspects of law enforcement agencies, including personnel management, budgeting, and strategic planning, contributing to effective and accountable police administration.
CSL120307	LAW AND JUSTICE IN A GLOBALIZING WORLD	2022-23	EN Law and Justice in a Globalizing World recognize the increasing interconnectedness of legal systems, necessitating a collaborative approach to address transnational challenges such as international trade, cybercrime, and human rights violations.



CSL120308	CLINICAL PAPER : 2 (LEGAL AID & TEACHING PRACTICE)	2022-23	EN ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
CSL120309	RESEARCH PROJECT DISSERTATION	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
CSL120310	DRUG ADDICTION AND CRIME	2022-23	EN Drug addiction and crime often share a complex and intertwined relationship, as substance abuse can contribute to criminal behavior, including drug-related offenses, theft, and violence.
CSL120311	CORPORATE CRIMES / WHITE COLLAR CRIMES	2022-23	SD Corporate Crimes or White Collar Crimes involve non-violent offenses committed by individuals, often within business or professional settings, such as fraud, embezzlement, insider trading, and other financial crimes.
CSL120312	LAW OF JUVENILE DELINQUENCY	2022-23	EN encompasses legal provisions and procedures specific to offenses committed by minors, focusing on rehabilitation rather than punitive measures, with the aim of preventing future criminal behavior.
IPL110401	RESEARCH METHODS AND LEGAL WRITING	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
IPL110402	COMPARATIVE PUBLIC LAW	2022-23	EM ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.
IPL110403	CLINICAL PAPER - 1 (DOCTRINAL, NON-DOCTRINAL, CLINICAL LEGAL RESEARCH)	2022-23	EM Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis

IPL110404	LAW OF COPYRIGHT, INDUSTRIAL DESIGN AND ELECTRONIC CIRCUIT DESIGN.	2022-23	EM The clear information about the Copyright laws, intellectual property rights and electronic circuit in India and abroad is gained by the students -SD development
IPL110405	LAW OF PATENT AND TECHNOLOGY TRANSFER	2022-23	EN The clear information about the Law of Patent, intellectual property rights and Technology Transfer in India and abroad is gained by the students -SD development
IPL110406	INTERNATIONAL PERSPECTIVE AND ADVANCE LAWS OF IPR	2022-23	EM The clear information about the patent laws, intellectual property rights and electronic circuit in India and abroad is gained by the students -SD development
IPL120407	LAW AND JUSTICE IN A GLOBALIZING WORLD	2022-23	EN ENis fostered by incorporating Comparative Public Law content within legal education, empowering individuals to understand legal systems across jurisdictions, aiding in the establishment of businesses with a nuanced understanding of diverse legal frameworks.
IPL120408	CLINICAL PAPER : 2 (LEGAL AID & TEACHING PRACTICE)	2022-23	EN ENis fostered by incorporating practical business law clinics, enabling aspiring entrepreneurs to navigate legal challenges in real-time, developing essential SDs for ethical and legally compliant business ventures.
IPL120409	RESEARCH PROJECT DISSERTATION	2022-23	EM Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
IPL120410	BUSINESS ASPECTS OF IPR: TRADE MARKET, TRADE SECRETS, ETC.	2022-23	EN The clear information about the intellectual property rights and Trade Market, Trade Secrets in India and abroad is gained by the students -SD development
IPL120411	LAW OF BIODIVERSITY, TRADITIONAL KNOWLEDGE AND GEOGRAPHICAL INDICATIONS.	2022-23	SD The clear information about the Law of Biodiversity and Trade Market, Trade Secrets in India and Geographical Indications is gained by the students -

IPL120412	SOCIAL ASPECTS OF IPR	2022-23	EM The clear information about the intellectual property rights and Social Aspects of IPR in India and abroad is gained by the students -SD development
FLIC310101	LAW OF TORTS ( M.V. ACT & CONSUMER PROTECTION)	2018-19	EM The Law of Torts, Motor Vehicles Act, and Consumer Protection Acts are pivotal legal frameworks shaping EM, entrepreneurship, and SD development.
FLIC310102	LEGAL METHODS & RESEARCH	2018-19	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
FLIC310103	ENGLISH FOR LEGAL PROFESSIONALS-1	2018-19	SD Proficiency in English for Legal Professionals is indispensable, ensuring precise communication, international collaboration, and effective legal practice.
FLIC310104	GENERAL PRINCIPLES OF ECONOMICS	2018-19	EM Utilize micro economic concepts and techniques to take business decisions
FLIC310105	FUNDAMENTALS OF ACCOUNTING	2018-19	EM Preparation and use of financial statement of different types of organisations.
FLIC320101	CONSTITUTIONAL LAW-I	2018-19	EM Providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
FLIC320102	LAW OF CONTRACT	2018-19	EM The Law of Contract is essential for governing agreements, ensuring legal enforceability, and facilitating fair and predictable transactions in commercial and civil relationships.
FLIC320103	ENGLISH FOR LEGAL PROFESSIONALS -2	2018-19	SD Proficiency in English for Legal Professionals is indispensable, ensuring precise communication, international collaboration, and effective legal practice.
FLIC320104	BUSINESS ECONOMICS-2	2018-19	EM Apply macroeconomic perspective to solve business issues and take appropriate policy decision.

