

Department of Food Technology

B.Sc (H) Food Technology

Program Learning Outcomes (PLOs)

PLO 1: Becoming skilled food technologist on a mission to strengthen the Indian food manufacturing.

PLO 2: Having a developed a methodological and entrepreneurial mind-set.

PLO 3: To pursue and imbibe the characteristics of honesty, ethics and moral code of conduct.

PLO 4: An enhanced the scientific temperament and pool of knowledge available in the field of food science and technology.

Program Specific Outcomes (PSOs)

B.Sc. (H) Food Technology is a three-year undergraduate program with specialization in food sciences. The program fosters interdisciplinary approach to not only train them with the core components, but also in areas that are need-based, innovative and relevant keeping in pace with the dynamics of the growing food industry.

The program specific outcomes of the course are:

PSO1: Students having good understanding about food composition, along with basic food concepts and their relevance.

PSO2: To be well versed with the technologies of food processing and preservation.

PSO3: To know about the role of food engineering and packaging in food industry.

PSO4: To have an analytic knowledge related to food testing and quality.

PSO5: To have an understanding of importance of food safety and quality management, along with food laws and regulations.

PSO6: To have clear communication and critical thinking skills, along with ability to innovate and take on leadership roles.

		L	T	P	C
21FTBS102	FUNDAMENTALS OF FOOD TECHNOLOGY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Enumerate the structure, composition, nutritional quality and post-harvest changes in various plant foods

CLO2: Express the structure and composition of various foods.

CLO3: Summarize the history and evolution of food processing.

CLO4: Correlate the methods of processing plant and animal foods.

		L	T	P	C
21FTBS152	FUNDAMENTALS OF FOOD TECHNOLOGY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Illustrate the principle of fundamental of food techniques.

CLO2: Evaluate the methods for food composition.

CLO3: Compare the effect of techniques on various food.

		L	T	P	C
21FTBS101	FOOD SCIENCE PRINCIPLES	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Describe the history and evolution of food processing.

CLO2: Distinguish between different plant and animal food.

CLO3: State the structure, composition, nutritional quality.

CLO4: Formulate the methods of processing of plant and animal foods.

		L	T	P	C
21FTBS151	FOOD SCIENCE PRINCIPLES LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Demonstrate different reactions on food products.

CLO2: Illustrate the principle different reactions which different types of food.

CLO3: Perform basic quality checks for meat and poultry products.

		L	T	P	C
21FTBS201	FOOD AND NUTRITION	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Appreciate the relationship between food, nutrition and health.

CLO2: Explain digestion, absorption, functions and food sources of various nutrients.

CLO3: Summarize the concept of balanced diets and menu planning.

CLO4: Assess nutritional status of adults.

		L	T	P	C
21FTBS251	FOOD AND NUTRITION LAB	0	0	4	2
	Prerequisite				

	Nil				
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COURSE LEARNING OUTCOMES (CLO)

CLO1: Create basic meal charts.

CLO2: Classify the concept nutritional labelling.

CLO3: Differentiate the science behind nutritional food preparation and different cooking methods.

		L	T	P	C
21FTBS202	FOOD PRESERVATION TECHNOLOGY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Describe the importance of biological agents in food preservation.

CLO2: Provide insights on different preservation technologies.

CLO3: Distinguish the concept of different processing and preservation technologies.

		L	T	P	C
21FTBS252	FOOD PRESERVATION TECHNOLOGY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: State the different food preservation methods.

CLO2: Develop the quality characteristics of different food products.

CLO3: Construct the basic food preservation methods.

		L	T	P	C
21FTBS301	TECHNOLOGY FOOD PROCESSING	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Generalize the Cold preservation, Freezer types and functioning.

CLO2: Describe the Dehydration, Dryer types and functioning.

CLO3: Analyze the Irradiation Plant layout, E beam and Microwave heating.

CLO4: Categorize the overall requirements of food industries.

		L	T	P	C
21FTBS351	TECHNOLOGY OF FOOD PROCESSING LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Correlate the different methods of food processing.

CLO2: Estimate the concept food packaging.

CLO3: Identify the science behind different methods and the changes food undergoes.

		L	T	P	C
21FTBS302	TECHNOLOGY OF FRUIT VEGETABLE ANF PLANTATION	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Illustrate the maturity indices of fruits and vegetables.

CLO2: Choose the concept of quality in relation to fruit and vegetable based products.

CLO3: Organize the processing and preservation of fruits and vegetables using various techniques.

CLO4: State the processing of plantation crops.

		L	T	P	C
21FTBS352	TECHNOLOGY OF FRUITS, VEGETABLES AND PLANTATION CROPS LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Explain the influence of different reactions in food products.

