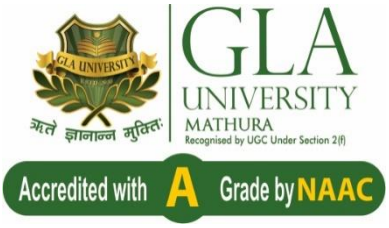

Program Outcomes (POs)

Program Educational Objectives (PEOs)

Program Specific Outcomes (PSOs)

Program Outcomes (Common to All B.Tech Programmes)

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: 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.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6. The engineer and society: 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: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: 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.

B.Tech. Civil Engineering

Program Educational Objectives (PEOs)

PEO1: Contribute to the planning, design, construction, maintenance and improvement of civil engineering systems critical to the quality of life in any society.
PEO2: Inculcate the values embodied in the University's mission to fit global requirements.
PEO3: Committed to maintain high professional ethical standards.
PEO4: Pursue life-long learning as a means of enhancing the knowledge base and skills necessary to contribute to the improvement of their profession and community.

Program Specific Outcomes (PSOs)

PSO1. Use surveying tools and techniques for planning and designing towns and building transportation systems.
PSO2. Analyze structures and determine economical structural dimensions of concrete and steel members as per the requirements of Indian standard codes utilizing modern software tools.
PSO3. Analyze and design of water resources, water supply and waste treatment systems for developing a sustainable environment
PSO4. Conduct geotechnical investigations for the construction, design, and analyze structures as per the codal provisions.

B.Tech. Electrical Engineering

Program Educational Objectives (PEOs)

PEO1. To employ in designing, production, testing, operation and/or maintenance of the Electrical Engineering systems and allied domain.
PEO2. To resolve the problems of social relevance, applying the knowledge in Electrical Engineering and allied domains.
PEO3. Engage in continued learning, career enhancement and adapt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO 1: Understand the standards of Electrical engineering, constructional principle of electrical machines, analog & digital devices and their applications in drives, communication, embedded and networking domains.
PSO 2: Apply technical information and utilization of current hardware & software program equipment related to electrical engineering for solving actual world problems.
PSO 3: Analyze, compare & Design the electrical systems for various engineering purposes and therefore demonstrating expert ethics & difficulty for societal wellbeing

B.Tech. Mechanical Engineering

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and maintaining systems in the field of mechanical engineering and allied engineering industries.
PEO2. Solve problems of social relevance applying the knowledge of mechanical engineering, and/or pursue higher education and research.
PEO3. Work effectively as individuals and as team members in multidisciplinary projects
PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1. The mechanical engineering graduates will be able to design and develop model & systems prototype related to solar thermal energy utilization.
PSO2. The mechanical engineering graduates will be capable to develop efficient cost effective lean manufacturing systems using smart manufacturing techniques, automation and minimize wastage thus strengthen eco-sustainability.
PSO3. Mechanical Engineering graduates will be able to do higher research in advanced materials development and characterization. They can pursue their career in industry, R&D laboratories and serve the nation and society.

B.Tech. Mechanical Engineering (Specialization in Automobile)

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and maintaining systems in the field of mechanical engineering and allied engineering industries.
PEO2. Solve problems of social relevance applying the knowledge of mechanical engineering, and/or pursue higher education and research.
PEO3. Work effectively as individuals and as team members in multidisciplinary projects
PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1. The mechanical engineering graduates will be able to design and develop model & systems prototype related to solar thermal energy utilization.
PSO2. The mechanical engineering graduates will be capable to develop efficient cost effective lean manufacturing systems using smart manufacturing techniques, automation and minimize wastage thus strengthen eco-sustainability.
PSO3. Mechanical Engineering graduates will be able to do higher research in advanced materials development and characterization. They can pursue their career in industry, R&D laboratories and serve the nation and society.

B.Tech. Mechanical Engineering (Specialization in Mechatronics)

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and maintaining systems in the field of mechanical engineering and allied engineering industries.
PEO2. Solve problems of social relevance applying the knowledge of mechanical engineering, and/or pursue higher education and research.
PEO3. Work effectively as individuals and as team members in multidisciplinary projects
PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1. The mechanical engineering graduates will be able to design and develop model & systems prototype related to solar thermal energy utilization.
PSO2. The mechanical engineering graduates will be capable to develop efficient cost effective lean manufacturing systems using smart manufacturing techniques, automation and minimize wastage thus strengthen eco-sustainability.
PSO3. Mechanical Engineering graduates will be able to do higher research in advanced materials development and characterization. They can pursue their career in industry, R&D laboratories and serve the nation and society.

B.Tech. Mechanical Engineering (Specialization in Smart Manufacturing)

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and maintaining systems in the field of mechanical engineering and allied engineering industries.
PEO2. Solve problems of social relevance applying the knowledge of mechanical engineering, and/or pursue higher education and research.
PEO3. Work effectively as individuals and as team members in multidisciplinary projects
PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1. The mechanical engineering graduates will be able to design and develop model & systems prototype related to solar thermal energy utilization.
PSO2. The mechanical engineering graduates will be capable to develop efficient cost effective lean manufacturing systems using smart manufacturing techniques, automation and minimize wastage thus strengthen eco-sustainability.
PSO3. Mechanical Engineering graduates will be able to do higher research in advanced materials development and characterization. They can pursue their career in industry, R&D laboratories and serve the nation and society.

B.Tech. Electronics & Communication Engineering

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and/or maintaining systems in Electronics Engineering and allied domain.
PEO2. Solve problems of social relevance applying the knowledge in Electronics Engineering and allied domains.
PEO3. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1: Apply the knowledge of basic sciences, and engineering fundamentals to analyze specific problems relevant to Electronics & Communication Engineering.
PSO2: Design and develop he analog and/or digital electronics circuits and systems for performing signal processing using the significant analytical knowledge in Electronics & Communication Engineering.
PSO3: Apply the contextual knowledge of Electronics and Communication Engineering to solve the real world problems.

B.Tech. Electrical & Electronics Engineering

Program Educational Objectives (PEOs)

PEO1. To employ in designing, production, testing, operation and/or maintenance of the Electrical Engineering systems and allied domain.
PEO2. To resolve the problems of social relevance, applying the knowledge in Electrical Engineering and allied domains.
PEO3. Engage in continued learning, career enhancement and adapt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1: Specify the modern electronic systems that perform analog and digital processing functions.
PSO2: Distinguish the appropriate technologies for the implementation of a specified communication system.
PSO3: Design the power supplies for electronic systems, including battery management and power amplifiers using currently available electronic components.

B.Tech. Computer Science & Engineering

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science &Engineering (Specialization in Cloud Computing & Virtualization)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation, applied database management systems and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science & Engineering (Specialization in Data Analytics)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation, applied database management systems and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science & Engineering (Specialization in Cyber Security & Forensics)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation, applied database management systems and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science& Engineering (Specialization in Internet of Things)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation, internet of things and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science & Engineering (Specialization in Artificial Intelligence & Machine Learning)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Solve real world problems using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Analyze the algorithmic principles, theory of computation, artificial intelligence and mathematical foundations for the modeling and design of computing systems.
PSO4: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Computer Science & Engineering (Specialization in Industrial Internet of Things)

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Model and design computing system using competency in computational logic, analytical ability, and system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

B.Tech. Biotechnology

Program Educational Objectives (PEOs)

PEO1: To provide fundamental and practical knowledge in the field of Biotechnology for pursuing research career in industry and academia.
PEO2: To impart analytical and research skills and nurture entrepreneurial endeavours.
PEO3: To develop biotechnologists with professional ethics to address global and societal issues for sustainable development.

Program Specific Outcomes (PSOs)

PSO 1: Acquire in-depth theoretical and practical knowledge in Biotechnology.
PSO2: Able to apply the acquired knowledge to provide cost-effective and sustainable solutions in Biotechnology.
PSO3: Translate biotechnological know-how to address environmental, ethical, intellectual property rights and societal issues.

