



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

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PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PROGRAM OUTCOMES (POs) AND

PROGRAM SPECIFIC OUTCOMES (PSOs)

Engineering Under graduate Programs

Program Educational Objectives (PEOs)

B.Tech (B. Tech):

PEO1	Practice engineering in a broad range of industrial, societal and real-world applications.
PEO2	Pursue advanced education, research, and development, and other creative and innovative efforts in science, engineering, and technology, as well as other professional careers.
PEO3	Conduct themselves in a responsible, professional, and ethical manner.
PEO4	Participate as leaders in their fields of expertise and in activities that support service and economic development throughout the world.

Program Outcomes (POs):

PO NC	Description
PO1	Engineering Knowledge :An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization for the solution of complex engineering problems in engineering
PO2	Problem Analysis :An ability to identify, formulate, research literature, analyze complex engineering problems in mechanical engineering using first principles of mathematics, natural sciences and engineering sciences
PO3	Design/ development of solutions :An ability to design solutions for complex engineering problems and system component or processes that meet the specified needs considering public health & safety and cultural, societal & environment
PO4	Conduct investigations of complex problems :An ability to use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to obtain solutions to engineering problems
PO5	Modern tool usage :Ability to create, select and apply appropriate techniques, resources and modern engineering activities, with an understanding of the limitations

PO6	The engineer and society :Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice
PO7	Environment and sustainability Ability to demonstrate the knowledge of engineering solutions, contemporary issues understanding their impacts on societal and environmental contexts, leading towards sustainable development
PO8	Ethics : An ability to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice
PO9	Individual and team work :An ability to function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings
PO10	Communication :Ability to communicate effectively oral, written reports and graphical forms on complex engineering activities
PO11	Project management and finance :Ability to demonstrate knowledge and understanding of the engineering and management principles and apply those one's own work, as a member and leader in team, to manage projects and in multi-disciplinary environments
PO12	Lifelong learning An ability to recognize the need for and having the preparation and ability to engage independent and life-long learning in broadest context of technological change

Program Specific Outcomes (PSOs)

Bio Technology	
PSO1	Graduates will be able design, perform experiments, analyze and interpret data for investigating complex problems in biotechnology Engineering and related fields.
PSO2	Graduates will be able to justify societal, health, safety and legal issues and understand his responsibilities in biotechnological engineering practices.
Civil Engineering	
PSO1	Function as design consultants in construction industry for the design of civil engineering structures.
PSO2	Provide sustainable solutions to the Civil Engineering Problems.
Computer Science & Engineering	
PSO1	An ability to design and develop software projects as well as Analyze and test user requirements.
PSO2	An Ability to gain working Knowledge on emerging software tools and technologies.
Electronics & Communication Engineering	
PSO1	An ability to Understand the theoretical and mathematical concepts to analyze real time problems.
PSO2	An Ability to Design and Analyze systems based on the theoretical and Practical Knowledge
Computer Engineering	
PSO1	Ability to design systems and desired needs for sustainable development and engineering solutions to the problems using knowledge and skills developed in thrust areas..
PSO2	Ability to solve Electronics Engineering problems using the latest hardware and software tools, to achieve cost effective and optimal solutions in the domain of Internet of Things and hardware security.
Electrical & Electronics Engineering	

PSO1	Knowledge and hands on competence in simulating, developing, Testing, operation and maintenance of Electrical & Electronics systems.
PSO2	Able to work in multi-disciplinary environments with knowledge on Electrical and Electronics domain and in Project Management techniques, environmental issues and Green technologies.
Mechanical Engineering	
PSO1	An ability to demonstrate the knowledge, skill to analyze the cause and effects on machine elements, processes and systems.
PSO2	An ability to apply the acquired Mechanical Engineering knowledge for the advancement of society and self.
Artificial Intelligence and Data Science	
PSO1	An ability to design and develop Artificial Intelligence technology into innovative products for solving real world problems.
PSO2	An ability to design and develop Data Science methods for analyzing massive datasets to extract insights by applying AI as a tool
Computer Science & Information Technology	
PSO1	An ability to Identify, Design, and Analyze complex computer systems, Implement and Interpret the results from those systems.
PSO2	An ability to select and apply current techniques, skills, and tools necessary for computing practice and integrate IT-based solutions into the user environment effectively.

Engineering Post graduate Programs

Master of Technology (M.Tech)

The Program Educational Objectives of M.Tech Program:

PEO1	To mould the students to become effective global science students in the competitive environment of modern society.
PEO2	To provide students with strong foundation in contemporary practices of Science, different functional areas and scientific environment
PEO3	To emphasize on application oriented learning.
PEO4	To develop communication, analytical, decision-making, motivational, leadership, problem solving and human relations skills of the students.
PEO 5	To inculcate professional and ethical attitude in students.
PEO6	To pursue lifelong learning as a means of enhancing knowledge and skills necessary to contribute to the betterment of profession

M.Tech Bio Technology

Program outcomes:

PO NO	Description
PO1	Ability to practically apply various Biotechnological concepts.
PO2	Demonstrate knowledge of innovative and modern bioengineering practices.
PO3	Synergize biological sciences with engineering and solve various societal and health problems.

M.Tech -Structural Engineering

Program Outcomes

PO NO	Description
PO1	An ability to independently carry out research /investigation and development work to solve practical problems.
PO2	An ability to write and present a substantial technical report/document
PO3	Students should be able to demonstrate a degree of mastery for designing and solving structural engineering problems.
PO4	An ability to use appropriate modern tools in structural engineering. In doing so he should demonstrate sufficient knowledge of competing tools and their relative merits and demerits
PO5	An ability to demonstrate the traits of learning and unlearning throughout his professional career, and be willing to learn new techniques, methods and processes
PO6	Tune his knowledge to be a responsible engineer adhering to all established practices of his profession

M.Tech -Construction Technology & Management

Program Outcomes

PO NO	Description
PO1	An ability to independently carry out research /investigation and development work to solve practical problems.
PO2	An ability to write and present a substantial technical report/document.
PO3	Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program
PO4	Students should be able to understand how to implement construction process using effective and efficient project planning tools, they will able to identify the activities and coordinate resources and create goals and objectives to complete individual task
PO5	Students should be able to understand how to use mathematics logic and technology to help effectively and efficiently analysis the project and solve problems required for technical tasks
PO6	Students should be able to understand concepts related to running sustainable projects and business

M.Tech - Geotechnical Engineering

Program Outcomes

PO NO	Description
PO1	Independently carry out research/investigation and development work to solve practical problems.
PO2	Write and present a substantial technical report/document.
PO3	Demonstrate a degree of mastery over geotechnical engineering.