CLO2: Differentiate the principle of different reactions which undergo in different fruits and vegetable products.

CLO3: Perform basic quality checks and adulteration checks for fruit and vegetable products.

		L	T	P	C
21FTBS303	DAIRY AND SEA FOOD TECHNOLOGY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Summarize the importance of dairy and fishery industry.

CLO2: Illustrate the various properties and composition of milk.

CLO 3: Demonstrate the technology of manufacturing of various products like butter, ghee, flavored milk, yoghurt, dahi, shrikhand, ice cream, cheese, channa, paneer, condensed milk and milk powder.

CLO4: Compile the techniques that can be used for preservation of fish and manufacturing of various value added fish products.

		L	T	P	C
21FTBS353	DAIRY AND SEAFOOD TECHNOLOGY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Perform basic analysis for dairy and seafood products.

CLO2: Explain the concept behind different processing methods for dairy and seafood products.

CLO3: Create the basic dairy and seafood products.

		L	T	P	C
21FTBS401	MICROBIOLOGY OF FOOD	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Classify the important genera of microorganisms associated with food and their characteristics, their growth pattern and parameters.

CLO2: Provide insights about the beneficial role of microorganisms and different types of fermented foods.

CLO3: Identify the role of microorganisms in food borne diseases and control measures.

CLO4: Assess the laboratory techniques to detect, quantify, and identify microorganisms in foods.

		L	T	P	C
21FTBS451	MICROBIOLOGY OF FOOD LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Interpret the food microbiology.

CLO2: Apply the different methods of microbial detection.

CLO3: Perform basic microbial detection methods.

		L	T	P	C
21FTBS402	TECHNOLOGY OF CEREAL PULSES AND OILSEEDS	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Discuss the basics of milling operations.

CLO2: Differentiate the basic composition & structure of food grain.

CLO3: Develop processing of food grains into value added products.

CLO4: Describe the principle of alcoholic beverage preparation.

		L	T	P	C
21FTBS452	TECHNOLOGY OF CEREALS, PULSES & OILSEEDS LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Illustrate different technologies related to cereals and pulses.

CLO2: Express the quality characteristics associated with cereals and pulses.

CLO3: Perform basic testing methods for cereals and pulses.

		L	T	P	C
21FTBS403	MEAT, POLUTRY AND EGG TECHNOLOGY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Select the need and importance of livestock, egg and poultry industry.

CLO2: Assemble the technology behind preparation of various animal food products and by-product utilization.

CLO3: Enumerate the egg production practices and egg preservation methods.

CLO4: Distinguish the factors affecting egg quality and measures of egg quality.

		L	T	P	C
21FTBS453	MEAT, POULTRY AND EGG TECHNOLOGY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Prepare the basic analysis for animal products.

CLO2: Outline the concept behind different processing methods for animal products.

CLO3: Illustrate the science behind production of animal products.

		L	T	P	C
21FTBS501	FOOD ENGINEERING	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Design the basics of food plant and storage system.

CLO2: Comprehend the principle of unit operations.

CLO3: Apply basic principles of refrigeration, freezing, fluid flow, heat and mass transfer, steam, psychrometrics etc.

CLO4: Solve numerical and problems relating to food engineering.

		L	T	P	C
21FTBS551	FOOD ENGINEERING LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Practice the different concepts of food engineering.

CLO2: Deduce the Psychrometrics and its application in food industry.

CLO3: Perform basic analysis.

		L	T	P	C
21FTBS502	FOOD CHEMISTRY-I	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Explain and describe the general chemical structures of the major components of foods.

CLO2: Observed physical properties and reactivity of major food components.

CLO3: Predict how processing conditions are likely to change the reactivity of food components.

CLO4: To predict how changes in overall composition are likely to change the reactivity of individual food.

		L	T	P	C
21FTBS552	FOOD CHEMISTRY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Generalize the basics of food chemistry.

CLO2: Interpretation of influence of food chemistry on food product development.

CLO3: Perform basic estimation methods for analysis of different parameters.

		L	T	P	C
21FTBS601	FOOD CHEMISTRY-II	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Explain the chemistry and interactions of food components.

CLO2: Express the role of enzymes in food industry.

CLO3: Determine approaches that may be used to control the reactivity of food components.

CLO4: Originate the concept of New Product Development.

		L	T	P	C
21FTBS651	FOOD CHEMISTRY II LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: List the basics of food chemistry.

CLO2: Evaluate the influence of food chemistry on food product development.

CLO3: Perform basic estimation methods for analysis of different parameters.

