

FST 302: Principles of Food Processing and Preservation II (3 Units)

Milling technology as applicable in food industry. Types of mills: burr, hammer and roller mills. Design features and design analyses for mills. Cold storage and freezing in food industry. Determination of size and power rating of cold store and freezer. Irradiation and its applications in food industry. Extrusion Technology and its application in food industry. Design features and parameters for extruder. Principles of operation of extruder. Use and choice of chemical preservatives. Positive and negative effects of preservatives in food.

Practical: Tutorials and experimentations in food processing methods to preserve food commodities including dehydration, concentration, canning, smoking, irradiation, fermentation, salting, pickling etc. Particle size distribution using Tyler sieves. Determination of fineness modulus and uniformity index. Comparison of particle size distribution on the materials obtained from burr mill, hammer mill and roller mill.