FLIC320105	ORGANIZATIONAL BEHAVIOUR AND BEHAVIOUR PSYCOLOGY	2018-19	EM Use techniques for raising funds from capital market and from different sources.
FLIC230113	BUSINESS COMMUNICATION	2019-20	SD Competence in oral, written, and visual communication: EM, Use current technology Practicals.
FLIC230114	BUSINESS ENVIRONMENT	2019-20	EM Analyse business environment and take appropriate decision.
FLIC230115	FUNDAMENTALS OF INTERNATIONAL BUSINESS	2019-20	SD To enable students to proficiently design, conduct, and analyze business research, fostering evidence-based decision-making in the corporate landscape.
FLIC230116	CONSTITUTION LAW II	2019-20	EM Providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
FLIC230117	FAMILY LAW I	2019-20	EN Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLIC230118	LEGAL THEORY (JURISPRUDENCE	2019-20	EM Jurisprudence is crucial as it provides a theoretical foundation for understanding, interpreting, and shaping the principles and philosophy underlying the law.
FLIC240119	CORPORATE ACCOUNTING-1	2019-20	EM Preparation of cost sheet and analysis of financial statements.
FLIC240120	INTRODUCTION TO DIRECT - INDIRECT TAXES	2019-20	EM Can handle computation of heads of income and taxable income, TDS, advance tax etc.
FLIC240121	FUNDAMENTALS OF BANKING	2019-20	EN Enhances the ability to analyze securities and construct portfolios for optimal investment returns and risk management
FLIC240122	CIVIL PROCEDURE CODE &LAW OF LIMITATION (CPC)	2019-20	SD The Civil Procedure Code (CPC) and Law of Limitation are pivotal in governing civil litigation, providing procedural guidelines and time constraints essential for fair and efficient resolution of legal disputes.

FLIC240123	FAMILY LAW -II	2019-20	EM Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLIC240124	TRANSFER OF PROPERTY AND EASEMENT ACT	2019-20	EM : transfer of property and easement act is related to the agreement and contract with property.
FLIC250125	ENVIRONMENTAL LAW	2019-20	EM Environmental law is crucial for safeguarding ecosystems and promoting sustainable development, ensuring legal frameworks that address environmental challenges and balance human activities with ecological preservation.
FLIC250126	MANAGEMENT ACCOUNTING - I	2019-20	EM Enhancing financial decision-making proficiency for optimal resource allocation and organizational sustainability.
FLIC250127	COST ACCOUNTING - II	2019-20	EM Preparation of cost sheet of financial statements
FLIC250128	LAW OF CRIME-I (I.P.C)	2019-20	SD : Student studies criminal procedure code, IPC, IEA, constitutions of India, acts pertaining to socio- economic and environmental crimes
FLIC250129	LABOUR & INDUSTRIAL LAW-I	2019-20	EM providing a comprehensive understanding of legal frameworks governing labor relations, equipping individuals to navigate the complexities of employment law and contribute effectively to industrial environments.
FLIC250130	INTERPRETATION OF STATUTES	2019-20	EM The interpretation of statutes is vital for ensuring the accurate application and understanding of laws, providing clarity and coherence in legal systems.
FLIC260131	LABOUR & INDUSTRIAL LAW -II	2020-21	EM providing a comprehensive understanding of legal frameworks governing labor relations, equipping individuals to navigate the complexities of employment law and contribute effectively to industrial environments.
FLIC260132	MANAGEMENT ACCOUNTING -2	2020-21	SD Equipping managers with the financial acumen to make informed business decisions and strategize effectively.

FLIC260133	LAW OF CRIME -CRPC-II	2020-21	SD : Student studies criminal procedure code, IPC, IEA, constitutions of India, acts pertaining to socio- economic and environmental crimes
FLIC260134	LAW OF EVIDENCE	2020-21	EM The Law of Evidence is essential for ensuring the fair administration of justice by establishing rules and standards for the admissibility and presentation of evidence in legal proceedings.
FLIC260135	DRAFTING, PLEADING & CONVEYANCING (CC)	2020-21	SD Drafting, Pleading, and Conveyancing (CC) is crucial in legal practice for honing the SDs needed to create precise legal documents, present effective arguments, and facilitate seamless transactions, enhancing the overall competency of legal professionals.
FLIC260136	BUSINESS ORGANIZATION AND MANAGEMENT	2020-21	EM providing a comprehensive understanding of legal frameworks governing labor relations, equipping individuals to navigate the complexities of employment law and contribute effectively to industrial environments.
FLIC170838	PUBLIC INTERNATIONAL LAW	2020-21	EM Equipping individuals with a profound understanding of international and domestic human rights principles, fostering the SDs needed to advocate for justice and equality in diverse legal settings.
FLIC170839	ADMINISTRATIVE LAW	2020-21	SD Legal Research Methodology is crucial for legal professionals to systematically gather, analyze, and interpret legal information, fostering informed decision-making and contributing to the development of robust legal arguments.
FLIC170841	COST & FINANCIAL ACCOUNTING - I	2020-21	SD Dissertation and viva are critical in academia for evaluating a student's depth of knowledge, research SDs, and analytical capabilities, shaping future experts in their respective fields.