Bachelor of Business Administration

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Apply the managerial knowledge in the business for effective decision making
PSO2: Understand the leadership skills through internship training.
PSO3: Remember the concepts pertaining to management principles, accounting and marketing operations.
PSO4: Demonstrate critical thinking skills in understanding managerial issues and problems related to the global economy and international business.

Bachelor of Computer Applications

Program Outcomes (POs)

PO1: Computational Knowledge: Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

PO2: Problem Analysis: Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

PO3: Design /Development of Solutions: Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4: Conduct Investigations of Complex Computing Problems: 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.

PO5: Modern Tool Usage: Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

PO6: Professional Ethics: Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.

PO7: Life-long Learning: Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

PO8: Project management and finance: Demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO9: Communication Efficacy: Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

PO10: Societal and Environmental Concern: Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.

PO11: Individual and Team Work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

PO12: Innovation and Entrepreneurship: Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large. Life-long Learning: Recognise the need, and have the ability, to engage in independent learning for continual development as a computing professional.

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Model and design computing system using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop application interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Apply knowledge to provide solutions to existing problems.

B. Sc. (Hons.) Biotechnology

Program Outcomes (POs)

PO1- Apply the principles and conceptual knowledge of Biotechnology to solve the practical problems in different areas of science and technology.
PO2- Develop the mathematical skills and methods to solve the problems in their core areas and other interdisciplinary subjects.
PO3- Identify, formulate and resolve the emerging challenges based on design, experiment, data interpretation and analysis of results.
PO4- Design a system, component, or methods to meet desired needs within realistic constraints such as environmental, health, safety, manufacturability and sustainability.
PO5- Develop the ability in using modern tools for design and analysis of scientific and societal problems.
PO6- Work in teams on multi-disciplinary projects in research organizations and industries and the report in a full scientific approach with professional ethics.
PO7- Build up communication skills, both written and oral, to specialized and non- specialized audiences.
PO8- Develop the ability to critically evaluate theories, methods, principles, and applications of pure and applied science in multidisciplinary domain.

Program Educational Objectives (PEOs)

PEO 1- The objective of the Biotechnology is to equip the students to apply knowledge of molecular mechanisms of cellular processes in living systems including microbes, plants, and higher order organisms to applied aspects.
PEO 2- The laboratory training along with theory is included to prepare them for careers in the industry, agriculture, and applied research where biological system is increasingly employed.
PEO 3- Basics and current updates in the areas of Industrial Biotechnology, Fermentation Technology, and Agriculture & Environmental Biotechnology are included to train the students and also sensitize them to scope for research.
PEO 4- The Bachelor in Biotechnology Programme will address the increasing need for skilled scientific manpower with an understanding of research ethics involving animals and humans to contribute to application, advancement, and impartment of knowledge in the field of biotechnology globally.
PEO 5- To produce students who attain professional leadership role.
PEO 6- To produce students who demonstrate a commitment to life-long learning.

Program Specific Outcomes (PSOs)

PSO 1: Proficiency to work on biotechnological concepts and interdisciplinary areas of science and technology towards product and process development for industrial and academic research applications.
PSO 2: An expert in Biotechnology and allied fields (medical, microbial, agricultural, environmental, plant and animal) for utilizing the practical skills to address biotechnological challenges.
PSO 3: Proficiency to demonstrate entrepreneurial and leadership skills with life- long learning.

B. Sc. (Hons.) Chemistry

Program Outcomes (POs)

The outcomes of the BSc (H) Chemistry program are to:

PO1. Afford a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective.
PO2. Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.
PO3. Inculcate the scientific temperament in the students and outside the scientific community.
PO4. Develop research-oriented skills through awareness of handling the sophisticated instruments/equipment.
PO5. Solve the problem and also think methodically, independently and draw a logical conclusion.
PO6. Communicate effectively through report writing, documentation and effective presentation.
PO7. Enhance skill for future employability through activities such as seminars, communication skills, industrial visits, internship.
PO8. Recapitulate the courses in chemistry required for competitive examination.
PO9. Function effectively as an individual and as member or leader in diverse teams in multidisciplinary settings.
PO10. Follow ethical principle and responsibilities of a chemist to serve the society.
PO11. Engage in independent and lifelong learning technological changes and related matters.
PO12. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions.

Program Specific Outcomes (PSOs)

PSO1. Exploit the laboratory skills and safely to transfer and interpret knowledge entirely in the working environment in industries.
PSO2. Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.
PSO3. Get exposures of a breadth of experimental techniques using modern instrumentation.
PSO4. Find out the green route for chemical reaction for sustainable development.

B. Sc. (Hons.) Agriculture

Program Outcomes (POs)

PO1: Understand, analyze and solve problems relevant to agricultural sector to meet the societal needs utilizing the knowledge and skills imparted during the program.
PO2: Improve communication skills to develop good relationship between all stakeholders.
PO3: Function effectively as an individual and as a member or leader in diverse teams.
PO4: Understand the impact of agricultural technology and eco-friendly practices for sustainable agricultural development and for socio-economic and ecological upliftment of local global populace.
PO5: Demonstrate the ability to engage in independent and lifelong learning in broader context for responsible citizenship.

Program Specific Outcome (PSOs)

PSO1. Achieve creative professionalism, understand their ethical responsibility and serve the society by way of providing need-based solutions in the agriculture sector.
PSO2. Examine the relationships between inputs and outputs in agricultural field to make effective and profitable decisions**.**
PSO3. Uphold high ethical know-how and good communication skills.
PSO4. Develop innovative processes, products and technologies to meet the challenges in agriculture and farming practices.
PSO5. Analyze the current events and issues that are occurring in agriculture and how they affect futuristic agriculture.

B. Sc. (Hons.) Physics

Program Outcomes (POs)

PO1: Apply the principles and conceptual knowledge of Physics to solve the practical problems in different areas of science and technology.
PO2: Develop the mathematical skills and methods to solve the problems in their core areas and other interdisciplinary subjects.
PO3: Identify, formulate and resolve the emerging challenges based on design, experiment, data interpretation and analysis of results.
PO4: Design a system, component, or methods to meet desired needs within realistic constraints such as environmental, health, safety, manufacturability, and sustainability.
PO5: Develop the ability in using modern tools for design and analysis of scientific and societal problems.
PO6: Work in teams on multi-disciplinary projects in research organizations and industries and present the report in a full scientific approach with professional ethics.
PO7: Build up communication skills, both written and oral, to specialized and non-specialized audiences.
PO8: Develop the ability to critically evaluate theories, methods, principles, and applications of pure and applied science in multidisciplinary domain.

Program Specific Outcomes (PSOs)

PSO1: Explain laws underlying a wide selection of physical phenomenon.
PSO2: Describe and evaluate current state-of-the-art in designated areas of Physics.
PSO3: Graduates shallpursuehighereducationatinstituteofnationalandinternationalrepute.
PSO4: Acquire industrial exposure and scientific knowledge through industry internship and research based learning.

Bachelor of Pharmacy

Program Outcomes (POs)

PO1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

PO3. Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

PO4. Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

PO5. Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.

PO6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

PO7. Pharmaceutical Ethics: Honor personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

PO8. Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

PO9. The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

P10. 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.

PO11. Life-long learning: 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. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Program Educational Objectives (PEOs)

PEO-1: To produce graduates with strong foundation in academics with high technical competence in Pharmaceutical Sciences.
PEO-2: To produce graduates with values, effective communication skills and team building ability for employability and entrepreneurship.
PEO-3: To train graduates to confront the challenges of the profession and contribute to society.
PEO-4: To build abilities for lifelong learning and sustainable development.

B.Com.(Hons.)