PO4	Identify Engineering solutions to problematic soils and provide suitable foundation.
PO5	Apply modern tools for designing geo technical structures.
PO6	Work in inter-disciplinary engineering teams with social responsibility and ethical values and pursue lifelong learning.

M.Tech- Computer Science Engineering

Program Outcomes

PO NO	Description
PO1	Apply the knowledge of computer engineering principles and paradigms in the design of system components and processes that meet the specific needs of the industry.
PO2	Identify, analyze, and formulate solutions to complex engineering problems using innovative and emerging technologies.
PO3	Effectively communicate technical information in speech, presentation, and documentation.
PO4	Extract information relevant to novel problems and apply appropriate research methodology to develop scientific knowledge.
PO5	Self-learn and pursue higher studies to upgrade qualifications and attain constructive growth in profession.
PO6	Make valuable contributions to design, developer by practicing related engineering applications and algorithmic methods.
PO7	Provide exposure to latest tools and technologies based on the industry needs and contribute to valuable research findings in the specialized domains.

M.Tech – Machine Learning and Computing

Program outcomes:

PO No	Description
PO1	Apply the knowledge of computer engineering principles and paradigms in the design of system components and processes that meet the specific needs of the industry.
PO2	Identify, analyze and formulate solutions to complex engineering problems using innovative and emerging technologies.
PO3	Effectively communicate technical information in speech, presentation, and documentation.
PO4	Extract information relevant to novel problems and apply appropriate research methodology to develop scientific knowledge.
PO5	Self-learn and pursue higher studies to upgrade qualifications and attain constructive growth in profession.
PO6	Make valuable contributions to design, developed by practicing related engineering applications and algorithmic methods.
PO7	Provide exposure to latest tools and technologies based on the industry needs and contribute to valuable research findings in the specialized domains.

M.Tech-Digital Forensics & Cyber Security

Program outcomes:

PO NO	Description
PO1	Apply the knowledge of computer engineering principles and paradigms in the design of system components and processes that meet the specific needs of the industry.
PO2	Identify, analyze and formulate solutions to complex engineering problems using innovative and emerging technologies.
PO3	Effectively communicate technical information in speech, presentation and documentation.
PO4	Extract information relevant to novel problems and apply appropriate research methodology to develop scientific knowledge.
PO5	Self-learn and pursue higher studies to upgrade qualifications and attain constructive growth in profession.
PO6	Make valuable contributions to design, developed by practicing related engineering applications and algorithmic methods.

PO7	Provide exposure to latest tools and technologies based on the industry needs and contribute to valuable research findings in the specialized domains.
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M.Tech - Radar & Communication

Program Outcomes:

PO NO	Description
PO1	An ability to identify, formulate, research literature, analyze complex engineering problems in the area of communications and RADAR to cater national and industrial needs.
PO2	An ability to develop solutions for complex problems in communication system design and RADAR system component or processes that meet the specified needs considering.
PO3	Ability to create and apply appropriate techniques using modern industrial and research tools for modeling and testing of antennas, communications system modules and RADAR systems.
PO4	An ability to design the experiments, analysis and interpretation of data and synthesis of the information using various modern and industrial tools to obtain solutions for complex problems in industries, military, and social needs.
PO5	Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, ethical principles of engineering practices and the consequent responsibilities relevant to the RADAR engineering.
PO6	Exposure to prerequisite math's and a mathematically rigorous approach to communication theory will provide him with all the necessary background to pursue a career in any field of communications going forward in his career.
PO7	An ability to function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings for project management by demonstrating the knowledge and understanding of principles of communication systems and radar, and apply those one's own work, as a member and leader in team, to manage projects and in multi-disciplinary environments.

M.Tech Program VLSI

Program Outcomes:

PO NO	Description
PO1	Apply the knowledge of science, mathematics, and engineering principles for developing problem solving attitude and get sound knowledge in the theory, principles and applications of VLSI Circuits and Systems.
PO2	Configure recent EDA tools, apply test conditions, deploy and manage them.
PO3	Design and conduct experiments, analyze, and interpret data, imbibe programming skills for development of simulation experiments.
PO4	Ability to demonstrate the knowledge of engineering solutions, and function as a member of a multidisciplinary team with sense of ethics, integrity and social responsibility.

PO5	To develop, design and implement projects with given specifications, in order to cater industrial needs.
PO6	Ability to investigate develops and carries out research to solve industrial problems related to designing and testing of VLSI systems.
PO7	Design a system, component, or process as per social needs and specifications and also will be aware of contemporary issues.

M.Tech - Power Systems:

Program Outcomes (Po's)

PO NO	Description
PO1	Acquire in- depth knowledge in the domain of power systems and understanding of engineering principles for project management.
PO2	Ability to critically analyze various power system components, models and their operation.
PO3	Ability to apply fundamentals and concepts to analyze, formulate and solve complex problems of electrical power systems and its components
PO4	Apply advanced concepts of electrical power engineering to analyze, design and develop electrical components, apparatus and systems to put forward scientific findings at national and international levels.
PO5	Ability to use advanced techniques, skills and modern scientific and engineering tools for professional practice.
PO6	Preparedness to lead a multidisciplinary scientific research team, communicate and lifelong learning effectively.