FLIC170842	MEDIATION & CONCILIATION AND ARBITRATION - I	2020-21	EM EM is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.
FLIC170843	CYBER LAW AND IT ACT	2020-21	EM: Case Study Discussions on various cybercrimes especially during the pandemic A demo on Various methods to identify Security Challenges Posed by Mobile Devices. Pictionary Games on basic terminologies in Cyber Offences SD: Quiz and Seminar on tools and methods used in cyber crime
FLIC180843	INTELLECTUAL PROPERTY RIGHT	2021-22	SD The clear information about the patent laws, intellectual property rights and drug regulation in India and abroad is gained by the students -SD development
FLIC180845	PROFESSIONAL ETHICS & PROFESSIONAL ACCOUNTING SYSTEM (CC)	2021-22	EM EM is bolstered through specialized training in professional ethics, providing legal professionals with a strong ethical foundation, crucial for building trust with clients and employers in diverse professional settings.
FLIC180846	INDIAN FINANCIAL SYSTEM	2021-22	EM Develops a comprehensive understanding of financial markets and their dynamics, enabling informed investment decisions.
FLIC180847	MEDIATION & CONCILIATION AND ARBITRATION-II	2021-22	EM EM is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.
FLIC180848	ALTERNATIVE DISPUTE LAWS	2021-22	EM EM is enhanced through practical training in Alternative Dispute Resolution (ADR), providing legal professionals with mediation and negotiation SDs crucial for resolving conflicts efficiently and contributing to their versatility in legal practice.

FLIC190847	FORENSIC SCIENCE & CRIME DETECTION METHOD	2022-23	EM: Case Study: Discussions on various cyber crimes during the pandemic. Online Assignments on how attacks are planned, Security Challenges Posed by Mobile Devices. SD: Quiz: Tools and Methods Used in Cybercrime
FLIC190848	LAW OF IMPORT & EXPORT	2022-23	EN ENis fostered by incorporating export-import law modules within business programs, empowering individuals to establish international ventures with a focus on legal compliance, risk management, and efficient cross-border transactions.
FLIC190849	HUMAN RIGHTS' LAW AND PRACTICE	2022-23	EM Equipping individuals with a profound understanding of international and domestic human rights principles, fostering the SDs needed to advocate for justice and equality in diverse legal settings.
FLIC190851	LEGAL RESEARCH METHODOLOGY	2022-23	SD Legal Research Methodology is crucial for legal professionals to systematically gather, analyze, and interpret legal information, fostering informed decision-making and contributing to the development of robust legal arguments.
FLIC190852	DISSERTATION AND VIVA	2022-23	SD Dissertation and viva are critical in academia for evaluating a student's depth of knowledge, research SDs, and analytical capabilities, shaping future experts in their respective fields.
FLIC1100852	PUBLIC INTEREST LAWYERING,LEGAL AID AND PARA LRGAL AID SERVICES	2022-23	EN Public Interest Lawyering involves legal advocacy on behalf of marginalized or disadvantaged groups, addressing systemic issues to promote social justice and advance the common good.



FLIC1100853	ANIMAL PROTECTION LAWS,FARMERSAND BREEDERS' RIGHT	2022-23	EM Animal Protection Laws encompass legislation designed to safeguard the welfare and rights of animals, addressing issues such as cruelty, neglect, and the responsible treatment of animals in various contexts, including agriculture, entertainment, and companionship.
FLIC1100854	BIODIVERSITY PROTECTION AND IPR	2022-23	EN Biodiversity Protection and IPR (Intellectual Property Rights) intersect in efforts to preserve and sustainably manage biological diversity. Legal frameworks, including patents and plant breeders' rights, aim to incentivize innovation while ensuring the conservation of diverse ecosystems.
FLIC1100856	NARCOTICS DRUGS &PSYCHOTROPIC SUBSTANCES ACT (NDPS)	2022-23	EM The NDPS Act is pivotal in addressing and controlling the production, trafficking, and abuse of narcotics and psychotropic substances, playing a crucial role in combating drug-related offenses and promoting public health and safety.
FLIC1100857	LAND LAWS	2022-23	SD Land laws are fundamental in regulating property rights, land use, and ownership, ensuring legal stability and equitable distribution of resources for sustainable development.
FLIC110201	LAW OF TORTS ( M.V. ACT & CONSUMER PROTECTION)	2022-23	EM The Law of Torts, Motor Vehicles Act, and Consumer Protection Acts are pivotal legal frameworks shaping EM, entrepreneurship, and SD development.
FLIC110202	LEGAL METHODS & RESEARCH	2022-23	SD Study of Scientific writing, Selection of problem, criteria for selecting a research title, research hypothesis
FLIC110203	ENGLISH FOR LEGAL PROFESSIONALS-1	2022-23	SD Proficiency in English for Legal Professionals is indispensable, ensuring precise communication, international collaboration, and effective legal practice.
FLIC110204	GENERAL PRINCIPLES OF ECONOMICS	2022-23	EM Utilize micro economic concepts and techniques to take business decisions

FLIC110205	FUNDAMENTALS OF SOCIOLOGY	2022-23	EM explore the foundational principles of the scientific study of society, encompassing topics such as social structures, institutions, culture, and the dynamics of human interaction within different social contexts.
FLIC120201	CONSTITUTIONAL LAW-I	2022-23	SD Providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles
FLIC120202	LAW OF CONTRACT	2022-23	EM The Law of Contract is essential for governing agreements, ensuring legal enforceability, and facilitating fair and predictable transactions in commercial and civil relationships.
FLIC120203	ENGLISH FOR LEGAL PROFESSIONALS -2	2022-23	SD Proficiency in English for Legal Professionals is indispensable, ensuring precise communication, international collaboration, and effective legal practice.
FLIC120204	BUSINESS ECONOMICS-2	2022-23	EM Utilize micro economic concepts and techniques to take business decisions
FLIC120205	BASIC PSYCHOLOGICAL PROCESSES	2022-23	EM involve fundamental cognitive functions such as perception, attention, memory, and decision-making, providing the building blocks for understanding how individuals process and interpret information.
Hom UG-AN	ANATOMY, HISTOLOGY AND EMBRYOLOGY	2022-23	SD: to develop understanding about detailed structure of human body
Hom UG - PB	HUMAN PHYSIOLOGY & BIOCHEMISTRY	2022-23	SD: to develop understanding about detailed function of organic leaving body
Hom-UG-HP	HOMOEOPATHIC PHARMACY	2022-23	EN: knowledge about prepreparation of homoeopathic medicine which will help beneficeary to establish own homoeopathic pharmacy
HomUG-HMM-I	HOMOEOPATHIC MATERIA MEDICA	2022-23	SD: to develop in depth knowledge and applicability of medicines used in homoeopathic practice
HomUG-R-I	HOMOEOPATHIC REPERTORY AND CASE TAKING	2022-23	EM: 1. to develop homoeopathic software. 2. as efficinet homoeopathic physician