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Demonstrate the ability to interpret and analyze financial statements of companies to take policy decisions.
PSO2: Provide hands-on training and experience on various financial and accounting software required for better data handling.
PSO3: Recognize the various learned accounting concepts and apply them to solve various functional issues pertaining to commerce domain.
PSO4: Develop problem identification and solving abilities among students as required in different business situations.

B.Com. (Hons.) Global Accounting

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Identify and understand the various concepts prevalent in the field of commerce at international level.
PSO2: Demonstrate ability to interpret and analyze financial statements of multinational corporations.
PSO3: Understand and comprehend sustainability concerns at global level which are the hallmark of today's business environment.
PSO4: Enhance conceptual clarity related to various functional issues in the field of commerce globally.

Bachelor of Business Administration (Family Business)

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Enable clear identification of all the concepts related to entrepreneurship with special reference to Family Business.
PSO2: Encourage developing effective communication and interpersonal skills.
PSO3: Train in understanding and appreciating latest business models & encourage to re-engineer the different business models as per the requirement.
PSO4: Enable preparation of a detailed business plan taking into account resources required to run a business successfully.

Bachelor of Business Administration (Hons.)

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Develop extensive understanding related to various concepts of management and business.
PSO2: Facilitated acquisition of all skills-set in order to tackle business-related problems effectively thereby providing solutions for the same.
PSO3: Contribute towards rational business decisions based on management principles and analysis.
PSO4: Perform reasonably while appearing in various competitive examinations in such areas as management, law, civil services, railways, banking and the related domains.

Bachelor of Arts (Hons.) Economics

Program Outcomes (POs)

PO1 Critical Thinking: Develop critical thinking and problem solving skills related to various concepts of Management domain
PO2 Effective Communication: Make them effective in communication skills thus enabling them towards standard written and spoken language practices
PO3: Leadership Skills: Enable them to understand significance of working as a part of a team as well as how to develop leadership skills
PO4 Ethics: Prepare them to become ethical global citizens and be conscious towards environment and sustainability

Program Educational Objectives (PEOs)

PEO1: Show expertise across various business domains, particularly apply the significant aspects of fundamental business principles to understand and solve problems and to build and execute answers in the current business environment
PEO2: Ensure collaboration and nurture necessary leadership abilities with regard to evaluation of organizational realities based on a complete approach
PEO3: Put into effect a professional approach thus leading to knowledge delivery and improving the ability of students via research to solve real-life business problems
PEO4: Bring forward a detailed outlook with regard to the right approach, both at the societal and professional levels
PEO5: Employ suitable as well as reasonable models to examine and choose from available options thus leading to an effective decision-making process

Program Specific Outcomes (PSOs)

PSO1: Define the structured curricula supporting the academic development related to the field of Economics.
PSO2: Explain conceptual and theoretical aspects of Economics with behavioral approach.
PSO3: Exhort the importance of teamwork for completing tasks and communicating effectively along with developing an enterprising mindset.
PSO4: Explain the fundamentals of economics by applying digital tools and technologies for reporting, retrieving, and analyzing data

Bachelor of Education

Program Outcomes (POs)

PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, analysis of Curriculum, construction of blue print, selecting appropriate teaching strategies according to needs of students and conducting action research to solve classroom problems and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2. Teaching competency: Know, select and use of learner-centred teaching methods, understanding of paradigm shift in conceptualizing disciplinary knowledge in school curriculum, necessary competencies for organizing learning experiences, applying teaching skills, Identifying the diversities and dealing it in inclusive classrooms environment, guidance and counselling programmes for disabled students, select and use of appropriate assessment strategies for facilitating learning.

PO3. Problem Solving: Understand and solve problems of classroom and relevance to society to meet the specified needs using the knowledge, skills, and attitudes acquired from core and pedagogy courses.

PO4. Effective Communication: Speak, read, write, listen clearly in person and through electronic media in English and one Indian language, and make meaning of the world by connecting people, ideas, books, media, technology, presenting seminar before peer students, teachers and practicing communication skills through various linguistic activities and applying it for better classroom communication.

PO5. Individual and Teamwork: Function effectively as an individual and as a member or leader in diverse teams and a wide variety of multi-disciplinary settings by following the principles of collaborative learning, cooperative learning, sports, scouting-guiding and team teaching.

PO6. Ethics: Understand multiple value systems, including your own, the moral dimensions of your decisions, and accept responsibility for them.

PO7. Self-directed and life-long learning: Preparing scripts for seminars, lesson plans, online content and demonstrate the ability to engage in independent, practice yoga and life-long learning in the broadest context socio-technological changes.

PO8. Computational Thinking: Understand data-based reasoning through the translation of data into abstract concepts using computing technology-based tools.

PO9. Effective Citizenship: Demonstrate empathetic social concern and equity-cantered national development and act with an informed awareness of issues and participate in civic life through volunteering.

Program Educational Objectives (PEOs)

PEO1. To offer Teacher education program of contemporary relevance and ensure quality based pedagogy through value and ICT based teacher education.
PEO2. Develop an understanding of education as an agenda for the local, state, nation and global concern issues, its policy visions and efforts in evolving a national system of education.
PEO3. Develop an understanding about teaching and learning process, school management, community involvement and pedagogic challenges posed by the subject comprising of a broad disciplinary stream.
PEO4. Develop a broad repertoire of perspectives, professional capacities, teacher dispositions, sensibilities and skills by providing adequate knowledge in computer and information technology along with curricular and extra-Curricular activities.

Program Specific Outcomes (PSOs)

PSO1. Enable to comprehend the development in physical, cognitive, social, and emotional areas, contemporary issues, and educational policies of education system in India, teaching-learning methods, strategies, epistemological basis of education, school management, professional ethics and observation of school activities by school internship.
PSO2. Understand the individual differences among students, measuring the attainment, evaluating progress, and assessing learning abilities, guidance programmes and administering psychological tools, ICT based Communication and teaching and lesson planning.

PSO3. Practice teaching in Schools, inculcate the real experiences of classroom teaching and online teaching for remote areas' students by using ICT and its different tools and software.
PSO4. Understand the classroom diversities and enable them to deal with diverse learners in inclusive classroom setup, education for human rights and women empowerment, environmental education and developing online content.

Bachelor of Commerce LLB (Hons.)

Program Outcomes (POs)

PO1: Critical Thinking: Explore and explain the substantial & procedural laws in which they are made/drafted and how students think and understand the legislative setup.
PO2: Effective Communication: Ability to learn the art of communicating and demonstrating their oral advocacy skills. Projecting the facts in a way suitable to the client and power to convince on legal reasoning forms the essence of communication in courts of law.
PO3: Social Interaction: Interpret and Analyze the legal and social problems and work towards finding solutions to the problems by application of laws and regulations.
PO4: Effective Citizenship: Inculcate values of Rights and Duties, and transfer these values to real life through legal and judicial process for promoting community welfare.
PO5: Ethics: Apply ethical principles and commit to legal professional ethics, responsibilities and norms of the established legal practices.
PO6: Environment and Sustainability: Understand the impact of the professional, legal solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
PO7:Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broader context of legal change.

Program Educational Objectives (PEOs)

PEO1: To develop a background in fundamental areas of business law.
PEO2: To provide students breadth, expertise and a foundation for professional practice.
PEO3: To develop fundamental in-depth knowledge and understanding of: the principles, concepts, values, substantive rules and development of the Indian legal system and core areas of business law.
PEO4: To develop intellectual rigor as well as more general transferable intellectual skills which are of value in the practice of Law and a wide range of careers.
PEO5: To provide our graduates with self-confidence, knowledge, understanding and skills that will provide added benefit to them as individuals, to the legal profession and to society as a whole

Program Specific Outcomes (PSOs)

PSO1: Demonstrate knowledge and understanding of substantive & procedural laws including various legislations and connected rules & regulations.
PSO2: Drafting, Counselling and Negotiation: Develop the skill of drafting or art of framing various plaints, petitions, writ, letters, using proper English format with clarity. Students therefore learn the skills of collaboration, negotiation and counselling for the ethical implementation of legal system.
PSO3: Building Professionalism: Understands the standards of conduct involved in practice of law and demonstrate values of legal profession. This inculcates ethical responsibilities towards clients in a legal system.