		L	T	P	C
21FTBS602	FUNDAMENTALS OF SENSORY EVALUATION	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Apply the principles of sensory science.

CLO2: Relate sensory to physical properties of food.

CLO3: Analyse the colour, flavour, texture and other sensory characteristics of food for quality assurance.

CLO4: Simulate the consumer perception and acceptance of food products.

		L	T	P	C
21FTBS652	FUNDAMENTALS OF SENSORY EVALUATION LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Describe different methods of sensory evaluation.

CLO2: Interpret the concept behind sensory evaluation.

CLO3: Perform basic sensory evaluation tests.

DISCIPLINE SPECIFIC ELECTIVES

		L	T	P	C
21FTBS503	FOOD SUPPLY CHAIN MANAGEMENT	3	1	4	6

	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Illustrate basics of food supply chain.

CLO2: Predict the strategic advantages of well- developed food supply chain.

CLO3: Apply basics to real life situation.

CLO4: Comprehend the need of a well-defined supply chain network.

		L	T	P	C
21FTBS553	FOOD SUPPLY CHAIN MANAGEMENT LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Prepare basic models related to the field.

CLO2: Enumerate the concept behind value chain development.

CLO3: Compare different supply chain systems.

		L	T	P	C
21FTBS504	FOOD PACKAGING	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Comprehend the overview of the scientific and technical aspects of food packaging.

CLO2: Select the packaging machinery systems for food products

CLO3: Distinguish between multiple packaging materials.

CLO4: Interpret the overall food packaging laws and regulations.

		L	T	P	C
21FTBS554	FOOD PACKAGING LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Collaborate the scientific and technical aspects of food packaging.

CLO2: Teach the science behind different requirements for food packaging.

CLO3: Perform basic material tests for food packaging.

		L	T	P	C
21FTBS505	NUTRACEUTICALS AND FUNCTIONAL FOODS	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Identify and appreciate the types of nutraceutical and functional foods.

CLO2: Appreciate the health promoting potential of nutraceuticals and functional foods.

CLO3: Survey the nutraceutical and functional food market.

CLO3: Comprehend the safety issues and consumer acceptance of nutraceutical and functional foods.

		L	T	P	C
21FTBS555	NUTRACEUTICAL AND FUNCTIONAL FOODS LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Survey the potential market of various nutraceuticals and functional foods.

CLO2: Produce the thinking behind the creation of different nutraceutical and functional foods.

CLO3: Illustrate the role of nutraceutical and functional foods in human health.

		L	T	P	C
21FTBS603	FOOD SAFETY AND QUALITY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Measure the food safety and types of hazards.

CLO2: Apply concepts of Food Safety Management to real life situations.

CLO3: Comprehend the need for well-defined quality management system.

CLO3: Arrange the need and importance of food additives.

		L	T	P	C
21FTBS653	FOOD SAFETY AND QUALITY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Outline the concept of food safety, types of hazards and their control measures.

CLO2: Write the importance of Quality Systems and Food Regulations.

CLO3: Detect various routes of contamination of food, identify and prevent potential sources.

		L	T	P	C
21FTBS604	FOOD FERMENTATION	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)**CLO1:** Explain the basics of fermentation.**CLO2:** Stimulate the concept behind the reactor design.**CLO3:** Select media for different microbial growth.**CLO4:** Evaluate the process behind the different fermented food products.

		L	T	P	C
21FTBS654	FOOD FERMENTATION LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)**CLO1:** Prepare basic fermented food products.**CLO2:** Distinguish the concept behind different fermented food products.**CLO3:** Interpret the role of microorganisms in preparation of fermented food products.

		L	T	P	C
21FTBS605	FLAVOR CHEMISTRY & TECHNOLOGY	3	1	4	6
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)**CLO1:** Learn the basics involved in flavour technology.**CLO2:** Practice the flavour perception.**CLO3:** Comprehend the mechanisms involved in flavour production.**CLO4:** Perform analysis of different flavours.

		L	T	P	C
21FTBS655	FLAVOUR CHEMISTRY AND TECHNOLOGY LAB	0	0	4	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)**CLO1:** Deduce the chemical stimuli involved in flavour perception.**CLO2:** List the mechanisms of flavour formation.**CLO3:** Illustrate the role of flavours in food product development.**OPEN ELECTIVE LIST**

		L	T	P	C
21OEMA001	INTRODUCTION TO ALGEBRA	3	0	0	3

	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Identify and develop concept of mapping and relations.

CLO2: Solve the basics problems of set theory.

CLO3: Well versed with different type of matrices.

CLO4: Apply matrix method solving system of equations problems.