HomUG-OM-I	ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY AND FUNDAMENTALS OF PSYCHOLOGY	2022-23	SD: to develop an integrated approach in homoeopathic management of patients on the principles of homoeopathy.
HomUG-Yoga I	YOGA FOR HEALTH PROMOTION	2022-23	SD: to develop meditational SDs and holistic approach in management of patients.
BA1001	COMPULSORY ENGLISH	2019-20	SD-Writing grammatically correct sentences. Structuring essays, reports, or letters (introduction, body, conclusion).
BA2001	COMPULSORY ENGLISH	2019-20	SD-Creative writing (stories, poems), Academic writing (assignments, research papers), Professional writing (emails, resumes, business letters).
BA3001	COMPULSORY ENGLISH	2020-21	Academic writing (assignments, research papers), Professional writing (emails, resumes, business letters).
BA4001	COMPULSORY ENGLISH	2020-21	SD-Learning synonyms, antonyms, and precise words.
BA5001	COMPULSORY ENGLISH	2021-22	SD-Checking for grammatical errors and coherence.
BA6001	COMPULSORY ENGLISH	2021-22	SD-Students will be able to develop their writing, speaking, presentation SD.
BA1004	INDIAN CONSTITUTION	2020-21	SD- To develop knowledge about human right , To develop knowledge about different law human right
BA2004	INDIAN GEOGRAPHY	2020-21	SD: Understanding of different pollutions and its impact to the environment EM: Applying different disposal techniques for soil, marine water and solid waste
BA3004	ENVIRONMENT SCIENCE	2021-22	SD- To develop knowledge about CONSTITUTION 2. To develop knowledge about INDIAN CONSTITUTION
BA4004	CULTURAL HERITAGE OF GUJARAT	2021-22	SD: Understanding of different pollutions and its impact to the environment EM: Applying different disposal techniques for soil, marine water and solid waste

BA5004	HUMAN RIGHTS	2022-23	SD-students will be able to know about the basic rights and moral duties as a citizen of india
BA6004	PERSONALITY DEVELOPMENT	2022-23	SD- Understand and demonstrate key soft skills such as teamwork, problem-solving, and emotional intelligence. Enhance their grooming and dressing style to suit various professional and social settings.
BA5025	SAMIXA ANE APATHIT	2021-22	SD- students will be able to understand letter writing, critical analysis, applicaion writing in gujarati language.
BA6025	VYAVHAR BHASHA	2021-22	SD-students will be able to write letter writing,application writing,
BA3044	INDIAN ECONOMY-1	2021-22	SD- A method of farming that avoids synthetic fertilizers, pesticides, and genetically modified organisms (GMOs), focusing instead on natural processes and inputs.
BA5044	DEVELOPMENT AND ENVIRONMENTAL ECONOMICS	2022-23	SD- Students will understand the importance of eco-friendly products and their role in reducing environmental damage.
FAHM115301	ELEMENTS OF HISTORICAL METHOD	2020-2021	SD- To introduce students to the basic knowledge of historical research, the lesson should focus on understanding the methods, sources, and tools used in studying history systematically. This will equip students with the ability to critically analyze historical events and construct evidence-based narratives.
FAHM125301	HISTORIOGRAPHY	2020-2021	SD- students will be able to know about the basic knowledge of historical research and writing, Develop skills to critically evaluate sources and construct historical interpretations.

BA5045	DEMOGRAPHY	2022-23	EN- To teach students about population explosion and birth control, the lesson should focus on creating awareness about the causes and consequences of rapid population growth and introducing effective measures to manage it, with an emphasis on birth control methods.
FAHM125403	BASIC STATISTICS OF ECONOMICS	2021-22	EN- To introduce Research Methodology for research work and surveys, students should be taught the fundamental concepts, the importance of structured methods, and practical applications for conducting research effectively.
FAHM125104	ENGLISH LANGUAGE THEORY	2020-21	SD- students will be able to know about the English language theory and its various methods of teaching
FAHM135105	RESEARCH METHODOLOGY	2020-21	SD- students will be able to know about how to research and its importance. Draft professional emails or reports.
FAHM115205	સાહિત્ય અને સિનેમા	2020-21	SD- students will be able to know about what is the inter relation between literature and Film
FAHM145205	ભાષા અને સાહિત્ય કૌશલ્ય	2020-21	SD- students will be able to know about language and its various skills
FAHM125405	INDUSTRIAL ECONOMICS	2021-22	EN-To educate students about the Entrepreneurship Development Program (EDP), the lesson should focus on fostering entrepreneurial skills, understanding the basics of starting and managing a business, and exploring opportunities for innovation and self-employment.
FNB110404	NURSING FOUNDATION	2021-22	SD :To Develop understanding about the concept of health, illness and scope of nursing within health care services.& Apply values, code of ethics and professional conduct in professional life.
FNB120403	NURSING INFORMATICS& TECHNOLOGY	2021-22	EM :To Develop a basic understanding of computer application in patient care and nursing practice.