PSO4. Development of Interpersonal Skills: Develops the ability to analyse, synthesize and disseminate large amount of complex and disparate information comprising of legal and non-legal aspects on the working of the entire system.

Bachelor of Arts LLB (Hons.)

Program Outcomes (POs)

PO1: Critical Thinking: Explore and explain the substantial & procedural laws in which they are made/drafted and how students think and understand the legislative setup.
PO2: Effective Communication: Ability to learn the art of communicating and demonstrating their oral advocacy skills. Projecting the facts in a way suitable to the client and power to convince on legal reasoning forms the essence of communication in courts of law.
PO3: Social Interaction: Interpret and Analyze the legal and social problems and work towards finding solutions to the problems by application of laws and regulations.
PO4: Effective Citizenship: Inculcate values of Rights and Duties, and transfer these values to real life through legal and judicial process for promoting community welfare.
PO5: Ethics: Apply ethical principles and commit to legal professional ethics, responsibilities and norms of the established legal practices.
PO6: Environment and Sustainability: Understand the impact of the professional, legal solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
PO7: Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broader context of legal change.

Program Educational Objectives (PEOs)

PEO1: To equip students with a sound understanding of the foundations of legal knowledge.
PEO2: To offer students the opportunity to study law from an extensive catalogue of optional subjects, covering the entire range of legal knowledge.
PEO3: To develop students' analytical and research skills, equipping them with the generic skills they will need in their future careers.
PEO4: To expose students to a wide range of disciplinary approaches to legal study, encouraging them to reflect on the complexity of legal practice.

Program Specific Outcomes (PSOs)

PSO1. Demonstrate knowledge and understanding of substantive & procedural laws including various legislations and connected rules & regulations.
PSO2. Drafting, Counselling and Negotiation: Develop the skill of drafting or art of framing various plaints, petitions, writ, letters, using proper English format with clarity. Students therefore learn the skills of collaboration, negotiation and counselling for the ethical implementation of legal system.
PSO3. Building Professionalism: Understands the standards of conduct involved in practice of law and demonstrate values of legal profession. This inculcates ethical responsibilities towards clients in a legal system.
PSO4. Development of Interpersonal Skills: Develops the ability to analyse, synthesize and disseminate large amount of complex and disparate information comprising of legal and non-legal aspects on the working of the entire system.

M. Sc. Biotechnology

Program Outcomes (POs)

PO1 Apply the knowledge of principles and concepts of Biotechnology to practical problems in industry and academia.
PO2 Identify, formulate, research literature, and analyze biological problems to arrive at substantiated conclusions using principles of life sciences.
PO3 Create, select, and apply appropriate techniques, resources, and modern analytic tools including prediction and modeling of biology with an understanding of the limitations.
PO4 Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional industrial practice.
PO5 Understand the impact of the biotechnology, and demonstrate the knowledge with sustainable manner and commit to professional ethics and responsibilities and norms of the industrial and scientific community, function effectively as an individual, and as a member or leader in multidisciplinary settings.
PO6 Communicate effectively by writing reports and presentation with the scientific community and society at large. Be able to comprehend and documentation by giving and receive clear instructions.
PO7 Demonstrate knowledge and understanding of scientific and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments**.**
PO8 Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological and scientific change.

Program Educational Objectives (PEOs)

PEO1 The objective of the Biotechnology is to equip the students to apply knowledge of molecular mechanisms of cellular processes in living systems including microbes, plants, and higher order organisms to applied aspects.
PEO2 The laboratory training along with theory is included to prepare them for careers in the industry, agriculture, and applied research where biological system is increasingly employed.
PEO3 Basics and current updates in the areas of Industrial Biotechnology, Fermentation Technology, Agriculture & Environmental Biotechnology are included to train the students and also sensitize them to scope for research.
PEO4 The Masters in Biotechnology Programme will address the increasing need for skilled scientific manpower with an understanding of research ethics involving animals and humans to contribute to application, advancement, and impartment of knowledge in the field of biotechnology globally.
PEO5 To produce students who attain professional leadership role.
PEO6 To produce students who demonstrate a commitment to life-long learning.

Program Specific Outcomes (PSOs)

PSO1: An expert to work on biotechnological concepts and allied fields (medical, microbial, agricultural, environmental, plant and animal) with modern tools and techniques towards product and process development for academic, industrial and research applications.

PSO2: Proficiency to demonstrate entrepreneurial and leadership skills with life- long learning.

M. Sc. Microbiology & Immunology

Program Outcomes (POs)

PO1: Apply the knowledge of principles and concepts of Microbiology to practical problems in industry and academia.
PO2: Identify, formulate, research literature, and analyze biological problems to arrive at substantiated conclusions using principles of life sciences.
PO3: Create, select, and apply appropriate techniques, resources, and modern analytic tools including prediction and modeling of biology with an understanding of the limitations.
PO4: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional industrial practice.
PO5: Understand the impact of the biotechnology, and demonstrate the knowledge with sustainable manner and commit to professional ethics and responsibilities and norms of the industrial and scientific community, function effectively as an individual, and as a member or leader in multidisciplinary settings.
PO6: Communicate effectively by writing reports and presentation with the scientific community and society at large. Be able to comprehend and documentation by giving and receive clear instructions.
PO7: Demonstrate knowledge and understanding of scientific and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments.
PO8: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological and scientific change.

Program Educational Objectives (PEOs)

PEO1: The objective of the Microbiology is to equip the students to apply knowledge of prokaryotic and eukaryotic cellular processes, classification, interaction of microorganisms among themselves, with physical and chemical agents and higher order organisms.
PEO2: The laboratory training in addition to theory is included to prepare them for careers in the industry, agriculture, and applied research where biological system is increasingly employed. Basics and current molecular updates in the areas of Industrial Microbiology, Fermentation Technology, Agriculture and Environmental Microbiology are included to train the students and also sensitize them to scope for research.
PEO3: The Masters in Microbiology Programme will address the increasing need for skilled scientific manpower with an understanding of research ethics involving microorganisms to contribute to application, advancement and implementation of knowledge in the field of microbiology and molecular biology globally.
PEO4: To produce students who pursue careers as practicing microbiologist in the field of microbiology and allied industries.
PEO5: To produce students who demonstrate a commitment to life-long learning.

Program Specific Outcomes (PSOs)

PSO1: An expert to work on microbiological concepts and allied fields (medical, microbial, agricultural, environmental, plant and animal) with modern tools and techniques towards product and process development for academic, industrial and research applications.
PSO2: Our candidates will be able to explain why microorganisms are ubiquitous in nature, inhabiting a multitude of habitats and occupying a wide range of ecological habitats.
PSO3: Able to cite examples of the vital role of microorganisms in microbiology, fermentation, medicine and other industries important to human well being.
PSO4: Able to demonstrate that microorganisms have an indispensible role in the environment, including elemental cycles, biodegradation etc.

M. Sc. Chemistry

Program Outcomes (POs)

PO1. Afford a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective.

PO2. Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.

PO3. Inculcate the scientific temperament in the students and outside the scientific community.

PO4. Understand good laboratory practices and their safety measures.

PO5. Develop research-oriented skills through awareness of handling the sophisticated instruments/equipment's.

PO6. Solve the problem and also think methodically, independently and draw a logical conclusion.

PO7. Identify chemical formulae and solve numerical problems.

PO8. Find out the green route for chemical reaction for sustainable development.