M.Tech – Power Electronics and Drives

Program Outcomes

PO1	Apply the knowledge of science and mathematics in designing, analyzing and using the power converters and drives for various applications for problem solving
PO2	Design the modern electric machines, drives, power converters, and control circuits for specific applications
PO3	Use modern tools, professional software platforms, embedded systems for the diversified applications
PO4	Function as a member of a multidisciplinary team and correlate the domain knowledge for global problems.
PO5	Demonstrate the communication at different levels effectively
PO6	Explore ideas for inculcating research skills and appreciate, critical and independent thinking and engage in lifelong learning.

M.Tech. – Thermal Engineering

Program Outcome's

PO1	Advanced knowledge of a broad range of modelling methodologies, and underlying mechanical science, commonly used in the development and analysis of Thermal engineering systems.
PO2	Knowledge of fundamental design issues relevant to Thermal engineering, and an understanding of how to formulate and analyze design solutions in various engineering contexts.
PO3	Working knowledge of a range of modern mathematical methods and tools used in the development and analysis of Thermal engineering systems.
PO4	In-depth knowledge of one or more of the following (depending of selection of option modules and project area): specific engineering systems, design methods, modelling techniques, mathematical and/or numerical techniques.
PO5	Knowledge of basic research and development principles and practices relevant to mainstream engineering industry.
PO6	Knowledge of key professional, safety and ethical issues arising in modern engineering industry.
PO7	Knowledge of time-management and work planning issues related to the organization, implementation and successful completion, including reporting, of an individual, Masters level, engineering based project.

M.Tech. – Robotics and Mechatronics

Program Outcome's

PO NO	Description
PO1	Advanced knowledge of a broad range of modelling methodologies, and underlying mechanical science, commonly used in the development and analysis of mechatronic engineering systems.
PO2	Knowledge of fundamental design issues relevant to mechatronic engineering, and an understanding of how to formulate and analyse design solutions in various engineering contexts.
PO3	Working knowledge of a range of modern mathematical methods and tools used in the development and analysis of mechatronic engineering systems.
PO4	In-depth knowledge of one or more of the following (depending of selection of option modules and project area): specific engineering systems, design methods, modelling techniques, mathematical and/or numerical techniques.
PO5	Knowledge of basic research and development principles and practices relevant to mainstream engineering industry.
PO6	Knowledge of key professional, safety and ethical issues arising in modern engineering industry.
PO7	Knowledge of time-management and work planning issues related to the organization, implementation and successful completion, including reporting, of an individual, Masters level, engineering based project.

M.Tech – Machine Design

Program Outcome's

PO1	Advanced knowledge of a broad range of modelling methodologies, and underlying principles of mechanics, commonly used in the development and analysis of mechanical machines and systems.
PO2	Knowledge of fundamental design issues relevant to machine or mechanical component, and an understanding of how to formulate and analyze design solutions in various engineering contexts.
PO3	Working knowledge of a range of modern mathematical methods and tools used in the development and analysis of machines and mechanical systems.
PO4	In-depth knowledge of one or more of the following (depending of selection of option modules and project area): specific engineering systems, design methods, modelling techniques, mathematical and/or numerical techniques.
PO5	Knowledge of basic research and development principles and practices relevant to mainstream engineering industry.
PO6	Knowledge of key professional, safety and ethical issues arising in modern engineering industry.
PO7	Knowledge of time-management and work planning issues related to the organization, implementation and successful completion, including reporting, of an individual, Masters level, engineering based project.

Management Humanities and Sciences

UG Programs

Bachelor of Architecture (B.Arch)

Program Educational Objectives(PEOs)

PEO1	Should be able to stimulate artistic sensitivity and creative powers. (SKILL)
PEO2	Strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems. (EMPL)
PEO3	Acquire leadership capabilities necessary for the competent practice of architecture and lifelong learning. (ETPR)
PEO4	Pursue advanced education, research and development, and other creative and innovative efforts in the field of Architecture. (SKILL).

Program Outcomes (POs):

PO1	Ability to gain knowledge of Humanities, Sciences and Architecture and the application of knowledge in practice.
PO2	Use the elements of Architecture and apply basic principles in Architectural Design.
PO3	Identify and solve the social, economical and cultural issues in Architectural Design.
PO4	Ability to apply theoretical knowledge to achieve Architectural Design solutions.
PO5	Recognize the ethical and professional responsibilities and the norms of Architectural practice.
PO6	Ability to research, review, comprehend and report technological developments happening in the field of Architecture
PO7	Communicate effectively and work in interdisciplinary groups according to the project scale.
PO8	To guide the building construction workforce in the right direction
PO9	Ability to understand the real-life situation in converting the On-paper design to On-site design of Architectural Practice
PO10	To make the student design aesthetically pleasing, structurally viable buildings and encourage technological advancements in the building construction industry.

Program Specific Outcomes (PSOs)

PSO1	PSO1: Ability to enhance creative design skills in attaining design solutions in architecture.
PSO2	To understand the design complexity of the designed structure and use appropriate building construction techniques and technology for the particular structure

Bachelor of Arts (B.A)

Program Educational Objectives (PEOs)

PEO1	Graduate will be able to exhibit their skills in Literature and diverse literary works.
PEO2	A graduate student able to analyze the aspects of History, Geography, Public Administration and Economy
PEO3	Graduate will be able to apply knowledge, information, and research skills to complex problems in the field of Social Science and Humanities.

