

Course:	Introduction to the Fundamentals of Agro-Processing and Food Science (Creating a Quality Product)
Contact Hours:	24
Pre-requisite:	None

## Description

This course was designed to enable students to become creative, critical thinkers in the field of Agro Processing; it will equip them with the fundamental understanding of Food Science.

Students will be guided with the necessary teachings that will aid in their holistic development to operationalize a successful Entrepreneurial mindset. Learners will be able to apply the valuable knowledge gained over the 6 weeks period to conceptualize any Agro Processing product they desire. Furthermore, students will be able to truly exploit the economic potential of agriculture commodities whether underutilized or over utilized to its fullest economic potential as a sustainable business.

# **Target Audience**

This course is designed for individuals that are interested in the field of Agro-processing but are lacking the training in Food Science as well as the confidence and support to create their product. Students will learn how to exploit the economic revenue opportunities that Agro- Processing has to offer.

## Learning outcomes

On completion of this course, learners will be able to:

- Promote their innovation
- Create a premier product that is market-ready
- Transform your kitchen into an Agro-Processing facility
- Grow your business

# **Course Content**

### Week 1 – An Introduction

- Understanding the concept of Agro-Processing and Food Science
- Opportunities in Value Addition (home base)

### Week 2 - Tools, Equipment and Technology

- Utilizing the versatility of Kitchen Tools and equipment for Agro-Processing
- Science behind food Preservation and Manufacturing Machinery
- Commercial and Domestic Practice comparison

#### Week 3 - Food Safety and Preservation

- Methods of Preservation
- Concept of Hygiene and Sanitation
- HACCP and Risk Analysis
- Principles of Food Microbiology and Shelf life

#### Week 4 – Condiments/ Sauces – Practical Lab

• Hope Peppers Sauce, Shadow Benny Sauce, Pineapple Sauce Sweet and Hot Sauce and Green Seasoning

#### Week 5 – Product development

• Understanding the fundamental requirements to create a final product

#### Week 6 – Dairy – Practical Lab

• Ice Cream & Cheese (Coconut, Pumpkin and Aloe)

#### Week 7 - Food Governance and Policy

- Requirements for an Agro-processed product ready for the market
- Understanding the roles and responsibilities of an Agro-processor that is legally foodcompliant

#### **Resources and Networking**

- Resources and Opportunities available to create an Agro-Processed product
- Exploring the current channels to access funding and product development
- A strategic approach for a successful business
- Marketing, branding and record keeping

#### Week 8 – Local Commodity Utilization – Practical Lab

 Jams/Marmalade, Juices, Plantain/Sweet Potato/Cassava Chips and Fresh Vegetables