

**Course:** **A Master Class in Agro-Processing for Small and New Businesses. Master your skills in Manufacturing - Pepper Sauce, Green Seasoning, Red Fruit Preservation, Ice-cream & Jams**

**Contact Hours:** **18**

**Pre-requisite:** **None**

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**Course Description:** This course will enable the student to become a creative, critical thinker in the field of Agro Processing with a fundamental understanding of food science. Students will be guided with the necessary teachings that aid in their holistic development to operationalize a successful Entrepreneurial mindset. The student will be able to apply valuable knowledge gained over the 8 weeks to conceptualize any Agro-processing product they desire. Furthermore, students will be able to truly exploit the economic potential of agricultural commodities whether underutilized or over utilized to their fullest economic potential as a sustainable business. The foundation of food science will build the confidence to take risks and explore the inevitable possibilities.

**Target Audience:** This course is designed for individuals interested in the field of Agro-processing but lack the Training in Food Science, confidence, and support to create their product. Students will learn how to exploit the economic revenue opportunities that Agro-processing has to offer. Transform your kitchen into an Agro-processing facility that would have the potential to grow your business.

**Learning outcomes:**

1. To provide the essential tools and training required to start a small business
2. Promote innovation and critical thinking
3. Provide a safe and supportive environment for growth and development
4. To be able to create a premier product that is market-ready using a scientific approach

## **Course Content**

### Module 1 – Theory

#### Introduction to Agro-Processing

- Understanding the concept of Agro-Processing and Food Science.
- Food Quality Parameters and Analysis

### Module 2 – Theory

- Food Safety, HACCP, and Risk Analysis
- Factors Influencing Food Safety Practices and Good Manufacturing Practices (GMP)
- Seven Principles of HACCP
- Conducting a Risk Assessment using HACCP

### Module Session 3 – Practical

- Introduction to Food Additives and Preservation Techniques
- Methodology in manufacturing Pepper Sauce & Green Seasoning
- Dehydration of herbs and spices

### Module 4 – Practical

- Introduction to Food Science & types of preserving techniques
- Flood plan and kitchen design Requirements for Product Certification of the local and export market
- Food Laws and Governance
- Label Design and template layout

### Module 5 – Practical

- Introduction to Red Fruit Preservation
- Pearson Square Calculation – slow syruring process

## Module 6 – Practical

- Understanding dairy science and methods of preservation
- Requirements for Ice-cream manufacturing
- Function of stabilizers in quality control
- Manufacturing jams & jellies
- Understanding the differences between Jams and Jelly