Program Outcomes (POs)

PO1	Provide knowledge and understanding of various fields of study in core disciplines in the Humanities and Social Sciences
PO2	Develop critical and analytical skills to identify and resolve problems within complex changing social, linguistic and literary context.
PO3	Understanding the general concepts and principles of selected areas of study outside core disciplines of the Humanities, Social Science and Languages
PO4	Follow independence in learning appropriate theories and methodologies with intellectual honesty and an understanding of ethical and human values
PO5	Encourage students to analyze the problems and apply this knowledge for remedies thereof
PO6	Enhance student's skills of effective communication and language learning i.e. reading, writing, listening and speaking another language with fluency and understand its cultural value.
PO7	Become well informed and updated member of the community and responsible citizen
PO8	Work with self-esteem, self-reliance, self-reflection and creativity to face adversities in the work and personal life
PO9	Inculcate leadership and administrative abilities for their future career
PO10	Increase inclination for higher studies and research in social sciences and Gain comprehensive knowledge to succeed in competitive examinations

Bachelor of computer applications (BCA)

Program Educational Objectives (PEOs)

PEO1	Practice Computer Applications in a broad range of industrial, societal and real world applications.
PEO2	Pursue advanced education, research and development, and other creative and innovative efforts in science, engineering, and technology, as well as other professional careers
PEO3	Conduct them in a responsible, professional, and ethical manner.

Program Outcomes (POs)

PO	Description
PO1	Problem Analysis: Ability to identify, formulate, research literature, and analyze complex computer application oriented problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and computer applications.
PO2	Design / development of solutions: Ability to design solutions for complex computer application problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
PO3	Conduct investigations of complex problems: Ability to use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO4	Modern tool usage: Ability to create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO5	Communication: Ability to communicate and engage effectively with diverse stakeholders.
PO6	Ability to apply ethical principles and commit to professional ethics and responsibilities.
PO7	Life-long learning: Ability to recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
PO8	Individual and teamwork: Ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Program Specific Outcomes (PSOs)

Cloud Technology and Information Security	
PSO1	An ability to use and develop cloud software, administrative features. Infrastructure services and architectural patterns; ethical hacking and forensic security technologies.
PSO2	An ability to gain knowledge on design and control strategy; techniques to secure information and adapt to the fast changing world of information technology needs.
Data Science	
PSO1	Ability to apply the knowledge of computing tools and techniques in the field of Data science for solving real world problems encountered in the Software Industries.
PSO2	Ability to identify the challenges in Data analytics with respect to IT Industry and pursue quality research in this field with social relevance.

Internet of Things	
PSO1	An ability to apply pattern recognition and artificial intelligent techniques including statistical data analysis and quantitative modelling techniques to solve real world problems from various domains such as healthcare, social computing, economics, etc.
PSO2	PSO1: An ability to apply pattern recognition and artificial intelligent techniques including statistical data analysis and quantitative modelling techniques to solve real world problems from various domains such as healthcare, social computing, economics, etc.
Intelligent Process Automation	
PSO1	An ability to apply pattern recognition, machine learning, and artificial intelligent techniques including statistical data analysis and quantitative modelling techniques to solve real world problems from various domains such as healthcare, social computing, economics, etc.
PSO2	An ability to recognize and analyze problems related to AI and ML applications along with their ethical implications

BBA&BBA-MBA Integrated Program

Program Educational Objectives(PEOs)

PEO1	To educate the business graduates to respond effectively in meeting the competitive business needs of the society.
PEO2	To nurture the spirit of Entrepreneurship among the students that propagates the business world.
PEO3	To train the students in emerging as efficient managers equipped with innovation, rationality and application-oriented decision-making in the context of the ever-changing business environment.

Program outcomes (pos)

PONO	Description
PO1	Core Business Knowledge Demonstrate competency in the underlying concepts, theory and tools taught in the core undergraduate curriculum.
PO2	Critical Thinking skills Able to define analyze and devise solutions for multifunctional business problems and issues in the areas like Marketing, Finance, Human Resources and Production.
PO3	Global Perspective Identify and analyze relevant global factors that influences decision making in International Business Perspective
PO4	Investigation of complex problems an ability to use research-based knowledge and research methods including design of innovative processes, analysis and interpretation of data and synthesis of the information to obtain solutions to organizational problems

PO5	Application of Statistical and Analytical tools Ability to create, select and apply appropriate analytical tools, techniques and methods in the modern management activities.
PO6	The Manager and society Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to the professional management practices.
PO7	Legal Environment and sustainability Ability to demonstrate the knowledge of contemporary issues in legal aspects, understanding and reporting their impact on societal and environmental contexts, leading towards sustainable organizational development through entrepreneurial orientation.
PO8	Ethics & Corporate Social Responsibility An ability to apply ethical principles and commit to professional ethics and responsibilities and norms of management practice. Identify and analyze ethical conflicts and social responsibility issues involving different stakeholders.
PO9	Individual and Teamwork An ability to perform different roles effectively as an individual and a member or leader in diverse teams and in multi-disciplinary streams with entrepreneurial edge.
PO10	Communication Ability to communicate effectively oral, written reports and graphical forms on complex managerial and administrative activities.
PO11	Project Management and Finance Ability to demonstrate knowledge and understanding of the business and operational activities and having sound knowledge in the financial aspects and applying those concepts to manage projects in multi-disciplinary environments.
PO12	Lifelong Learning An ability to recognize the need for and having the preparation and ability to engage independent and life-long learning in global context of technological and organizational change.

Bachelor of Commerce (B.Com) Program Educational Objectives(PEOs)

PEO1	To produce best commerce (H) graduates in the country as well as in Global.
PEO2	To equip students with updated inputs in the field of accounting and finance
PEO3	To provide practical explore as per corporate needs through summer intern ship and industrial training.

Program Outcomes (POs)

PO1	Ability to understand the world of trade and Commerce
PO2	Ability to apply the knowledge of Accounting, Finance and Taxation in the Global context
PO3	Ability to develop each graduate to be adept in identifying and understanding major trends in commerce in national and international level
PO4	Ability to develop each graduate to be a critical thinker and strong decision maker.
PO5	Ability to develop each graduate to be an effective and professional communicator.

PO6	An understanding of professional and ethical responsibility in business related issues
PO7	Knowledge of contemporary issues in finance and accountancy
PO8	A recognition of the need for and an ability to engage in life-long learning in commercial activities
PO9	Enhance the skills of students competent to deal with Accounting and Finance practices at global level.
PO10	Develop commerce students as professional auditors and tax practitioners at national and international level.