FNB130403	ADULT HEALTH NURSING I	2021-22	SD :To Explain the etiology, pathophysiology, manifestations, diagnostic studies, treatments and complications of common medical and surgical disorders.
FNB150401	CHILD HEALTH NURSING	2021-22	SD :To Develop understanding of the history and modern concepts of child health and child-care.
FNB150405	INTRODUCTION TO FORENSIC NURSING AND INDIAN LAWS	2021-22	SD :Identify forensic nursing as an emerging specialty in healthcare and nursing practice
FNB170403	OBSTETRICS AND GYNAECOLOGY (OBG) NURSING	2021-22	SD :Demonstrate professional accountability for the delivery of nursing care as per INC standards/ICM competencies that are consistent with moral, altruistic, legal, ethical, regulatory and humanistic principles in midwifery practice.
FNB150402	MENTAL HEALTH NURSING	2021-22	SD :- Apply nursing process in providing care to patients with substance use disorders, and personality and sexual disorders.
FNM115101	MEDICAL SURGICAL NURSING-I	2020-21	SD : Appreciate the trends & issues in the field of Medical – Surgical Nursing as a specialty. 2. Apply concepts & theories related to health promotion.
FNM115201	OBSTETRIC & GYNECOLOGICAL NURSING - I	2020-21	SD : Appreciate the trends in the field of midwifery, obstetrics and gynaecology as a specialty. 2. Describe the population dynamics and indicators of maternal and child health
FNM115301	MENTAL HEALTH NURSING-I	2020-21	SD : Appreciate the trends and issues in the field of psychiatry and psychiatric nursing. 2. Explain the dynamics of personality development and human behaviour.
FNM115401	CHILD HEALTH NURSING -I	2020-21	SD : Appreciate the history and developments in the field of pediatrics and pediatric nursing as a specialty 2. Apply the concepts of growth and development in providing care to the pediatric clients and their families.

FNM115501	COMMUNITY HEALTH NURSING -I	2020-21	SD : Appreciate the history and development in the field of Community Health and Community Health Nursing. 2. Appreciate role of individuals and families in promoting health of the Community.
FNP110201	NURSING FOUNDATION	2021-22	SD :Identify professional aspects of nursing 2. Explain theories of nursing
FNP110206	MATERNAL NURSING	2021-22	SD : Describe the physiology of pregnancy, labour, and puerperium. 2. Manage normal pregnancy, labour and puerperium.
FNP110207	CHILD HEALTH NURSING	2021-22	SD : Explain the modern concept of child care and the principles of child health nursing. 2. Describe the normal growth and development of children in various age groups.
FNP110208	MEDICAL & SURGICAL NURSING	2021-22	SD : Explain relevant Anatomy & Physiology of various systems of the body. 2. Explain etiology, pathophysiology & manifestations of various disorders
FNP120202	COMMUNITY HEALTH NURSING	2021-22	SD : Explain the concept of various factors contributing the health of individual family and community. 2. Explain and analyze health need of individual family and community based on factors contributing to health and illness
FNP120203	MENTAL HEALTH NURSING	2021-22	SD :Identify and describe the philosophy and principles of mental health nursing. 2. Describe the historical development of mental health and psychiatric nursing.
CPSECCOM106B	Computer IT-I	2023-24	EM: Workshops on Emerging Technologies: Sessions on the latest trends and technologies such as AI, machine learning, blockchain, and IoT to keep students updated and skilled.
CPMJDSCTTM201A	Tourism and Travel Management	2023-24	ED:Sessions on the latest trends in the tourism industry, such as sustainable tourism, digital nomadism, and experiential travel.

CPMIACT202B	Accounting & Taxation	2023-24	SD: Training sessions on the use of modern accounting software such as QuickBooks, SAP, and Tally to enhance technical skills and EM.
CPMDCCOC203B	Corporate Communication	2023-24	SD: Training sessions on effective public speaking and presentation skills, essential for corporate communication roles.
CPIKSYGM105	Yoga & Meditation	2023-24	SD: Comprehensive training programs that equip participants with the skills and certification needed to become professional yoga instructors.
GPB.1.1	Introductory Botany	2023-24	SD: -Plant habits, annuals, biennials, perennials, seed and seed germination. Introduction to plant taxonomy and plant systematic
Hort.1.1	Fundamentals of Horticulture	2023-24	SD: - Importance and scope of fruit and plantation crop industry in India, High density planting, Use of rootstocks, production technology for the cultivation of major fruits mango, banana, citrus, grape, papaya, apple pomegranate, sapota.
Ag.Micro.1.1	Agricultural Microbiology	2023-24	SD: -• Soil Health Management Using beneficial microbes to enhance soil fertility and Microbial Pest Control: Applying microorganisms to control agricultural pests and diseases. Careers in soil consultancy and microbial research.
Agron.1.1	Agricultural Heritage	2023-24	SD: -Learning about sustainable, low-impact agricultural practices. Promoting heritage practices and educating communities. • Starting eco-tourism ventures that showcase traditional farming methods. Traditional farming practices, crop conservation, and indigenous agricultural knowledge.
Ag.Chem.1.1	Fundamentals of Soil Science	2023-24	SD: -• Soil Testing and Analysis: Conducting tests to assess soil health and fertility. Water and Irrigation Management: Efficient water use to prevent soil degradation. Focus Areas: Soil properties, fertility management, soil conservation, and sustainable land use.