PO9. Work in the interdisciplinary and multidisciplinary areas of chemical sciences and its applications.

PO10. Follow ethical principle and responsibilities of a chemist to serve the society.

PO11. Engage in independent and lifelong learning technological changes and related matters.

PO12. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions.

Program Specific Outcomes (PSOs)

PSO1: Exploit the laboratory skills and safely to transfer and interpret knowledge entirely in the working environment in industries.

PSO2: Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.

PSO3: Get exposures of a breadth of experimental techniques using modern instrumentation

PSO4: Find out the green route for chemical reaction for sustainable development.

M. Sc. Physics

Program Outcomes (POs)

PO1: Apply the knowledge of principles and concepts of Physics to practical problems in industry and academia.
PO2: Identify, formulate, research literature, and analyze physical problems to arrive at substantiated conclusions using principles of physical sciences.
PO3: Create, select, and apply appropriate techniques, resources, and modern analytic tools including prediction and modeling of physics with an understanding of the limitations.
PO4: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional industrial practice.
PO5: Understand the impact of the physics, and demonstrate the knowledge with sustainable manner and commit to professional ethics and responsibilities and norms of the industrial and scientific community, function effectively as an individual, and as a member or leader in multidisciplinary settings.
PO6: Communicate effectively by writing reports and presentation with the scientific community and society at large. Be able to comprehend and documentation by giving and receive clear instructions.
PO7: Demonstrate knowledge and understanding of scientific and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments.
PO8: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological and scientific change.

Program Specific Outcomes (PSOs)

PSO1: Explain laws underlying a wide selection of physical phenomenon.
PSO2: Describe and evaluate current state-of-the-art in designated areas of Physics.
PSO3: Establish the ability to plan, undertake, and report on a programme of original work; which includes (1) planning/execution of experiments and (2) analysis/interpretation of experimental results.
PSO4: Graduates will enable themselves for pursuing carrier in research and development.

M. Sc. Mathematics

Program Outcomes (POs)

PO1: Critical Thinking: Apply knowledge of mathematics to become competent professionals at global level.
PO2: Problem Solving: Identify and solve complex scientific problems using mathematical skills
PO3: Computational Thinking: Apply the mathematical complex problems based on scientific principles for the analysis and interpretational data.
PO4: Design Mindset: Select, design and apply appropriate computational techniques to solve and models physical problems.
PO5: Environment and Sustainability: Apply and improve the mathematical modeling to predict the effect of environment changes and contribute to the sustainable development.
PO6: Ethics: Implement ethical principles and responsibilities of a mathematician to serve the society.
PO7: Effective Communication: Communicate effectively through soft skills, report writing, documentation and effective presentations.
PO8: Individual and Team Work: Perform as an individual and as a member or leader in diverse teams in multidisciplinary settings.
PO9: Self-directed and Life Long Learning: Engage in independent and lifelong learning in the broadest context of science and technological changes.
PO10: Skill Enhancement: Enhance and adopt skills required for higher order employment or jobs through activities such as seminar, dissertation, workshops and conferences.
PO11: Competitive Mindset: Successfully crack the national and international level competitive examinations.
PO12: Analytical ability: Apply and implement mathematical/statistical tools to analyze the data.

Program Educational Objectives (PEOs)

PEO1: To provide professional cadres in the field of Mathematics to support the national development programs within public and higher education institutes.
PEO2: To encourage scientific research and publications in the accredited scientific publications.
PEO3: To encourage participation in scientific forums and seminars.
PEO4: To encourage follow up of latest scientific research and techniques.

Program Specific Outcomes (PSOs)

PSO1: Students will be able to understand the mathematical concepts and applications in the field of algebra, analysis, computational techniques, optimization, differential equations, engineering, finance and actuarial science.
PSO2: Handle the advanced techniques in algebra, analysis, computational techniques, optimization, differential equations, engineering, finance and actuarial science to analyze and design algorithms solving variety of problems related to real life problems.
PSO3: Adopt changing scientific environment in the process of sustainable development by using mathematical tools.

PSO4: Have necessary skills and expertise in the field of research and developments through seminar and dissertation.

Master of Pharmacy Pharmacology

Program Outcomes (POs)

PO1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

PO3. Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

PO4. Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

PO5. Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.

PO6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

PO7. Pharmaceutical Ethics: Honor personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

PO8. Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

PO9. The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

P10. 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.

PO11. Life-long learning: 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. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Program Educational Objectives (PEOs)

PEO-1: To produce graduates with strong foundation in academics with high technical competence in Pharmaceutical Sciences.
PEO-2: To produce graduates with values, effective communication skills and team building ability for employability and entrepreneurship.
PEO-3: To train graduates to confront the challenges of the profession and contribute to society.
PEO-4: To build abilities for lifelong learning and sustainable development.

Master of Pharmacy Pharmaceutics

Program Outcomes (POs)

PO1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

PO3. Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

PO4. Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

PO5. Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.

PO6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

PO7. Pharmaceutical Ethics: Honor personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

PO8. Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

PO9. The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

P10. 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.

PO11. Life-long learning: 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. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Program Educational Objectives (PEOs)

PEO1: To produce graduates with strong foundation in academics with high technical competence in Pharmaceutical Sciences.
PEO2: To produce graduates with values, effective communication skills and team building ability for employability and entrepreneurship.
PEO3: To train graduates to confront the challenges of the profession and contribute to society.
PEO4: To build abilities for lifelong learning and sustainable development.

M.Tech. Civil Engineering (Structural Engineering)

PO1: Scholarship of Knowledge: Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyze and synthesize existing and new knowledge, and integration of the same for enhancement of knowledge.

PO2: Critical Thinking: Analyse complex engineering problems critically, apply independent judgment for synthesizing information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context.

PO3: Problem Solving: Think laterally and originally, conceptualize and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise.

PO4: Research Skill: Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyse and interpret data, demonstrate higher order skill and view things in a broader perspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering.

PO5: Usage of modern tools: Create, select, learn and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities with an understanding of the limitations.

PO6: Collaborative and Multidisciplinary work: Possess knowledge and understanding of group dynamics, recognise opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open- mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others.

PO7: Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply the same to one's own work, as a member and leader in a team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economic and financial factors.

PO8: Communication: Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions.

PO9: Life-long Learning: Recognise the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously.

PO10: Ethical Practices and Social Responsibility: Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society.

PO11: Independent and Reflective Learning: Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback.

Program Educational Objectives (PEOs)

PEO1: To demonstrate fundamental knowledge and skills required for pursuing higher education and for functioning effectively as a skilled professional. (Engineering Knowledge)
PEO2: To provide motivation and engineering base to get actively involved in focused research targeting innovative solutions to modern society challenges. (Problem Analysis, Design/Development of Solution)
PEO3: To work collaboratively within a team and individually, efficaciously articulate technical knowledge, ideas, and proposals. (Teamwork & Leadership)
PEO4: To acknowledge the responsibilities towards the society and to behave ethically, morally and be willing to engage in activities beneficial to the society. (Ethics & Society)
PEO5: To demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk-taking and implementation of novel ideas or methods. (Innovation & Entrepreneurship

Program Specific Outcomes (PSOs)

PSO1: Analyse various materials used in construction and their applications in design and construction of various types of structures.
PSO2: Design civil engineering structures using advanced softwares and as per the codal provisions.

M.Tech. Civil Engineering (Transportation Engineering)

Program Outcomes (POs)

PO1: Scholarship of Knowledge: Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyse and synthesise existing and new knowledge, and integration of the same for enhancement of knowledge.

PO2: Critical Thinking: Analyse complex engineering problems critically, apply independent judgement for synthesising information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context.

PO3: Problem Solving: Think laterally and originally, conceptualise and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise.

PO4: Research Skill: Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyse and interpret data, demonstrate higher order skill and view things in a broaderperspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering.