CLO5: Solve vector identities.

		L	T	P	C
21OEMA002	DIFFERENTIAL CALCULUS	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Identify and develop concept of mapping of functions.

CLO2: Solve the limit continuity problems of functions.

CLO3: Apply graphical method for test differentiability of function.

CLO4: Well versed with tangent normal and curvature.

CLO5: Solve problems of polar coordinate and curve tracing of curve.

		L	T	P	C
21OEMA003	DIFFERENTIAL EQUATIONS	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Identify ordinary differential equations.

CLO2: Solve the linear differential equations by various methods.

CLO3: Well versed with Cauchy-Euler equation.

CLO4: Apply the concept of total differential equations.

CLO5: Identify classification of second order partial differential equations.

		L	T		P	C
21OEMA004	STATISTICAL METHODS AND PROBABILITY	3	0		0	3
	Prerequisite					
	Nil					

COURSE LEARNING OUTCOMES (CLO)

CLO1: Identify and develop knowledge of basics and importance of statistics.

CLO2: Solve the problems based on concept of central tendency.

CLO3: Apply the concept of random experiment, definition of probability.

CLO4: Well versed with Bayes theorem and its applications.

CLO5: Solve problems of concept of discrete random variables.

		L	T	P	C
21OEPH001	QUANTUM MECHANICS	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Able to understand the dual nature of light and matter.

CLO2: Equipped with the details of quantum properties of micro size particles and quantum descriptions of its physical properties.

CLO3: Fluent with quantum mechanical approach to solve simple 1D problem.

CLO4: Well versed with quantum treatment of electric and magnetic field effects on the atomic spectra.

		L	T	P	C
21OEPH002	THERMAL PHYSICS AND STATISTICAL MECHANICS	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Equipped with the theory of equipartition to relate the structure of the molecules to the measured heat capacity

CLO2: Able to utilize the kinetic theory of gases and calculate properties of gases including the heat capacity and mean free path

CLO3: Fluent in the understanding of Thermodynamics - entropy and relate this to the second law of thermodynamics and calculate entropy changes

CLO4: Be able to link the microscopic view of a system to its macroscopic state variables be able to derive and use Maxwell's equations

		L	T	P	C
21OEPH003	WAVES AND OPTICS	3	0	0	3

	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Able to understand the fundamental principles underlying wave phenomena.

CLO2: Fluent in the concepts of interference and diffraction.

CLO3: Equipped with the knowledge of linear, circular polarization and various devices based on phenomenon of polarization.

CLO4: Get an understanding of the basic principles of waves and optics

		L	T	P	C
21OEPH004	SOLID STATE PHYSICS	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Able to explain various crystal structures and their crystal symmetries.

CLO2: fluent on the concept of Bragg's X-ray diffraction

CLO3: Well versed with the up-to-date knowledge of the basic ideas, and outstanding problems in solid state materials

CLO4: Understand the band theory and their application in electronic conduction.

		L	T	P	C
21OECY001	PHYSICAL CHEMISTRY-I	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Calculate the heat flow into and work done by a system and how that is constrained by the first law of thermodynamics.

CLO2: Explain the behaviour of ideal and real gases.

CLO3: Describe various radioactive decay process, decay kinetics and to measure the radioactivity.

CLO4: Demonstrate the symmetry elements and symmetry operation, lattice parameters using the X-ray diffraction pattern.

		L	T	P	C
21OECY002	INORGANIC CHEMISTRY	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Describe the atomic structure and shape of orbitals.

CLO2: Explain the concept of concept of ionic bonding.

CLO3: Explain the concept of concept of covalent bonding

CLO4: Demonstrate the structure and properties of important coordination compounds.

		L	T	P	C
21OECY003	PHYSICAL CHEMISTRY-II	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Apply the postulates of quantum chemistry and to simple system.

CLO2: Describe the applications of rotational spectroscopy.

CLO3: Explain vibrational energy and transitions in molecules.

CLO4: Demonstrate the structure and properties of compounds using electronic spectroscopy.

		L	T	P	C
21OECY004	ANALYTICAL CHEMISTRY	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Apply the data analysis in qualitative and quantitative estimation.

CLO2: Explain the principle and applications of thermal methods of analysis.

CLO3: Illustrate principle and applications of different electroanalytical methods.

CLO4: Demonstrate various techniques in separation of different compounds.