Ag.Stat.1.1	Agricultural Informatics	2023-24	SD:-• Data Analysis: Analyzing data to improve decision-making in farming practices. Precision Agriculture: Using technology to optimize resource use and crop yield.• Opportunities to develop agricultural software, apps, or platforms for farm management.
Pl.Path.1.1	Fundamentals of Plant Pathology	2023-24	SD:-• Disease Identification: Recognizing symptoms of plant diseases and understanding their causes.• Integrated Pest Management: Combining biological, chemical, and cultural methods to control plant diseases.• Plant Health Management: Developing strategies to protect crops and enhance yields.• Opportunities in the bio-pesticide industry, plant protection services, and agricultural extension.
Ag.Met.1.1	Introductory Agro-Meteorology & Climate change	2023-24	EP:-• Roles in climate-resilient agriculture, meteorological advisory services, and sustainable farming.• Starting a climate-adaptive farm, developing agriculture-based climate solutions, or offering climate-related agricultural services.• Weather Forecasting: Understanding how weather affects agricultural practices.
HVE.1.1	Human value & Ethics	2023-24	SD:-• Sustainability: Implementing ethical, socially responsible, and sustainable agricultural practices.• Ethical Decision Making: Evaluating and applying ethical principles in farming and business practices.• Roles in sustainable agriculture, ethical supply chains, and corporate social responsibility.
Maths.1.1	Elementary Mathematics	2023-24	SD:-• Data Analysis: Using statistical tools to analyze agricultural data.• Financial Planning: Managing farm finances and resources effectively.• Entrepreneurship potential in agricultural finance, resource allocation for farming, and financial consulting for farmers.

Eng.1.1	Comprehension and Communication skills in English	2023-24	SD:-• Business Communication: Communicating effectively in an agricultural business context.• Public Speaking: Delivering clear and engaging presentations on agricultural topics.• Effective Communication: Writing reports, technical documents, and delivering presentations.• Opportunities to start businesses in agriculture training, workshops, or content creation (e.g., blogs, books, or videos on farming techniques).
PE.1.1	NCC/NSS/Physical Education & Yoga practices	2023-24	SD:-hysical Health: Developing physical fitness and wellness practices for a balanced life.• Community Engagement: Participating in social service activities related to agriculture and rural development.• Roles in wellness businesses (e.g., yoga for farmers), community outreach programs, and physical education.• Leadership: Building leadership skills through community service (NSS) or military training (NCC).
FLIC130201	Business Communication	2023-24	SD Competence in oral, written, and visual communication: EM, Use current technology Practicals.
FLIC130202	Legal History	2023-24	SD Legal history activities and content can be used to develop skills and knowledge that can help with EM, entrepreneurship, and skill development. Some examples include: EM ourses that focus on EM, entrepreneurship, and skill development can be offered at various institutions.

FLIC130203	International relation	2023-24	SD nternational relations activities and content can help develop skills and knowledge that are useful for EM and entrepreneurship. These activities can include courses, guest lectures, and simulations. EM Courses on international relations history, political theory, and theories of international relations can help develop skills for EM
FLIC130204	Constitution law II	2023-24	EN :Constitution Law-II proficiency boosts EM in legal and governmental sectors, aiding entrepreneurs in ensuring compliance and ethical business practices. SD development in constitutional law is essential for navigating legal complexities and making informed decisions.
FLIC130205	Family Law I	2023-24	EM Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLIC130206	Jurisprudence (Legal Theory)	2023-24	EM :Jurisprudence is crucial as it provides a theoretical foundation for understanding, interpreting, and shaping the principles and philosophy underlying the law.
FLIC140201	Managerial Economics	2023-24	EM Apply macroeconomic perspective to solve business issues and take appropriate policy decision.
FLIC140202	Public Policy and Public Administration	2023-24	SD This field focuses on the organizational and managerial aspects of law enforcement agencies, including personnel management, budgeting, and strategic planning, contributing to effective and accountable police administration.
FLIC140203	Theoretical Prospective of Sociology	2023-24	SD Providing a strong legal foundation for navigating complex legal issues and fostering a deep understanding of constitutional principles

FLIC140204	Civil Procedure Code & Law of Limitation	2023-24	SD :The Civil Procedure Code (CPC) and Law of Limitation are pivotal in governing civil litigation, providing procedural guidelines and time constraints essential for fair and efficient resolution of legal disputes.
FLIC140205	Family Law -II	2023-24	EM Family is paramount for emotional support and personal development, shaping the foundation of one's values and relationships.
FLIC140206	Transfer of Property and Easement Act	2023-24	EM & EN Equipping individuals with a comprehensive understanding of real estate regulations, facilitating effective legal navigation in property transactions and fostering entrepreneurial opportunities in the real estate sector.
FPB110101	HUMAN ANATOMY	2018-19	<ul style="list-style-type: none"> <li>1) Acquire the knowledge of structure of human body in general.</li> <li>2) Understand the regional anatomy in detail</li> <li>3) Anatomical changes right from embryonic period till old age</li> <li>4) Understand histological features of various organs</li> <li>5) Understand its application in medical science</li> </ul>
FPB110102	HUMAN PHYSIOLOGY AND BIO-CHEMISTRY	2018-19	<ul style="list-style-type: none"> <li>1) Acquire the knowledge of functions of various systems of human body</li> <li>2) Understand the role of hormones, enzymes, and other different types of cells of Human body.</li> </ul>

