



M.E.S MAMPAD COLLEGE (AUTONOMOUS)

MAMPAD COLLEGE P.O, MALAPPURAM, KERALA, INDIA, 676542

Affiliated to University of Calicut

Accredited by NAAC with A grade

| | |
|---------------|---|
| Syllabus Year | 2019-2020 |
| Department | Food Technology |
| Programme | Bvoc. Food Processing & Safety Management |

Programme outcome.

| Sl.No | Programme Outcome |
|-------|--|
| PO1 | They should live with moral ethical value and live in the society with responsible citizen |
| PO2 | They should be able to communicate with others effectively |
| PO3 | They should take readily any challenge before them and solve those problems persist |
| PO4 | They must understand the environmental issues and to accept the adaption |

Continue adding rows till the POs are completely added.

Programme specific out come

| Sl.No | Programme Specific Outcome. |
|-------|--|
| PS01 | They will demonstrate knowledge of Food Chemistry, Food Microbiology, Food science and Food engineering. |
| PS02 | They will demonstrate an ability to identify, formulate and solve processing problems related to food sector/industry. |
| PS03 | They will able to focus on the importance of safe processed nutritious food. |
| PS04 | They will be get exposure to various technologies aspect of Food product preparation |

| | |
|-------|---|
| PS05 | They will demonstrate an ability to design or process food products as per the needs and specifications. |
| PS06 | They will demonstrate an ability to work in Food industries, research organization and teaching. |
| PS07 | They will demonstrate skills to use modern tools and equipment to analyze food prone infection and food spoilage. |
| PS08 | They will demonstrate knowledge of professional and ethical responsibilities. |
| PS09 | They will be able to understand economic importance of food products and food laws. |
| PS010 | They will show the understanding of impact of technological solutions on the society and also will be aware of contemporary issues. |
| PS011 | They will develop confidence for self-education and ability for life-long learning. |

Continue adding rows till the POs are completely added

Course Out come (add sufficient Number of rows in each semester)

| Semester | Course Code | Course Name | Course out come |
|----------|-------------|---|---|
| I | SDC1FP01 | INTRODUCTION TO FOOD SCIENCE & TECHNOLOGY | The nature of food & its composition |
| | | | Able to analyze sensory evaluation of products using survey panels or consumers |
| | | | To understand sources of additives |
| | | | Information on different food journals which covers scientific and technological updates of food related things |
| | | | To study various research institutes advanced in area of food |
| | SDC1FP02 | FOOD CHEMISTRY | Understand the structure and functional properties of food nutrients. |
| | | | To get exposure on the importance of physico chemical properties in food products |
| | | | Knowledge on minor constituents and their relevance. |
| | SDC1FP03 | FOOD MICROBIOLOGY | The students acquire information on the basic structure of microorganisms |
| | | | Use of basic microbial methods or the evaluation microbial load |
| | | | Knowledge on microbiological control |
| | | | Microbial monitoring of fermented foods |

| | | | |
|-----|----------|---|--|
| | | | Help to differentiate different type of contamination and various foods by different organisms. |
| | SDC1FP04 | CEREALS, PULSES AND OIL SEEDS TECHNOLOGY | It will develop a critical understanding of the uniqueness of wheat as a cereal grain in the world food supply. |
| | | | Students will learn to appreciate the complex nature of flour and the complexity of modern baking technology |
| | | | Students will develop competency to critically evaluate quality of product formulation and processing |
| II | SDC2FP05 | TECHNOLOGY OF FRUITS, VEGETABLE PRODUCTS AND POST HARVEST MANAGEMENT | An idea about fruits and vegetable classification |
| | | | To understand sources of additives |
| | | | Information on different food journals which covers scientific and technological updates of food related things |
| | | | To study various research institutes advanced in area of food |
| III | SDC3FP09 | BASIC FOOD QUALITY & SAFETY | Upon completion of this course students will be able to understand the importance of food safety and hygiene and can apply it at industrial level. |
| | | | Students will recognize the national and international standards and practices for food safety and can implement it at industries. |
| | | | Students can take new concept of food plant sanitation and apply them to another situation |
| | | | Students can implement the updated FSSAI act at analysis as well as production level. |
| | | | Students will get a knowledge about food adulteration |
| | SDC3FP10 | BUSINESS MANAGEMENT | Understand the process of business management and its functions |
| | | | Familiarize the students with current management practices |
| | | | Understand the importance of ethics in current business |
| | | | To acquire knowledge and capability to develop ethical practices for effective management |
| | SDC3FP11 | FOOD PRESERVATION | Helps to apply major food preservation techniques and explain underlying principles |