PO5: Usage of modern tools: Create, select, learn and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities with an understanding of the limitations.

PO6: Collaborative and Multidisciplinary work: Possess knowledge and understanding of group dynamics, recognise opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open- mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others.

PO7: Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply the same to one's own work, as a member and leader in a team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economic and financial factors.

PO8: Communication: Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions.

PO9: Life-long Learning: Recognise the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously.

PO10: Ethical Practices and Social Responsibility: Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society.

PO11: Independent and Reflective Learning: Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback.

Program Educational Objectives (PEOs)

PEO1: To demonstrate fundamental knowledge and skills required for pursuing higher education and for functioning effectively as a skilled professional. (Engineering Knowledge)
PEO2: To provide motivation and engineering base to get actively involved in focused research targeting innovative solutions to modern society challenges. (Problem Analysis, Design/Development of Solution)
PEO3: To work collaboratively within a team and individually, efficaciously articulate technical knowledge, ideas, and proposals. (Teamwork & Leadership)
PEO4: To acknowledge the responsibilities towards the society and to behave ethically, morally and be willing to engage in activities beneficial to the society. (Ethics & Society)
PEO5: To demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk-taking and implementation of novel ideas or methods. (Innovation & Entrepreneurship)

Program Specific Outcomes (PSOs)

PSO1: Apply the state of the art methods, tools and techniques which are suitable in Transportation Engineering discipline.
PSO2: Design various components of transportation system such as highways, railways, airways, canals, and tunnels etc. using modern tools and as per the codal provisions.

M.Tech. Computer Science & Engineering

Program Outcomes (POs)

PO1: Engineering Knowledge: Apply knowledge of mathematics and science, with fundamentals of Computer Science & Engineering to be able to solve complex engineering problems related to CSE.
PO2: Problem Analysis: Identify, Formulate, review research literature and analyze complex engineering problems related to CSE and reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
PO3: Design/Development of solutions: Design solutions for complex engineering problems related to CSE and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural societal and environmental considerations.
PO4: Conduct Investigations of Complex problems: 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.
PO5: Modern Tool Usage: Create, Select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to computer science related complex engineering activities with an understanding of the limitations.
PO6: The Engineer and Society: Apply Reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the CSE professional engineering practice.
PO7: Environment and Sustainability: Understand the impact of the CSE professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development
PO8: Ethics: Apply Ethical Principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9: Individual and Team Work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary Settings.
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large such as able to comprehend and with write effective reports and design documentation, make effective presentations and give and receive clear instructions.
PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.
PO12: Life-Long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning the broadest context of technological change.

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals, researchers or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Model and design computing system using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop hardware and software interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Apply knowledge to provide innovative solutions to existing problems and identify research gaps.

M.Tech. Electrical Engineering

Program Outcomes (POs)

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: 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.

PO5. Modern tool usage: 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.

PO6. The engineer and society: 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: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: 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.

Program Educational Objectives (PEOs)

PEO1. To employ in designing, production, testing, operation and/or maintenance of the Electrical Engineering systems and allied domain.
PEO2. To resolve the problems of social relevance, applying the knowledge in Electrical Engineering and allied domains.
PEO3. Engage in continued learning, career enhancement and adapt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1: Apply the concepts of power system and power electronics in the real time projects to fulfill the present demand of society
PSO2: Identify the customized requirements and meet the challenges existing in current technology.
PSO3: Design, develop the power electronics / power system based products and validate through standard results.

M.Tech. Electronics & Communication Engineering

Program Outcomes (POs)

PO1: Apply Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2: Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4: Conduct Investigations of Complex Problems: 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.
PO5: Modern Tool Usage: 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.
PO6: The Engineer and Society: 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: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12: Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

Program Educational Objectives (PEOs)

PEO1. Engage in designing, manufacturing, testing, operating and/or maintaining systems in the field of electronics and communication engineering and allied engineering industries.
PEO2. Solve problems of social relevance applying the knowledge of electronics and communication engineering, and/or pursue higher education and research.

PEO3. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO 1: Design and develop the advanced electronic circuits and systems for performing signal processing using the significant analytical knowledge in Electronics & Communication Engineering**.**
PSO 2: Apply the contextual knowledge of Electronics and Communication Engineering to solve the real world problems.
PSO 3: Acquire integrity and ethics of research to solve the complex problem in Electronics and Communication Engineering.

M.Tech. Mechanical Engineering (Production)

Program Outcomes (POs)

PO1: Engineering Knowledge: Ability to apply knowledge of basic sciences, knowledge of mathematics and engineering fundamentals to the solution of complex Production and Industrial Engineering problems

PO2: Problem Analysis: Identify, formulate, research literature and analyze complex Production, thermal, materials and Industrial Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences

PO3: Conduct investigations: Ability to investigate simple and complex thermal, materials and Production Engineering problems using research-based knowledge and research methods including analysis, interpretation of data and synthesis of information to provide valid and logical conclusions.

PO4: Modern Tool Usage: To use various tools, soft skills to develop models and simulation, which can be applied in wide ranging of problems related to solar energy systems design and analysis, materials modeling and production engineering?

PO5: The Engineer and Society: Ability to apply contextual knowledge and acquired experience to assess socio-economic, agricultural problems, ethical and environmental issues of masses. Engineers can provide solution in terms of services, engineering and technological solutions.

PO6: Environment and Sustainability: Understand impact of industrial production, technological hazards and engineering activities on environment. They will ready to work with harmony with nature and develop synergistic solution.

PO7: Ethics: Apply ethics in every activity between industry and society, industry and environment and ethical need of production.

PO8: Individual and Team Work: To work with full dedication, working as individual, as a member in a team or imparting leadership as a participant in a team.

PO9: Communication: Communicate effectively, regarding dissipation of knowledge from industry to society, from authority to workers and end users.

PO10: Project Management and Finance: Demonstrate knowledge and skill to manage projects related to thermal, production and materials engineering. Ability to write structured projects to national and international funding agencies for multidisciplinary research.

PO11: Life-long Learning: Recognize the need for further acquisition of knowledge and refinement of skill to update for dynamic changes in society and industry. Pursue for higher education and research

Program Educational Objectives (PEOs)

PEO1. Designing, manufacturing, testing, operating and maintaining systems in the field of Mechanical Engineering and allied Engineering Industries.

PEO2. Provide solutions to socially relevant issues by making cost effective environment friendly devices and pursue higher education and research.

PEO3. Work effectively as individuals and as team members in multidisciplinary projects

PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1: An ability to apply knowledge and skill of various approaches in manufacturing technology and designing with latest softwares, for solving engineering problems.
PSO2: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and IT tools.
PSO3: An ability to automate a mechanical system or a process to meet desired needs within realistic constraints such as health, safety and manufacturability.
PSO4: Should be able to handle research problems and write dissertations.

M.Tech. Mechanical Engineering (Design)

Program Outcomes (POs)

PO1: Engineering Knowledge: Ability to apply knowledge of basic sciences, knowledge of mathematics and engineering fundamentals to the solution of complex Production and Industrial Engineering problems

PO2: Problem Analysis: Identify, formulate, research literature and analyze complex Production, thermal, materials and Industrial Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences

PO3: Conduct investigations: Ability to investigate simple and complex thermal, materials and Production Engineering problems using research-based knowledge and research methods including analysis, interpretation of data and synthesis of information to provide valid and logical conclusions.

PO4: Modern Tool Usage: To use various tools, soft skills to develop models and simulation, which can be applied in wide ranging of problems related to solar energy systems design and analysis, materials modeling and production engineering?

PO5: The Engineer and Society: Ability to apply contextual knowledge and acquired experience to assess socio-economic, agricultural problems, ethical and environmental issues of masses. Engineers can provide solution in terms of services, engineering and technological solutions.