FPB110103	PSYCHOLOGY AND SOCIOLOGY	2018-19	<p>1. Define the term psychology and its importance in the health delivery system and gain knowledge of psychological maturation during human development and growth and alteration during ageing process.</p> <p>2. Understand the importance of psychological status of the person in the health and diseases, environmental and emotional influence on the mind and personality.</p> <p>3. Acquire the knowledge as to how to deal with the patient. Reference should be made whenever appropriate to the therapist's relationship with the patient and with his professional colleagues. Emphasis should be laid on the effects of disease on the patient's behavior.</p>
FPB110104	EXERCISE THERAPY I & SOFT TISSUE MANIPULATION	2018-19	<p>1. Understand the basic mechanical principles and effect of exercise, therapeutic modality in the restoration of physical function.</p> <p>2. Describe and acquire the skills of application and demonstration of the use of various tools of the therapeutic gymnasium and various starting and derived positions.</p>
FPB110105	BIOMEDICAL PHYSICS	2018-19	<p>1. Describe the fundamentals of general physics and able to relate its application in physiotherapy</p> <p>2. Understand basic physical principles of sound, light and heat and their application in physiotherapy field</p>
FPB110106	PROFESSIONAL PRACTICE & ETHICS	2018-19	<p>1. Be able to understand the moral values and meaning of ethics</p> <p>2. Acquire bedside manners and communication skills in relation with patients, peers seniors and other professionals.</p>

FPB110107	COMPUTER APPLICATIONS	2018-19	The course enables the students to understand the fundamentals of computer and its basic applications.
FPB110108	ENGLISH	2018-19	The course is designed to help Acquire a good command and comprehension of the English language through individual papers and conferences.
FPB120101	PATHOLOGY AND MICROBIOLOGY	2019-20	<ol style="list-style-type: none"> <li>1. Acquire the knowledge of concepts of cell injury and changes produced thereby in different tissues and organs; capacity of the body in healing process.</li> <li>2. Recall the etio-pathogenesis, the pathological effects and the clinical-pathological correlation of common infection and non-infectious disease.</li> <li>3. Acquire the knowledge of concepts of Neoplasia with reference to the etiology, gross and microscopic features, diagnosis and prognosis in different tissues and organs of the body.</li> </ol>
FPB120102	PHARMACOLOGY	2019-20	<ol style="list-style-type: none"> <li>1. Describe pharmacological effects of commonly used drugs by patients referred for physiotherapy; list their adverse reactions, precautions to be taken, contraindications, formulation and route of administration.</li> <li>2. Identify whether the pharmacological effect to the drug interferes with the therapeutic response of physiotherapy and vice versa</li> </ol>
FPB120103	EXERCISE THERAPY II	2019-20	<ol style="list-style-type: none"> <li>1. Describe the biophysical properties of connective tissue and the effect of biomedical loading and factors which influence the muscle strength and mobility of articular and periarticular soft tissue.</li> </ol>

FPB120104	KINESIOLOGY	2019-20	<ol style="list-style-type: none"> <li>1. Acquire the skill of assessment of isolated and group muscle strength subjectively and objectively.</li> <li>2. Analyze normal human posture and its associated problems, its management.</li> </ol>
FPB120105	PSYCHIATRY	2019-20	<ol style="list-style-type: none"> <li>1. Enumerate various psychiatric disorders with special emphasis to movement, pain and ADL &amp; describe the various causative factors and methods of assessment and management</li> </ol>
FPB120106	ELECTROTHERAPY	2019-20	<ol style="list-style-type: none"> <li>1. Recall the Physics – Principles and laws of electricity, Electromagnetic spectrum, Ultrasound</li> <li>2. Describe the electrical main supply, Electric shock – precautions</li> </ol>
FPB120107	MISCELLANEOUS MEDICINE	2019-20	<ol style="list-style-type: none"> <li>1. Identify common chest conditions together with basic traumatic, infective, inflammatory and degenerative conditions and bony skeletal</li> <li>2. Read CT, MRI of different joints.</li> </ol>
FPB120108	ALLIED THERAPEUTICS	2019-20	<ol style="list-style-type: none"> <li>1. Comprehend the use of various allied therapeutic sciences in health care delivery.</li> </ol>
FPB120109	RECENT TRENDS	2019-20	<ol style="list-style-type: none"> <li>1. Be able to understand the moral values and meaning of ethics</li> <li>2. Acquire bedside manners and communication skills in relation with patients, peers seniors and other professionals.</li> </ol>

FPB130101	MEDICINE-I	2020-21	1. Acquire the knowledge of Etiology, Patho-physiology, signs and symptoms and management in brief, of the infectious diseases, diseases of metabolism especially obesity and other related medical conditions, diseases of hematopoietic system, diseases of GI and urinary tract & endocrine disorders
FPB130102	MEDICINE-II	2020-21	Describe normal development and growth of a child, importance of immunization and breast feeding and psychological aspect of development
FPB130103	SURGERY	2020-21	1. Describe the effects of surgical trauma and anesthesia in general 2. Classify, clinically evaluate and describe the surgical management in brief in a) wounds-ulcers b) burns
FPB130104	PHYSICAL & FUNCTIONAL DIAGNOSIS	2020-21	acquire the skill of detection & objective documentation of the neurological, musculoskeletal, cardiovascular & pulmonary dysfunctions such as pain, altered muscle power, mobility, endurance, limb length, posture, gait, hand function & A.D.L. in adult & pediatric conditions & acquire skill & to arrive at the Functional diagnosis as per International Classification of Functioning (ICF)
FPB130105	ORTHOPADICS	2020-21	1. Discuss the patho-physiology, clinical manifestations and conservative/surgical management of various non-traumatic cases of the musculo-skeletal conditions
FPB130106	PREVENTIVE & SOCIAL MEDICINE	2020-21	2. Describe the health administration at various levels (centre and state), health care delivery at urban and rural areas