Bachelor of Science (Hotel Management)

Program Education Outcomes(PEOs)

PEO1	Make students to be leaders in hospitality industry through industry immersion and national and international linkages in order to support business in the field of relevance.
PEO2	To intensify student`s knowledge and skills with instruction based on international standards, to produce quality graduates with balanced knowledge, skills and industry exposure in catering, hotel and management.
PEO3	Inculcate leadership skills needed for integration of hotel and restaurant development, to demonstrate community involvement in travel and tour operation, airlines and other related industries to strengthen their knowledge and skills.

Program Outcomes (POs)

PONO.	Description
PO 1	Technical Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.
PO 2	Quality / Cost control Knowledge of raw materials, production processes, quality control, costs, hygiene and sanitation and other techniques for maximizing the effective manufacture and distribution of goods.
PO 3	Strategic Planning Knowledge of business and management principles involved effectively in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
PO 4	Customer Service Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
PO 5	Financial Principles Knowledge of economic and accounting principles and practices, the financial markets, banking, analysis and reporting of financial data involved in industrial sectors.
PO 6	Individual and teamwork Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.

PO 7	Communication Knowledge of the structure and content of different language including the meaning and spelling of words, rules of composition, and grammar.
PO 8	Marketing Strategy Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.
PO 9	Safety Measures Knowledge of principal methods of cleaning, controlling, recycling process, maintenance of equipment's, latest technology, and its usage, safety measures to taken in hotel industry.
PO10	Tourism Industry Knowledge on Tourism, hospitality industry history, sales, promotions, Audit, general knowledge, share market, excellent skill to communicate and computer knowledge.

Bachelor Fine Arts

Program Educational Objectives (PEOs)

PEO1	Graduate Apply appropriate communication skills across settings, purposes, and audiences.
PEO2	Graduates shall promote professionalism in the practice of Fine Arts.
PEO3	Graduates with sense of responsibility and rooted in community involvement with a global perspective.
PEO4	Participate as leaders in their fields of expertise and in activities that support service and economic development throughout the world.

Program Outcomes (POs)

PO1	Building a solid foundation in the elements, principles, and process of visual design
PO2	Communicate effectively with clients and utilize the talents and strengths of design colleagues to develop the best design products.
PO3	Applying fundamentals to solve increasingly complex design problems in technologically innovative ways.
PO4	Engage in critical analysis of their own and their peer's creative work.
PO5	Explore media, communication, and dissemination techniques to entertain via written, oral and visual media.
PO6	Apply design principles to software in a manner that provides the skills to adapt to the newest technologies in expectation for the technologies which will emerge in the future.
PO7	Understanding of and ability to develop strategies for planning, producing, and Disseminating visual communications.
PO8	Understand and prepare production management for artworks for hassle free delivery of works
PO9	Ability to design solutions for the development of current society and a design which is functional in the growth of acting society.
PO10	Engage in the practicing of ethical professionalism in the creative world.

PO11	Ability to understand the Global Scenario and get updated time to time.
PO12	Ability to carry out research study and fill in the void thus developing new dimensions in applied arts and crafts.

Bachelor of Science (Visual Communication)

Program Educational Objectives (PEOs)

PEO1	Graduate Apply appropriate communication skills across settings, purposes, and audiences.
PEO2	Graduates shall promote professionalism in the practice of Visual Communication.
PEO3	Graduates with sense of responsibility and rooted in community involvement with a global perspective.
PEO4	Participate as leaders in their fields of expertise and in activities that support service and economic development throughout the world.

Program Outcomes (POs)

PO1	Building a solid foundation in the elements, principles and process of visual design.
PO2	Communicate effectively with clients and utilize the talents and strengths of design colleagues to develop the best design products.
PO3	Applying fundamentals to solve increasingly complex design problems in technologically innovative ways
PO4	Engage in critical analysis of their own and their peer's creative work.
PO5	Explore media, communication, and dissemination techniques to entertain via written, oral and visual media.
PO6	Apply design principles to software in a manner that provides the skills to adapt to the newest technologies in expectation for the technologies which will emerge in the future.
PO7	Understanding of and ability to develop strategies for planning, producing, and disseminating visual communications.
PO8	Understand and prepare production management for artworks for hassle free delivery of works.
PO9	Ability to carry out research study and fill in the void thus developing new dimensions in communications.

PO10	Engage in the practicing of ethical professionalism in the creative world.
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Bachelor of Pharmacy (B.Pharm)

Program Educational Objectives (PEOs)

PEO1	To produce pharmacist workforce competent for the society.
PEO2	To produce pharmacy graduates with employable skills and high technical Competence in pharmaceutical industry and health care sectors
PEO3	To inculcate research activity and develop passion for discovery and innovations.
PEO4	To develop entrepreneurship qualities that support growth of pharmaceutical intellectual property and contribute for economic development throughout the world

Program Outcomes (POs)

PO 1	Pharmacy Knowledge: Provide basic knowledge for understanding the principles and their applications in the area of Pharmaceutical Sciences and Technology.
PO 2	Technical Skills: Develop an ability to use various instrument and equipment with an in-depth knowledge on standard operating procedures for the same.
PO 3	Modern tool usage: Develop/apply appropriate techniques, resources, and IT tools including prediction and modeling to complex health issues and medicine effect with an understanding of the limitations.
PO 4	Research and Development: To demonstrate knowledge of identifying a problem, critical thinking, analysis and provide rational solutions indifferent disciplines of Pharmaceutical Sciences and Technology
PO 5	Lifelong Learning: Develop an aptitude for continuous learning and professional development with ability to engage in pharmacy practice and health education programs
PO 6	Communication: Communicate effectively on health care activities with the medical community and with society at large, to comprehend drug regulations, write health reports and provide drug information.
PO 7	The Pharmacist and Society: Apply reasoning informed by the contextual knowledge to comprehend medical prescription, perform patient counselling and issue or receive clear instructions on drug safety and the consequent. Responsibilities relevant to the professional pharmacy practice.
PO 8	Ethics: Follow the code of ethics and commit to professional values and responsibilities and norms of the pharmacy practice.
PO 9	Environment and Sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
PO 10	Pharmaceutical product development: To apply the knowledge of manufacturing, formulation, and quality control of various pharmaceutical and cosmetic products
PO 11	Competitive skills: Develop problem-solving skills and aptitude to participate and succeed in competitive examinations.

