PROGRAMME OUTCOMES & PROGRAMME SPECIFIC OUTCOME

Department of Food Science and Quality Control

Programme Outcomes (PO)

Graduates will be able to:

- Apply and incorporate the principles of food science in practical, real-world situations and problems
- Apply the principles of food science to control and assure the quality of food products
- Describe the source and variability of raw food material and their impact on food processing operations
- Explain the spoilage and deterioration mechanisms in foods and methods to control deterioration and spoilage
- List the principles that make a food product safe for consumption and explain the properties and uses of various packaging materials
- Describe the basic principles and practices of cleaning and sanitation in food processing operations
- Utilize laboratory techniques to identify microorganisms in food
- Know the principles involving food preservation via fermentation processes
- Know the role and significance of microbial inactivation, adaptation and environmental factors (i.e., aw, pH, temperature) on growth and response of microorganisms in various environments
- Identify the conditions, including sanitation practices, under which the important pathogens and spoilage microorganisms are commonly inactivated, killed or made harmless in foods
- Know the chemistry underlying the properties and reactions of various food components
- Have sufficient knowledge of food chemistry to control reactions in foods and the major chemical reactions that limit shelf life of foods
- Demonstrate practical proficiency in a food analysis laboratory

- Gained knowledge in food chemistry, microbiology and sensory evaluation to the development, processing, and preservation of safe, nutritious, and high-quality food products
- Acquire good knowledge in advanced instruments and technologies to process and analyze food products and to solve food safety problems
- Formulate and standardized food products that meet the various food regulations and laws
- Critically assess and analyze food science information available in the public domain in an innovative and ethical way
- Communicate technical and other relevant information effectively in both oral and written format to a diverse audience including supervisors, colleagues, and consumers
- Participate in ongoing, voluntary and self-motivated pursuits that supplement food science knowledge

Department of Clinical Laboratory Science

Programme Outcomes (PO)

- Perform a full range of clinical laboratory tests in such areas as hematology, clinical chemistry, immune-hematology, microbiology, serology/immunology, coagulation, molecular, analytical tests of body fluids and other emerging diagnostics with accuracy.
- Develop and establish procedures for collecting, processing, and analyzing specimens.
- Perform assays according to laboratory protocol and recognize factors interfering with test results and take corrective action.
- Evaluate laboratory data results using quality control and quality assurance measures, and institute proper procedures to maintain accuracy and precision.
- Comply with established laboratory safety regulations and regulations governing regulatory compliance related to laboratory practice.
- Confirm abnormal results, verifying quality control procedures, executing quality control
 procedures, and developing solutions to problems concerning the generation of laboratory
 data using interpretive algorithms.
- Apply principles of continuous assessment to all laboratory services by developing, evaluating, and selecting new techniques, instruments, and methods in terms of their usefulness and practicality within the context of a given laboratory's personnel, equipment, space, and budgetary resources.
- Evaluate published scientific studies utilizing knowledge of research design.
- Apply principles of educational methodology to educate providers and users of laboratory services.
- Demonstrate ethical and professional conduct with patients, laboratory personnel, health-care professionals, and the public.
- Participate in continuing education as a function of growth and maintenance of professional competence

- Communicate through oral and written skills, effectively and professionally to enable consultative interactions with healthcare personnel, external relations, customer service and patients in order to function successfully as a member of the healthcare team
- Able to exhibit ethical leadership skills in professional practice and community service
- Ability to perform laboratory procedures accurately and quickly even under stressful conditions and to adapt to changing situations
- Ability to maintain patient confidentiality and to exercise ethical judgment, integrity, honesty, dependability, and accountability in the performance of one's laboratory responsibilities
- Ability to work effectively both independently and as a member of a team

Department of Fashion Design

Programme Outcomes (PO)

- Able to know about the different size charts and will be able to take measurements of the person
- Develop an understanding of how different constructional tools help to make a perfect garment.
- Able to describe their garments in a more professional manner, by using the correct terminology
- Gain practical understanding of different textile materials (Fiber, yarn, fabric)
- Develop understanding regarding the identification and testing parameters of textiles.
- Able to care for their garments and developed textile material
- Students will gain basic understanding of garments, machines and their use in apparel and fashion industry
- Develop an understanding of ethical and sustainable principles in fashion design considering environmental, social, economic, and political impacts of climate change
- Create garments that reflect creativity and innovation through the use of foundational techniques achieved through shape, color, silhouette, proportion and fabrication
- Knowledge of machines and tools used for sewing
- To acquire the knowledge of taking measurements, standardization and different size charts

- Adapt and develop artistic abilities to form original fashion designs with understanding of diverse fashion proportions, utilizing hand and digital rendering techniques
- Effectively use appropriate, innovative technologies to conceptualize, create, produce and communicate fashion design and related concepts
- Recognize and apply foundational concepts of diversity, equity and inclusion in the fashion design development process that honor communities and people who have been marginalized and excluded from the dominant fashion discourse

- Utilize information and communication technologies to research, evaluate, create, and communicate information as it relates to fashion design concepts at a foundational level
- Able to develop an understanding of International and national fashion brands.