FPB130107	RECENT TRENDS	2020-21	2. Acquire bedside manners and communication skills in relation with patients, peers seniors and other Professionals.
FPB140105	ETHICS AND MANAGEMENT	2021-22	1. Understand the moral values and meaning of ethics. 2. Acquire bedside manners and communication skills in relation with patients, peers seniors and other professionals.
FPB140106	BIO-STATISTICS & RESEARCH METHODOLOGY	2021-22	2. Differentiate complete enumeration and various forms of sampling (random: Simple, stratified, cluster, multi stage; non random: snow ball, quota, purposive, convenient) with understanding of merits and demerits of them
FPM110201	BASIC SCIENCES	2021-22	1:Apply knowledge of basic sciences to analyze appropriate physiotherapeutic interventions, showcasing the ability to transfer theoretical knowledge to practical situations.
FPM110202	PHYSICAL AND FUNCTIONAL DIAGNOSIS	2021-22	1:Interpret diagnostic data, integrating information from multiple sources to identify underlying pathology, contributing factors, and potential treatment implications.
FPM110203	ADVANCED PHYSIOTHERAPEUTICS	2021-22	1: Plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.
FPM110204	ELECTIVE PAPER	2021-22	1: Advanced understanding of the scope of practice of musculoskeletal physiotherapy, advanced knowledge of physical, biological, medical and behavioural sciences.

FEM115106	Cryogenic Engineering	2018-19	EM Key for industries in aerospace, energy, and medical applications.
FEM115107	Solar Energy Engineering	2018-19	EM Relevant for renewable energy sectors.
FEM115108	Thermal and Nuclear Power Plants	2018-19	EM Prepares for roles in energy generation and plant management.
FEM115109	Hydrogen and Fuel Cell Technology	2018-19	EM Key for sustainable energy industries.
FEM115110	Design of Heat Exchanger	2018-19	EM Vital for industries like HVAC, energy, and process engineering.
FEM125102	ADVANCED FLUID MECHANICS	2018-19	EM Prepares for roles in fluid dynamics, aerospace, and manufacturing.
FEM125104	Design and Optimization of Thermal System	2018-19	EM Relevant for thermal engineering roles in various industries.
FEM125105	Combustion Engineering	2018-19	EM Key for roles in energy, automotive, and aerospace sectors.
FEM125106	Energy Conservation & Management	2018-19	EM Relevant for roles in sustainability and energy management.
FEM125107	Advanced Air conditioning Engineering	2018-19	EM Essential for HVAC industry and environmental engineering.
FEM125108	Computational Fluid Dynamics	2018-19	EM Key for roles in aerospace, automotive, and mechanical design.
FEM125109	MINI PROJECT WITH SEMINAR	2018-19	EM Demonstrates practical skills and project management.
FEM135101	INTERNAL REVIEW-I	2018-19	EM Provides feedback on academic progress and project development.
FEM135103	Industrial Safety	2018-19	EM Key for roles in safety management and risk assessment.
FEM135104	COST MANAGEMENT OF ENGINEERING PROJECTS	2018-19	EM Prepares for roles in project management and budgeting.
FEM135105	Composite Materials	2018-19	EM Relevant for industries focused on lightweight, durable materials.
FEM135106	Advanced Thermal Turbo Machines	2018-19	EM Key for roles in energy production and turbine engineering.
FEM135107	Jet Propulsion & Air-Craft Engineering	2018-19	EM Essential for aerospace and aviation industries.

FEM135108	Exergy Analysis of Thermal Systems	2018-19	EM Relevant for energy analysis and optimization roles.
FEM145101	INTERNAL REVIEW-II	2018-19	Entrepreneurship: Helps fine-tune ideas for real-world implementation.
FEM145102	DISSERTATION PHASE-II	2018-19	EM Demonstrates ability to conduct independent research.
FEB110202	Elements Of Mechanical Engineering	2018-19	EM Provides foundational knowledge for mechanical roles.SD: Develops basic mechanical design and system understanding.
FEB110003	Communication Skill	2018-19	EM Enhances verbal and written communication for professional settings.SD: Strengthens presentation, negotiation, and technical writing skills.
FEB110304	Elements Of Electrical Engineering	2018-19	EM Expands knowledge into electrical systems and integration.
FEB110005	Physics	2018-19	EM Provides the foundation for all engineering principles.
FEB110206	Basic Workshop	2018-19	SD Builds practical knowledge in workshop tools and techniques.
FEB120403	Computer Programming With C	2018-19	EM Key for roles in software development and automation.SD Develops programming, debugging, and problem-solving skills.
FEB120204	Engineering Graphics	2018-19	EM Essential for design and technical drawing roles.
FEB120105	Environmental Science(Mandatory Course)	2018-19	EM Relevant for roles in environmental management and sustainability.
FEB130002	Indian Constitution	2018-19	EM Provides understanding of legal frameworks in the workplace.
FEB180303	Computer aided design for Electrical Engineering	2018-19	EM: Essential for electrical design roles in industries like automation, power, and electronics.
FEM115303	COMPUTER METHODS IN POWER SYSTEM ANALYSIS	2018-19	Employability: Key for roles in power system design, operation, and optimization.EN: Supports launching businesses in energy management and smart grid technologies.
FEM115305	ELECTRICAL DRIVES	2018-19	EM: Relevant for roles in automation, motor control, and electrical engineering.

FEM125308	MODERN POWER SYSTEM PROTECTION	2018-19	EM: Crucial for roles in power generation, transmission, and distribution systems.
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