PO6: Environment and Sustainability: Understand impact of industrial production, technological hazards and engineering activities on environment. They will ready to work with harmony with nature and develop synergistic solution.

PO7: Ethics: apply ethics in every activity. Between industry and society, industry and environment and ethical need of production.

PO8: Individual and Team Work: To work with full dedication, working as individual, as a member in a team or imparting leadership as a participant in a team.

PO9: Communication: Communicate effectively, regarding dissipation of knowledge from industry to society, from authority to workers and end users.

PO10: Project Management and Finance: Demonstrate knowledge and skill to manage projects related to thermal, production and materials engineering. Ability to write structured projects to national and international funding agencies for multidisciplinary research.

PO11: Life-long Learning: Recognize the need for further acquisition of knowledge and refinement of skill to update for dynamic changes in society and industry. Pursue for higher education and research

Program Educational Objectives (PEOs)

PEO1. Designing, manufacturing, testing, operating and maintaining systems in the field of Mechanical Engineering and allied Engineering Industries.

PEO2. Provide solutions to socially relevant issues by making cost effective environment friendly devices and pursue higher education and research.

PEO3. Work effectively as individuals and as team members in multidisciplinary projects

PEO4. Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs.

Program Specific Outcomes (PSOs)

PSO1. Design and develop the model & systems prototype related to thermal energy system.
PSO2. Develop efficient cost effective lean manufacturing systems using smart manufacturing techniques, automation and minimize wastage thus strengthen eco-sustainability.
PSO3. Pursue higher research in advanced materials development and characterization. They can pursue their career in industry, R&D laboratories and serve the nation and society.

Master of Business Administration

Program Outcomes (POs)

PO1: Business Problems: Apply knowledge of management theories and practices to solve business problems.

• Understand the management theories and practices.
• Identify and formulate business problems.
• Select management theories and practices relevant to the business problems.
• Propose solutions to problems using the selected management theories and practices.
• Business problems can be presented as case studies in courses.
• Assessment could be in terms of the student's identification of business problem, his/her perception in terms of selected management theories, the choice of a method of solving the problem, and justification of choices.

PO2: Data-based Decision Making: Foster analytical and critical thinking abilities for data-based decision making.

• Design hypotheses and related sampling.
• Compute statistical parameters from the data collected.
• Determine the trends from the processed data.
• Understand decision making by selecting criteria and using the data.
• Analyse the model of the problem formulated with regard to boundaries and assumptions made.

PO3. Value Based Leadership: Ability to develop Value based Leadership ability.

• Understand what values are.
• Understand what corporate governance is corporate social responsibility.
•Understand what each person can contribute to the team, project and to the wider organization.

PO4: Global, economic, legal and ethical aspects of business:

• Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
• Analyze the impact of a given solution on environment and sustainability.
• Operate effectively in cross-cultural settings, understanding the importance of globalization
• Understand the complexities of business ethics and legal aspects in a global environment.
• Understand micro and macro economics

PO5. Achieving Organizational Goals: Ability to lead themselves and others in the achievement of organizational goals

• Understand what organizational goals are.
• Relate your personal goals and goals of professional activities to the organizational goals.
• Understand the contributions other people in the group make.
• Maximize the use of available resources for the benefit of organizations
• Integrate functional knowledge and apply strategic management skills

Program Educational Objectives (PEOs)

PEO1: To assess global opportunities and challenges to contribute towards firm's growth through strategies such as mergers, acquisitions, international expansion, and new venture development.
PEO2:To apply the conceptual and practical business knowledge to identify and solve organizational problems using a systematic and analytical decision-making approach.
PEO3:To enable the students exhibit ability to identify and organize data; synthesize and analyse to abstract meaning from information, in order to share knowledge to the key stakeholders
PEO4:To inculcate value based leadership, ethical qualities and socially responsible behavior.

Program Specific Outcomes (PSOs)

PSO1: Demonstrate critical awareness in current issues in business and management and exhibit ability to lead research and practice.
PSO2: Inculcating knowledge, skills & attitude to work individually or as multi- disciplinary teams in a dynamic organizational environment and apply managerial problem-solving skills through multidisciplinary approach in national and international context
PSO3: Developing critical and advanced thinking skills based on conceptual and practical knowledge to solve corporate managerial issues
PSO4: Creating awareness and understanding the impact of managerial decision making in socio-environmental context
PSO5: Ability to communicate effectively with various stakeholders.

MBA (Logistics and Supply Chain Management)

Program Outcomes (POs)

PO1: Business Problems: Apply knowledge of management theories and practices to solve business problems.

• Understand the management theories and practices.
• Identify and formulate business problems.
• Select management theories and practices relevant to the business problems.
• Propose solutions to problems using the selected management theories and practices.
• Business problems can be presented as case studies in courses.
• Assessment could be in terms of the student's identification of business problem, his/her perception in terms of selected management theories, the choice of a method of solving the problem, and justification of choices.

PO2: Data-based Decision Making: Foster analytical and critical thinking abilities for data-based decision making.

• Design hypotheses and related sampling.
• Compute statistical parameters from the data collected.
• Determine the trends from the processed data.
• Understand decision making by selecting criteria and using the data.
• Analyse the model of the problem formulated with regard to boundaries and assumptions made.

PO3. Value Based Leadership: Ability to develop Value based Leadership ability.

• Understand what values are.
• Understand what corporate governance is corporate social responsibility.
•Understand what each person can contribute to the team, project and to the wider organization.

PO4: Global, economic, legal and ethical aspects of business:

• Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
• Analyze the impact of a given solution on environment and sustainability.
• Operate effectively in cross-cultural settings, understanding the importance of globalization
• Understand the complexities of business ethics and legal aspects in a global environment.
• Understand micro and macro economics

PO5. Achieving Organizational Goals: Ability to lead themselves and others in the achievement of organizational goals

• Understand what organizational goals are.
• Relate your personal goals and goals of professional activities to the organizational goals.
• Understand the contributions other people in the group make.
• Maximize the use of available resources for the benefit of organizations
• Integrate functional knowledge and apply strategic management skills

Program Educational Objectives (PEOs)

PEO1: To prepare management graduates by combining theory and practice for supply chain industry.
PEO2: To develop industry specific competencies enabling learners to act as intrapreneur and entrepreneur.
PEO3: To develop critical and a holistic approach for designing and implementing supply chain solutions for business, government and society.
PEO4: To inculcate value based leadership, ethical qualities and socially responsible behavior.

Program Specific Outcomes (PSOs)

PSO1: Develop understanding of managerial concepts / principles / practices / theories / models essential for managerial decision making in the domain of Supply Chain Management
PSO2: Inculcating problem solving skills in context of Logistics and Supply Chain Management issues
PSO3: Developing critical and advanced thinking skills based on conceptual and practical knowledge to solve Logistics and Supply Chain Management issues
PSO4: Creating awareness and understanding the impact of managerial decision making in socio-environmental context
PSO5: Ability to communicate effectively with various stakeholders

MBA (Financial Markets & Banking)

Program Outcomes (POs)

PO1: Business Problems: Apply knowledge of management theories and practices to solve business problems.

- Understand the management theories and practices.
- Identify and formulate business problems.
- Select management theories and practices relevant to the business problems.
- Propose solutions to problems using the selected management theories and practices.
- Business problems can be presented as case studies in courses.
- Assessment could be in terms of the student's identification of business problem, his/her perception in terms of selected management theories, the choice of a method of solving the problem, and justification of choices.

PO2: Data-based Decision Making: Foster analytical and critical thinking abilities for data-based decision making.

- Design hypotheses and related sampling.
- Compute statistical parameters from the data collected.
- Determine the trends from the processed data.
- Understand decision making by selecting criteria and using the data.
- Analyze the model of the problem formulated with regard to boundaries and assumptions made.

PO3. Value Based Leadership: Ability to develop Value based Leadership ability.