Ability Enhancement Compulsory Courses (AECC)

		L	T	P	C
21AEEN101	PROFESSIONAL ENGLISH	4	0	0	4
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Able to seamlessly communicate in standard English – written & spoken

CLO2: Able to analyse texts on various parameters expected/demanded during different situations and circumstances

CLO3: Able to conduct basic research on a topic (pertaining to their discipline/workplace)

CLO4: Able to prepare basic/preliminary research documents, official documents and deliver presentations on a given topic

CLO5: Able to understand and analyse the time, history, circumstances, polity, society, economy that influences any kind of writing and its subsequent production

		L	T	P	C
21AEEVA201	ENVIRONMENTAL STUDIES	3	1	0	4
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: To develop an awareness about our environment and elicit collective response for its protection.

CLO2: To know and analyse the physical, chemical, and biological components of the earth's systems and their function.

CLO3: Understanding about cause of Environmental pollution and prevention.

CLO4: Understanding about Natural resources, Climate change and Sustainable development.

Skill Enhancement Courses (SEC)

		L	T	P	C
21AEEN101	ELEMENTARY IT SKILLS	0	0	4	4
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Understand the basic fundamental components of computers including the working of internet.

CLO2: Familiarize in working of MS-Word including creating and modifying the text documents and its conversion into different other formats like pdf., etc.

CLO3: Students will be able to apply different formulas in the Excel sheets to solve complex business problems.

CLO4: Ability to create a good interactive presentation using MS-PowerPoint.

CLO5: Ability to enhance the data analytics practices executed in the business world.

CLO6: Ability to identify the characteristics of datasets and compare the trivial data and big data for various applications.

CLO7: Ability to select and implement machine learning techniques and computing environment that are suitable for the applications under consideration.

CLO8: Demonstrate the types of machine learning: Supervise learning, unsupervised learning, and deep learning.

CLO9: Describe popular algorithms Classification, Regression, Clustering, and Dimensional Reduction.

CLO10: Analyse the factors that influenced the advancements of AI in recent years.

		L	T	P	C
21SS251	EFFECTIVE COMMUNICATION SKILLS	0	0	2	1
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: To communicate effectively and interact with people with confidence.

CLO2: To demonstrate and differentiate between various forms of communication.

CLO3: To apply effective communication skills confidently which a student need to get ahead in job and life.

		L	T	P	C
21SS352	TEAMWORK & INTERPERSONAL SKILLS	0	0	2	1
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: To be confident working in a team and leading it as well.

CLO2: To categorise the work and achieve expected performance within the time frame & will be able to adapt himself to work under various kinds of stress and re-energise himself to bounce back from such situations.

CLO3: To get benefitted from Emotional Quotient in building stronger professional relationships and achieving career and personal goals.

CLO4: To face complex problems and effectively deal with it in the job due to Critical Thinking & Problem Solving Skills.

		L	T	P	C
21SSA453	PRESENTATION & SPEAKING SKILLS	0	0	2	1
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: To be confident in presenting himself in front of audience.

CLO2: To become professional in his approach towards work culture.

CLO3: To enhance the level communication skills while interacting with others.

		L	T	P	C
21SS554	PROFESSIONAL WRITING SKILLS & INTERPERSONAL SKILLS: STRATEGIES	0	0	2	1

	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: To understand the importance of professional writing required in workplace.

CLO2: To explore different formats in resume, cover letters & other business related letters.

CLO3: To develop knowledge, skills and understanding people in-group and individually.

CLO4: To apply communication strategies either in-group or one on one basis and will be confident to lead the discussion among them.

		L	T	P	C
21FTBS601	BAKERY & CONFECTIONARY TECHNOLOGY	1	1	0	2
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES (CLO)

CLO1: Apply the fundamentals of baking.

CLO2: Acquire the knowledge of the technologies behind bakery products.

CLO3: Understand the technologies for confectionary product preparations.

CLO4: Understand different innovations and trends in baking and confectionery industry.

		L	T	P	C
21FTBS271	LIVE PROJECTS & INDUSTRY VISITS	0	0	2	1
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Capable enough to exhibit strong foundation knowledge of domain area.

CLO2: Students can take a challenge and place better career development scenario in professional life.

CLO3: It gives a strong boost for experienced to take their career into next stage.

CLO4: Successfully completion of live projects shows a better stand and technical expertise in domain area.

		L	T	P	C
21FSH472	SUMMER INTERNSHIP	3	0	0	3
	Prerequisite				
	Nil				

COURSE LEARNING OUTCOMES

CLO1: Able to demonstrate various aspects of theory as well as practical.

CLO2: Able to build and expand network of professional relationships and contacts.

CLO3: Develop a solid work ethic and professional demeanour, as well as a commitment to ethical

conduct and social responsibility.

CLO4: At the end of the course, a student will be competent in their domain area.