PO 12	Invention and Entrepreneurship: Application of technical skills to integrate health care systems, design an effective product with commercial advantage and societal benefit, perform risk analysis and become entrepreneur.
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Bachelor of Business Administration – Bachelor of Law (BBA- LLB)

Program Education Outcomes (PEOs)

PEO1	Should be able to stimulate compassion and creativity in the field of legal profession.
PEO2	Strengthen intellectual growth and the capacity to develop ingenious and conscientious legal solutions to unique and varying tribulations of society and business environment
PEO3	Acquire leadership capabilities necessary for the competent practice of law and lifelong learning in practice
PEO4	Pursue advanced education, research, and development, and other innovative and pioneering efforts in the field of law

Program Outcomes (POs)

PO NO	Description
PO1	Ability to gain knowledge of law and the application of such knowledge in practice
PO2	Be proficient to use the fundamentals and vital principles in law;
PO3	Identify and solve the social, economic and cultural issues in law;
PO4	Ability to synthesis academic knowledge to legal problems and find solutions;
PO5	Recognize the ethical and professional responsibilities and the norms of advocacy;
PO6	Ability to research, review, comprehend and utilize such knowledge for Law reform;
PO7	Converse effectively and work in inter-disciplinary groups and legal institutions;
PO8	To guide the trainee legal practitioners in the right direction;
PO9	Ability to understand the real-life situation in legal profession and practice;
PO10	To make the student to learn aesthetically pleasing practice and make it socially relevant;

Program Specific Outcomes (PSOs)

5 Year BB.A, LL.B PROGRAMME	
PSO1	To equip skills required to deal with a fast-changing business environment and legal arena;
PSO2	To acquaint with technological developments and to make suitable changes in the field of law and legal profession.

LL.B

Program Outcomes (POs):

PO1	Ability to gain knowledge of law and the application of such knowledge in practice.
PO2	Be proficient to use the fundamentals and vital principles in law.
PO3	Identify and solve the social, economic, and cultural issues in law.
PO4	Ability to synthesis academic knowledge to legal problems and find solutions.
PO5	Recognize the ethical and professional responsibilities and the norms of advocacy.
PO6	Ability to research, review, comprehend and utilize such knowledge for Law reform.
PO7	Ability to understand the real-life situation in legal profession and practice.
PO8	To make the student to learn aesthetically pleasing practice and make it socially relevant.

Program Specific Outcomes (PSOs)

PSO1	equip skills required to deal with a fast-changing business environment and legal arena
PSO2	To acquaint with technological developments and to make suitable changes in the field of law and legal profession

MHS PG Programs

Master of Arts (English)

Program Educational Objectives (PEOs)

PEO1	Introduce students to the professional conversation in English studies in various fields and to texts from diverse eras and cultures, with the intention of provoking and supporting their intellectual curiosity and valuing literature, language, and imagination: Students will develop a passion for literature and language. They will appreciate literature's ability to elicit feeling, cultivate the imagination, and call us to account as humans. They will cultivate their capacity to judge the aesthetic and ethical value of literary texts—and be able to articulate the standards behind their judgments.
PEO2	Critical Approaches: Students will develop the ability to read works of literary, rhetorical, and cultural criticism, and deploy ideas from these texts in their own reading and writing. They will express their own ideas as informed opinions that are in dialogue with a larger community of interpreters and understand how their own approach compares to the variety of critical and theoretical approaches.
PEO3	Research Skills: Students will be able to identify topics and formulate questions for productive inquiry; they will identify appropriate methods and sources for research and evaluate critically the sources they find; and they will use their chosen sources effectively in their own writing, citing all sources appropriately.

Program Outcomes (POs)

PO Number	Description
PO1	Gain an introductory knowledge of some of the issues explored in influential works in English language and the stylistic strategies that writers used to explore those issues.
PO2	Read complex texts actively: recognize key passages; raise questions. appreciate complexity and ambiguity; comprehend the literal and figurative uses of language.
PO3	Appreciate literary form: recognize how form and structure shape a text's meaning; appreciate how genre generates expectations and shapes meanings.
PO4	Interpret texts with an awareness of and curiosity for other viewpoints
PO5	Practice writing as a process of motivated inquiry, engaging other writers' ideas through the use of quotations, paraphrase, allusions and summary. Use sources well and cite them correctly.
PO6	Attend to a wider range of voices within interculturation.
PO7	Enjoy the experience of reading challenging literature: appreciate literature's ability to elicit feeling, cultivate the imagination, and call us to account as humans

Master of Sciences (M.Sc Chemistry)

Program Education Outcomes(PEOs)

PEO1	To prepare students for successful practice in diverse fields of Chemical Sciences such as pharmaceutical, chemical, polymer / advanced material, energy, biotechnology and environmental engineering and in the fields of Societal expectations on time.
PEO2	To prepare students for advanced studies in Chemical sciences and its allied fields.
PEO3	To ensure our students to achieve excellence and get selected for high-ranking industrial, academic, Government and other professional positions, as well as to inculcate leadership qualities.
PEO4	To develop graduate's skills and awareness to become socially, ethically and morally responsible individual in all the challenges they take over, in our communities and in the field of chemical Sciences.

Program Outcomes (POs)

PONO	Description
PO1	Ability to understand the scope and principle of Chemistry.
PO2	Ability to understand and implement complex chemical equations and chemical compositions.
PO3	Ability to analyze the outcomes of experiments on chemicals and their product
PO4	Ability to understand the chemicals deeply and their effects on environment and health.