- Understand what values are.
- Understand what corporate governance is corporate social responsibility.
- Understand what each person can contribute to the team, project and to the wider organization.

PO4: Global, economic, legal and ethical aspects of business: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.

- Analyze the impact of a given solution on environment and sustainability.
- Operate effectively in cross-cultural settings, understanding the importance of globalization
- Understand the complexities of business ethics and legal aspects in a global environment.
- Understand micro and macro economics

PO5. Achieving Organizational Goals: Ability to lead themselves and others in the achievement of organizational goals

- Understand what organizational goals are.
- Relate your personal goals and goals of professional activities to the organizational goals.

- Understand the contributions other people in the group make.
- Maximize the use of available resources for the benefit of organizations
- Integrate functional knowledge and apply strategic management skills

Program Educational Objectives (PEOs)

PEO1: To prepare management graduates by combining theory and practice for Financial Markets, Insurance and Banking industry.
PEO2: To develop industry specific competencies enabling learners to facilitate financial intermediation.
PEO3: To develop critical and a holistic approach for designing and implementing Financial Markets, Insurance and Banking solutions for business, government and society.
PEO4: To inculcate value based leadership, ethical qualities and socially responsible behaviour.

Program Specific Outcomes (PSOs)

PSO1: Develop understanding of financial market, Banking and Insurance concepts / principles / practices / models essential for managerial decision making.
PSO2: Developing analytical and problem solving skills in context of financial market, Banking and Insurance related issues
PSO3: Inculcating critical and advanced thinking abilities among the students based on conceptual and practical knowledge to be able to solve issues related to finance, banking and allied issues
PSO4: Creating awareness and understanding the impact of managerial decision making in socio-environmental context
PSO5: Ability to communicate effectively with various stakeholders

MBA Integrated

Program Outcomes (POs)

PO1: Business Problems: Apply knowledge of management theories and practices to solve business problems.
• Understand the management theories and practices.
• Identify and formulate business problems.
• Select management theories and practices relevant to the business problems.
• Propose solutions to problems using the selected management theories and practices.
• Business problems can be presented as case studies in courses.
• Assessment could be in terms of the student's identification of business problem, his/her perception in terms of selected management theories, the choice of a method of solving the problem, and justification of choices.

PO2: Data-based Decision Making: Foster analytical and critical thinking abilities for data-based decision making.
• Design hypotheses and related sampling.
• Compute statistical parameters from the data collected.
• Determine the trends from the processed data.
• Understand decision making by selecting criteria and using the data.
• Analyse the model of the problem formulated with regard to boundaries and assumptions made.

PO3. Value Based Leadership: Ability to develop Value based Leadership ability.
• Understand what values are.
• Understand what corporate governance is corporate social responsibility.
•Understand what each person can contribute to the team, project and to the wider organisation.

PO4: Global, economic, legal and ethical aspects of business:
• Ability to understand, analyse and communicate global, economic, legal, and ethical aspects of business.
• Analyse the impact of a given solution on environment and sustainability.
• Operate effectively in cross-cultural settings, understanding the importance of globalisation
• Understand the complexities of business ethics and legal aspects in a global environment.
• Understand micro and macro economics

PO5. Achieving Organizational Goals: Ability to lead themselves and others in the achievement of organizational goals
• Understand what organizational goals are.
• Relate your personal goals and goals of professional activities to the organizational goals.
• Understand the contributions other people in the group make.
• Maximise the use of available resources for the benefit of organisations
• Integrate functional knowledge and apply strategic management skills

Program Educational Objectives (PEOs)

PEO1: Integrate core, cross-functional and inter-disciplinary aspects of management theories, models and frameworks to analyze business, policy and social issues
PEO2: Develop excellent communication skills, excel in cross-functional, multidisciplinary and multi-cultural teams to manage continuity, change, risk, ambiguity and complexity.
PEO3: Inculcate value based leadership, ethical qualities and a sense of social purpose
PEO4: Creating managers to understand national as well as international business environment and to assimilate updated information.
PEO5: Engaging in successful career pursuits covering a broad spectrum of areas in corporate, non-profit organizations, public policy, entrepreneurial ventures and lifelong learning.
PEO6: Identify business opportunities, design and implement innovations in workspace

Program Specific Outcomes (PSOs)

PSO1: Developing adequate theoretical knowledge of various core disciplines of management science
PSO2: Enabling students to explore practical applications of management concepts
PSO3: Providing a strong analytical foundation in key functional areas of management
PSO4: Creating awareness and understanding the impact of managerial decision making in socio-environmental context
PSO5: Ability to communicate effectively with various stakeholders

Master of Computer Applications

Program Outcomes (POs)

PO1: Computational Knowledge: Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

PO2: Problem Analysis: Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

PO3: Design /Development of Solutions: Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4: Conduct Investigations of Complex Computing Problems: 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.

PO5: Modern Tool Usage: Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

PO6: Professional Ethics: Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.

PO7: Life-long Learning: Recognise the need, and have the ability, to engage in independent learning for continual development as a computing professional.

PO8: Project management and finance: Demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO9: Communication Efficacy: Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

PO10: Societal and Environmental Concern: Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.

PO11: Individual and Team Work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

PO12: Innovation and Entrepreneurship: Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

Program Educational Objectives (PEOs)

PEO1: Become globally competent computer professionals or entrepreneurs, for developing sustainable solutions.
PEO2: Attain positions of leadership in an organization and /or on teams.
PEO3: Engage in lifelong learning to improve their professional skills and knowledge to address industrial and societal needs using latest technologies.

Program Specific Outcomes (PSOs)

PSO1: Model and design computing system using competency in computational logic, analytical ability, system design principles and programming skills.
PSO2: Design and develop application interfaces along with latest tools and technology to meet the needs of industry.
PSO3: Apply knowledge to provide solutions to existing problems.

MBA (Construction Management)

Program Outcomes (POs)

PO1: Scholarship of Knowledge: Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyze and synthesize existing and new knowledge, and integration of the same for enhancement of knowledge.

PO2: Critical Thinking: Analyze complex engineering problems critically; apply independent judgment for synthesizing information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context.

PO3: Problem Solving: Think laterally and originally, conceptualize and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise.

PO4: Research Skill: Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyze and interpret data, demonstrate higher order skill and view things in a broader perspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering.

PO5: Usage of modern tools: Create, select, learn 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.

PO6: Collaborative and Multidisciplinary work: Possess knowledge and understanding of group dynamics, recognize opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open- mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others.

PO7: Project Management and Finance: Demonstrate knowledge and understanding of engineering and management principles and apply the same to one's own work, as a member and leader in a team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economic and financial factors.

PO8: Communication: Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions.

PO9: Life-long Learning: Recognise the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously.

PO10: Ethical Practices and Social Responsibility: Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society.

PO11: Independent and Reflective Learning: Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback.

Program Educational Objectives (PEOs)

PEO1: To demonstrate fundamental knowledge and skills required for pursuing higher education and for functioning effectively as a skilled professional. (Engineering Knowledge)
PEO2: To provide motivation and engineering base to get actively involved in focused research targeting innovative solutions to modern society challenges. (Problem Analysis, Design/Development of Solution)
PEO3: To work collaboratively within a team and individually, efficaciously articulate technical knowledge, ideas, and proposals. (Teamwork & Leadership)
PEO4: To acknowledge the responsibilities towards the society and to behave ethically, morally and be willing to engage in activities beneficial to the society. (Ethics & Society)
PEO5: To demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk-taking and implementation of novel ideas or methods. (Innovation & Entrepreneurship)

Program Specific Outcomes (PSOs)

PSO1: Apply project management and construction techniques to complete projects within the stipulated period and funds.
PSO2: Test management concepts specifically for the construction industry.
PSO3: Design and develop sustainable and smart infrastructure considering the global environmental challenges.