



OPEN/GENERAL ELECTIVE COURSE (OE/GE): FRUIT AND VEGETABLE PROCESSING I

Open for Second Year Graduate Student w.e.f. 2024-25

**RECOMMENDED BY THE BOARD OF STUDIES IN BOTANY
AND
APPROVED BY THE ACADEMIC COUNCIL**

Devrukh Shikshan Prasarak Mandal's
Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and
Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh.
Tal.Sangmeshwar, Dist. Ratnagiri-415804, Maharashtra, India

Academic Council Item No: dated

Name of the Implementing Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Science/Arts/Commerce
Name of the Class to Which the course is Open	:	Second Year, Semester Third
No. of Credits	:	02
Title of the Course	:	Fruit and Vegetable Processing I
Course Code	:	BTOE201
Passing Marks	:	40%
Nature of Course	:	Open Elective Course (OE)
Level	:	UG
Pattern	:	60:40
Status	:	Multidisciplinary- Open to all in the First Year
To be implemented from Academic Year	:	2024-25

Open Elective Course (OE) in Fruit and Vegetable Processing I

(With effect from the academic year 2024-25)

SEMESTER-III

Paper No.– I

Course Title: Fruit and Vegetable Processing I

No. of Credits - 02

Type of Vertical: Open/General Elective

COURSE CODE: BTOE201

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to...		
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Recall Fundamentals of Food Processing and processes involved.
CLO-02	Understand	Explain the role and importance of steps involved in converting a raw harvested food materials to a preserved product.
CLO-03	Apply	Prepare various processed products from Mango
CLO-04	Analyse	Differentiate various processes of processing
CLO-05	Evaluate	Justify the significance of food processing.

**Syllabus for Open/General Elective Course in
Fruit and Vegetable Processing I**

(With effect from the academic year 2024-25)

SEMESTER-III

Paper No.– I

Course Title: Fruit and Vegetable Processing I

No. of Credits - 02

Type of Vertical: Open/General Elective

COURSE CODE: BTOE201

COURSE CONTENT			
Module No.	Content	Cr	L
I	<p>Classification of Food, Fundamentals of Food Processing Classification of foods- based on origin, pH, nutritive value, Organic food, Nutraceuticals. Steps involved in converting a raw harvested food materials to a preserved product with sound quality- harvesting, storage, manufacturing, preservation, packaging, distribution and marketing, Chemical, enzymatic, physical and biological deterioration, implications and prevention</p>	01	15
II	<p>Processing of Mango Mango and mango products- raw unripe mango products: brined mango slices, dried green mango slices and powder (Amchur), canned mango slices in syrup, canned or frozen mango pulp, mango juice or mango nectar, mango jam, mango squash, mango juice powder, mango freeze dried products, mango syrup</p>	01	15
Total		02	30

References:

Hui, Y H and Associate Editors; Hand Book of Food Products Manufacturing Vol I,
 Wiley- Interscience, New Jersey 2007.

- Brian E. Grimwood, Coconut Palm Products: Their Processing in Developing Countries, 1979.
- Hui, Y H and Associate Editors; Hand Book of Food Products Manufacturing Vol II, wiley- Interscience, New Jersey 2007.
- Manay, N.S, Shadaksharaswamy, M., Foods- Facts and Principles, New Age International Publishers, New Delhi, 2004.
- Potter, N. N, Hotchkiss, J. H. Food Science. CBS Publishers, New Delhi. 2000.
- Srilakshmi, B. Food Science (3rd edition), New Age International (P) Limited Publishers, New Delhi, 2003.
- Siddappa and Bhatia, Fruits and Vegetable Processing Technology.
- Lea, R. A. W, Fruit juice processing and packaging.