

SYLLABUS :-

Identification of design, operating and performance parameters in mechanical, thermal and mass transfer operations carried out in food processing such as; particulate size reduction, homogenization, centrifugation, packaging, mixing, conveying, extrusion, storage, heating, cooling, freezing, puffing, frying, distillation, extraction, concentration and drying. Developing mathematical relationship between the independent and dependent variables affecting the food processing operations by using physical and chemical principles governing the processes. Factorial, fractional factorial and rotatable central composite experimental design. Developing empirical equations using experimental data. Developing predictive model using Neural network. Optimization of processing parameters using Genetic algorithms. Application of Fuzzy logic to sensory evaluation and ranking of foods.