

Title of Skill Course: SECFT 201-Advances in Fruits and Vegetables Drying and Dehydration Technician

1. Department : Food Technology
2. Title : Advances in fruits and vegetables drying and dehydration technician
3. Sector: Food industries
4. Year of implementation: 2024-25

Course Structure

Skill Level	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch
4	15	30	45	02	30

Syllabus

Course Objectives: Students should

1. know role and responsibilities of drying and dehydration technician
2. know government food safety standards and measures.

Theory Syllabus

Contact Hrs: 15

	SEMESTER-II SECFT 201 Advances in Fruits and vegetables drying and dehydration Technician	No. of hours per unit/credits(15)
Unit-I	Introduction to Drying and Dehydration	07
	Definition, scope and importance of drying and dehydration, Dehydration principles and equipment's used for drying. Pre-treatment in drying process. Sun drying & dehydration and its merits and demerits .Dehydrated products, Need for dehydration of food, Dried Fruits/vegetables slices and dices, Preparation of product for dehydration, manufacturing of fruit leather	
Unit-II	Effect of Drying and Dehydration on Food	08
	Physical and chemical changes during drying and dehydration, Principles, merits and limitations of freeze drying. Packaging of dried Fruits/Vegetables, dried slice and dices, Effect of dehydration on nutritive value, Spoilage of dehydrated fruits and vegetables.	

Practical Syllabus**Contact Hrs: 30**

Sr. No	SEMESTER-II SECFT 201 Advances in Fruits and vegetables drying and dehydration Technician	No. of hours per unit/credits(30)
1	Identification of equipment required for drying and dehydration	3
2	Drying and dehydration of seasonal vegetables.	3
3	Dehydration and rehydration of common available vegetable.	3
4	Different methods of peeling and evaluation of their effectiveness.	3
5	Different methods of blanching.	3
6	Reconstitution of dehydrated fruits & vegetables.	3
7	Blanching test for peroxides activity.	3
8	Cleaning and maintenance of the equipment	3
9	Determination of moisture content of dried vegetables.	3
10	Drying and dehydration of seasonal fruits	3

Course Outcomes :Students are able to

1. understand dehydration principles and dehydrated products
2. learn the process of drying and dehydration.
3. understand equipments used for drying.

References:

1. Hand Book Of Food Dehydration & Drying, by Eiri Board, Engineers India Research Institute (1January 2008)
2. Handbook of drying of vegetables and vegetable products / [edited by]. Min Zhang, Bhesh Bhandari, Zhongxiang Fang. Description: Boca Raton
3. Food Science, Potter NH, CBS Publication, New Delhi,1998
4. Food Processing Principles and Applications, Ramaswamy Hand MarcottM CRC Press, 2006
5. Preservation of Fruits and Vegetables Girdhari Lal, Siddhapa and Tondon, ICAR, I' Bllshed By Indian Council Of Agricultural Research New Delhi.

6. Fruit and Vegetable Processing, Sri S.Chenna Kesava Reddy, Acharya Ng Ranga Agricultural University Fruit and Vegetables Harvesting, Handling and Storage, A. K. Thompson, Blackwell Publishing Ltd

BOS Sub Committee:

Sr. No.	Name of Member	Designation	Address
1	Ms.P.I.Nalawade	Chairman	Y.C.I.S.Satara
2	Ms.S.S.Pisal	Member	Y.C.I.S. Satara
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4	Mr.S.M.Patil	Industrial Expert	Doehler India Private Limited, Pune