| | | | |
|----|----------|---|--|
| | | TECHNOLOGY | Analyse and evaluate novel food processing method including non thermal food processing technique To get an idea about new product development. Students will develop an understanding of shelf life and nutritional consequences of preservation. |
| | SDC3FP12 | FOOD PACKAGING TECHNOLOGY | To study about food packaging, functions and properties To identify various kind of packaging materials To realize advanced packaging technologies To find out the importance of food labeling and standards |
| | SDC3FP13 | DAIRY TECHNOLOGY | To acquire knowledge about dairy products and their physico-chemical properties To obtain informations regarding with their processing methods To get details on dairy plant sanitation and hygiene |
| IV | SDC4FP14 | SPICES & PLANTATION PRODUCTS TECHNOLOGY | To acquire information on the different spices and plantation products in food chain sector Acquiring knowledge on properties and processing of different spices, coffee, cocoa and tea. Exposure on the different products and application on available in the current food processing sector |
| | SDC4FP15 | BEVERAGES TECHNOLOGY | Signify the importance of beverage in food industry Develop general knowledge on origin and economic status of beverage industry in India Lists various type of beverages Understand manufacturing process and quality evaluation of alcoholic and non-alcoholic beverages Familiarize brewing technology Optimize the idea on various water treatment process Understand quality standards of water |

| | | | |
|---|----------|-------------------------------|---|
| | | | Understand importance of fermentation and carbonation in beverage industry |
| | SDC4FP16 | TECHNOLOGY OF ANIMAL PRODUCTS | Description of slaughtering methods |
| | | | Emphasize on curing methods |
| | | | Significance of animal byproducts and processing |
| | | | Understand preservation techniques of fish and egg |
| | SDC4FP17 | FOOD ENGINEERING | Understand the application of food engineering during the handling ,processing, storage and distribution of food products |
| | | | Familiarize fundamental food engineering concepts and develop problem solving skill. |
| | | | Develop knowledge in different modes of heat transfer operations |
| | | | Understand rheological characteristics of food |
| | | | Familiarize working principle of heat exchangers, evaporators, driers and boilers. |
| | | | Comprehend the theories of refrigeration and freezing |
| | | | Understand concept of Pasteurization technique |
| V | SDC5FP19 | FOOD BIOTECHNOLOGY | Have developed an understanding of the application of biotechnology in animal, plant and food production. |
| | | | Understand the principles of fermentation |
| | | | Understand how different biotechnology processes are applied to food product development |
| | | | Recognize the impact of biotechnological applications on food supply and consumer acceptance of food products. |
| | | | Apply microbiological and molecular biological techniques in food testing. |
| | SDC5FP20 | FOOD TOXICOLOGY | The Awareness on the concept “food processing as a toxin generator”. |
| | | | Familiar with their properties, modes of action of toxins. |
| | SDC5FP21 | INSTRUMENTAL FOOD ANALYSIS | Exposure to various Instrumental analysis of foods which needed for statutory requirements |

| | | & TECHNIQUES | |
|----------|--|--------------|---|
| | | | Understand the relevance of each technique in the various types of food. |
| | | | Knowledge of operation and analysis through sophisticated instruments in the field of food processing to develop a better food analyst. |
| SDC5FP22 | FOOD SAFETY REGULATION & STANDARDS | | Exposure to various food safety management systems in the current scenario of food industries. |
| | | | Exposure on the various laws and regulations for self-establishment of the new food start-up |
| | | | Become an expertise food technologist in the area of an quality department of an food industry |
| SDC5FP23 | FOOD SUPPLY CHAIN & MARKETING MANAGEMENT | | Familiarize the new concepts of supply chain and special focus on the food supply chain system. |
| | | | To get knowledge food safety and quality is legally regulated during the distribution in the supply chain |
| | | | To initiate the marketing management skills of students through various medium of marketing. |
| | | | Students will acquire knowledge on to market the food products. |
| SDC5FP24 | FOOD QUALITY MANAGEMENT & AUDITING | | Understand principles and methods of quality management |
| | | | Exposure on HACCP in different food processing |
| | | | Recognizing special establishment inspection in different processing units |
| | | | Identifying hazards and critical control points |
| | | | A clear idea about standards and specifications |