PO5	Ability to connect the latest developments in Chemistry with the knowledge attained during academics and come up with better ideas.
PO6	Awareness of the impact of Chemistry in all domains of the society including environment, manufacturing, and production, etc.
PO7	Use modern techniques, decent equipment and Chemistry software's

Program Specific Outcomes (PSOs)

PSO1	Global level research opportunities to pursue Ph.D Program targeted approach of CSIR – NET examination.
PSO2	Enormous job opportunities at all levels of chemical, pharmaceutical, food products, life-oriented material industries
PSO3	Specific placements in R & D and synthetic division of polymer industries & Allied Division
PSO4	Discipline specific competitive exams conducted by service commission.

Master of Sciences (M.Sc Applied Mathematics)

Program Educational Objectives(PEOs)

PEO1	To assimilate and understand a large body of complex concepts and their interrelationships.
PEO2	Apply Advanced Mathematical Techniques to formulate, solve and analyze mathematical models of real-life problems
PEO3	To identify and apply suitable computational mathematical tools and techniques to solve various complex Engineering problems and meaningful physical interpretation.
PEO4	To Demonstrate, communicate, and work, with people having diversified backgrounds in individual and group settings, in an ethical and professional manner.

Program Outcomes (POs)

PONO	Description
PO1	To identify, formulate, abstract, and solve mathematical problems that use tools from a variety of mathematical areas, including algebra, analysis, probability, numerical analysis and differential equations
PO2	The program prepares students for a variety of mathematical careers. The current program has three identified tracks viz: Cryptography, Data analysis, Applied Mechanics, and Ph.D preparation. Students should be prepared for employment requiring mathematical skill and sophistication at the Master's level.
PO3	Apply mathematics and technology tools (MATLAB, R, and MINITAB) to solve problems.
PO4	Ability to do research in a particular topic agreed with a Supervisor, on which the student publish a research paper in a peer reviewed indexed journal.

PO5	To maintain a core of mathematical and technical knowledge that is adaptable to changing technologies and provides a solid foundation for lifelong learning.
PO6	Promote interdisciplinary research among allied subjects related to applied mathematics
PO7	Use symbolic and numerical software as part of practical computation.

Master of Sciences (M.Sc Physics)

Program Educational Objectives(PEOs)

PEO1	To develop strong student competencies in Physics and its applications in a technology-rich, interactive environment.
PEO2	To develop strong student skills in research, analysis and interpretation of complex information
PEO3	To prepare the students to successfully compete for employment in Electronics, Manufacturing and Teaching and to offer a wide range of experience in research methods, data analysis to meet the industrial needs

Program Outcomes (POs)

PONO	Description
PO1	Ability to understand the scope and principle of Physics.
PO2	Ability to solve the physical problems by applying physics principles
PO3	Ability to analyze the outcomes of Physics and electronics experiments and their product.
PO4	Ability to demonstrate the knowledge in physics for managing the physics projects effectively.
PO5	Ability to connect the latest developments in Physics with the knowledge attained during academics and come up with better ideas
PO6	Ability to do research in the fields related to Materials and Electronics.
PO7	Ability to understand and solve the complexity of Solid state physics.

Master of Business Administration (MBA)

Program Educational Objectives (PEOs)

PEO1	Make students to apply techniques of business analysis, data management and problem-solving skills in order to support business management decision- making in the field of relevance.
PEO2	Inculcate leadership skills needed for implementing and coordinating organizational activities and managing change to explore business problems in depth for developing their functional knowledge to think strategically and to lead, motivate and manage teams across borders.
PEO3	Nurture with abilities to integrate business knowledge and management techniques to aid planning and control in a changing environment and to enhance better career paths.

Program Outcomes (POs)

PO NO	Description
PO1	Core Business Knowledge: Able to synthesize the knowledge, management skills, and tools acquired in the program, which will be helpful to shape the organizations effectively.
PO2	Career Planning and Decision Making: Able to excel in their chosen career paths, by learning on how to live, adapt and manage business. environmental change through decision making.
PO3	Critical Thinking and Leadership: Able to reflect upon and explore business and research problems in depth, to demonstrate leadership skills and to demonstrate ability to pursue new knowledge necessary to succeed in dynamic domestic and international business environments.
PO4	Manager & Society: Able to emerge as efficient managers equipped with innovation, rationality and application-oriented decision-making in the context of the ever-changing business environment.
PO5	Team Building & Business Communication: Able to communicate effectively and to perform different roles efficiently as an individual or in a team in multi-disciplinary streams with entrepreneurial edge.
PO6	Business perspective and Sustainability: Able to gain an understanding of professional, legal, financial, marketing, production & operational activities, logistics, ethical, social issues and responsibilities
PO7	Application of Statistical and Analytical tools: Able to gain knowledge of contemporary issues and develops an art of using current techniques, skills, and necessary analytical tools for managerial practice.

Master of Sciences (Finance & Control) Program Educational Objectives (PEOs)

PEO1	To produce best Postgraduates in Finance & Control in the country as well as in Global.
PEO2	To equip students with updated inputs in the field of accounting and finance
PEO3	To provide practical explore as per corporate needs through summer internship and Finance Research project

Program Outcomes (POs):

PO1	Develop each Postgraduate student to be adept in identifying and understanding major trends in business environment both locally and globally.
PO2	Develop Post-graduate student to be a critical thinker and strong decision maker.
PO3	Develop Post-graduate student to be an effective and professional communicator.
PO4	Create an atmosphere by which the student can become a professional entrepreneur.
PO5	Enhance the ability and skills of entering corporate world.

PO6	This program would open doors for the students to enter into research and development field.
PO7	Ability to create effective professionals in the area of accounting, finance and taxation.