Department of Computer Application

Programme Outcomes (PO)

- Have knowledge and expertise in at least one procedure-oriented and object-oriented programming language.
- Have a wide perspective on software development including web based applications as well as graphic applications.
- Have the familiarity with Desktop Publishing system.
- Have the ability to design and implement optimal databases using current technologies.
- Have understanding of design and working principles of the digital electronics.
- Able to design and analyze algorithms as per need by relating the data structure and algorithms.
- Able to identify and describe the communication networks technologies in local area networks and the Internet and countermeasures for security
- Be aware of the design principles of Operating Systems specializing on at least one popular Operating System.
- Have understanding of various legislative acts and articles related to information technologies and international initiative in the field of IT laws.
- Able to solve simple computational problems involving mathematical structures and processes.
- Have the concepts regarding the architecture and organization of a computer system.
- Development of good communication skills in both written and verbal.
- Understand contemporary issues and provide engineering solutions for solving social problems
- Acquire skills and ability for life-long learning.

- Knowledge and training of technical subjects so that they will be technical professional by learning C programming, Relational Database Management, Data Structure, Software Engineering, Graphics, Java, PHP, Networking, Theoretical Computer Science, System programming, Object Oriented Software Engineering.
- Understand the concepts of software application and projects
- Understand the computer subjects with demonstration of all programming and theoretical concepts with the use of ICT.
- Development of in-house applications in terms of projects
- Build up programming, analytical and logical thinking abilities and aware to publish their work in reputed journals
- Make them employable according to current demand of IT Industry and responsible citizen.

Department of Clinical Nutrition and Dietetics

Programme Outcomes (PO)

Post Graduates will be able to:

- Utilize knowledge from the physical and biological sciences as a basis for understanding the role of food and nutrients in health and disease processes
- Provide nutrition counseling and education to individuals, groups, and communities throughout the lifespan using a variety of communication strategies
- Evaluate nutrition information based on scientific reasoning for clinical, community, and food service application
- Apply technical skills, knowledge of health behavior, clinical judgment, and decisionmaking skills when assessing and evaluating the nutritional status of individuals and communities and their response to nutrition intervention
- Implement strategies for food access, procurement, preparation, and safety for individuals, families, and communities
- Perform food management functions in business, health-care, community, and institutional arenas
- Practice state-of-the-art nutrition care in collaboration with other healthcare providers in interdisciplinary settings within the bounds of ethical, legal, and professional practice standards
- Provide culturally competent nutrition services for individuals and communities

 Accurately interpret data and research literature to solve complex problems
- Critically evaluate information on food science and nutrition issues appearing in the popular press
- Analyze the environmental dimensions of issues facing professionals
- Demonstrate creativity in the discipline in ways that have practical benefits

- Understanding the role and functioning of dieticians and nutritionists in different health organizations like hospitals, clinics, nursing homes, gyms, corporate sectors, food industries, etc
- Developing diet planning skills for healthy and diseased individuals in society for better health management and prevention of diseases
- Competence in the skills of assessment, planning, management and evaluation of food service, nutrition and dietetic services in institutional food, community nutrition, and clinical dietetics settings
- Students will utilize advanced principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition services in professional settings
- Developing a clear understanding of human body
- Developing research skills in nutrition field through Dissertation/Project

Department of Microbiology

Programme Outcomes (PO)

- Prepare and view specimens for examination using light microscopy
- Use pure culture and selective techniques to isolate microorganisms
- Analyze and interpret results from a variety of microbiological methods
- Identify microorganisms (media-based, molecular and serological) and Estimate the number of microorganisms in a sample by suitable enumeration technique
- Use quantitative reasoning by using mathematical calculations and graphing skills to solve problems in microbiology.
- Communicate and collaborate with other disciplines by effectively communicating the fundamental concepts of microbiology in written and oral format
- Identify credible scientific sources to interpret and evaluate the evidences
- Understand the relationship between science and society by recognizing and discussing logical, scientific and ethical issues in microbiology
- To acquire, retain and apply specialized concept and knowledge relevant to plethora of microbiological field
- To understood various laboratory practices, biosafety and also know the applications of important instruments

- Estimate the number of microorganisms in a sample by suitable enumeration technique Use appropriate microbiological and molecular lab equipment and methods
- To acquire the skill in the use and care of basic microbiological equipment; performance
 of basic laboratory procedures in microbiology; proper collection and forwarding of
 microbiological and parasitological specimens to the laboratory
- To comprehend and write effective project reports in multidisciplinary environment. It
 will also help to the development of sound attitudes in relation to the role of medical
 microbiology in clinical and community medicine

- To gain hands on experience in state-of-the-art laboratory equipments that could enrich them to perform high throughput research on microorganisms and execute diagnostic procedures required in food, dairy and pharmaceutical industries
- Use appropriate microbiological and molecular lab equipment and methods
- Practice safe microbiology, using appropriate protective, biosafety and emergency procedures, Document and report on experimental protocols, results and conclusions