Master of Pharmacy (M.PHARM) – PHARMACEUTICS

Program Educational Objectives (PEOs)

PEO1	Knowledge & Understanding: The pharmacy students should possess upon graduation, knowledge of pharmaceuticals, medication use and their safety and effectiveness.
PEO2	Skill: The graduate should be able to demonstrate his skills in providing quality pharmaceuticals, drug information and therapy including legal and ethical aspects.
PEO3	Attitude: The graduate should be able to inculcate the current knowledge, changes in technology, continuous upgrading of professional information and participation in implementation of National health programs.

Program Outcomes (POs)

PO1	Pharmaceutical Sciences Knowledge: Apply the knowledge of mathematics, science, pharmaceutical physical properties of the different pharmaceutical ingredients and the factor influencing them is very valuable for pharmaceutical dosage form design. Enables the students to learn about different packaging materials used in pharmaceutical industry and the factors governing their use.
PO2	Unit Operations: Pharmaceutical engineering renders knowledge about the basic unit operations that are taking place in pharmaceutical industry and the different factors associated with it. This information is useful for both pharmaceutics and pharmaceutical engineering.
PO3	Entrepreneurship: The knowledge on different pharmaceutical dosage forms are imparted on students. This knowledge comes while handling a pharmacy or a manufacturing unit or in the further courses.
PO4	Design/Development of solutions: The information on solid dosage forms like tablets and capsules, their formulation and quality control serves as an important prerequisite for dosage form design.
PO5	Application oriented Knowledge: The knowledge of bio-pharmaceutics enables the students to visualize the effect of pharmacokinetic (ADMET) parameters on the biological effect of the drug. The correlation of pharmacokinetics and pharmacodynamics is thus introduced and is experimentally explained to them.

PO6	Conduct investigations of complex problems: To understand biopharmaceutical principles and pharmacokinetic principles through different compartment models, multiple dosage regimens, non-linear pharmacokinetics, and assessment of bioavailability and bioequivalence.
PO7	Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
PO8	Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions and accept responsibility for them.
PO9	Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.
PO10	Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes.

Program Specific Outcomes (PSOs)

PSO1	Knowledge and skills: To impart knowledge and skills on criteria for formulation design, product development, evaluation, and optimization for better therapeutic efficacy.
PSO2	Research & Career: To create a talent pool by involving students in research projects and to make students to undertake research projects for scientific contribution to society. To foster ambitious desire among students to undertake higher studies, career growth and life-long learning.
PSO3	Entrepreneurship: Set-up pharmaceutical production unit to design and formulate pharmaceutical dosage forms. Validate the knowledge and skills gained through education to gain recognition in pharmaceutical society and related field.

Doctor of Pharmacy (PHARM.D)

Program Educational Objectives (PEOs)

PEO1	To provide a comprehensive pharmaceutical education leading to Doctor of Pharmacy (Pharm. D.) degree.
PEO2	To provide hands on training through state of art infrastructure to meet challenges of drug discovery and pharmaceutical care.
PEO3	To integrate knowledge and skills with clinical research to promote health care.

PEO4	Understand and appreciate the role of health care education in the development of society and on mankind's welfare. To inculcate leadership capabilities as member of health care team.
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Program Outcomes (POs)

PO1	Life Sciences Knowledge: Impart fundamental knowledge of physiology, anatomy, formulation science, and applied biochemistry, Chemistry of organic and inorganic compounds as per the monographs.
PO2	Pathology and Pharmacology Knowledge: Impart a thorough knowledge of relevant aspects of pathophysiological mechanisms, application of microbiology in pharmacy field, medical uses of natural drugs, and Pharmacological aspects of drugs.
PO3	Community Pharmacy Knowledge: To improve skills such as dispensing of drugs, ensure safe medication usage, patient counseling and improve patient care in community pharmacy set up.
PO4	Clinical Pharmacist Knowledge: To enhance practical clinical discussions, attending ward rounds, follow-up progress of patients, case presentation at discharge are imbibed through hospital postings. Participation in hospital camps, disease awareness programs will inculcate the social responsibility of the clinical pharmacists.
PO5	Environment and Sustainability: To understand the instrumental techniques applied in Good Laboratory Practice and following ICH-GCP guidelines, total quality management, quality review and documentation and study of regulatory bodies such as Drugs and Cosmetics Act, CDSCO guidelines, pertaining to regulatory environment.
PO6	Design/Development of solutions: To study the modern concept of rational drug design such as Quantitative Structure Activity Relationship, Computer Aided Drug Design and concept of antisense molecules.
PO7	Investigations of Complex Problems: To understand biopharmaceutical principles and pharmacokinetic principles through different compartment models, multiple dosage regimens, non-linear pharmacokinetics, and assessment of bioavailability and bioequivalence.
PO8	Toxicology Knowledge: To understand the toxicological aspects of individual class of xenobiotics such as pesticides, opiates, NSAIDs, Caustics, radiation, heavy metals, plant, food poisonings, snake bites, and envenomation.
PO9	Ethics: To understand the clinical aspects of drug development, such as phases, ethical issues, and roles and responsibilities of clinical trial personnel, design of clinical study documents, data management and safety monitoring in clinical trials.
PO10	Problem Analysis and Learning: In house scientific and social poster competition, Case study presentations, prescription auditing, and contribution to drug information center.

Program Specific Outcomes (PSOs)

PSO1	Preparation of individualized therapeutic plans based on diagnosis, monitoring therapy, through identification of alternatives, time-course of clinical and laboratory indices of therapeutic response and adverse effects.
PSO2	To detect, assess, and monitor adverse drug reactions, interpret selected laboratory results of specific disease states, retrieve, analyze, interpret and formulate drug or medicine

	information. To apply the pharmacies epidemiological methods like drug utilization review, cohort studies, meta-analysis, prescription event monitoring and study on vaccine safety, risk management and drug induced birth defects, pharmacoeconomic evaluation for cost minimization, cost-benefit, cost-effectiveness, and cost-utility evaluations.
PSO3	To improve patient care in performing medication history, interpretations of laboratory data of biological samples, identifying potential-drug related influences of Pharmacotherapy. To contribute for research and progress in higher studies, career, or entrepreneurship.



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