

### Application Procedure

For information on the application procedure please visit our website: [www.mksu.ac.ke](http://www.mksu.ac.ke) or Registrar Academic and Student Affairs) Office. The following documents are required:

- i. A copy of National Identity Card or Passport

Tuition fees payable to any of the following bank accounts

Kenya Commercial Bank: 1137145064

Nation Bank of Kenya: 01020078499400

Standard Chartered bank: 0152016845602

Fees Structure for Dairy Management Short Course

Tuition fee :KShs. 35,000 - Residential

Tuition fee :KShs. 25,000 - Non Residential

Mode of Study

The mode of study is flexible to accommodate all participants quarterly per year

Intake is quarterly per year in Feb, June, Oct and Dec

For further information on short courses and admissions, please contact the Department of Agricultural Education and Extension

P.o. Box 136-901100, Machakos

Email: [cod.agm@mksu.ac.ke](mailto:cod.agm@mksu.ac.ke)

Tel: 0780 651383



**MACHAKOS UNIVERSITY**

ISO 9001:2015 Certified

#### For more information

Call us on +254 723 805829

or Email us on [info@mksu.ac.ke](mailto:info@mksu.ac.ke)

or write to us on P.O. Box 136-90100  
Machakos, Kenya



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**SCHOOL OF AGRICULTURAL SCIENCES  
DEPARTMENT OF AGRIBUSINESS MANAGEMENT  
AND TRADE**

#### PROGRAMME FOR

**Short Course in:**  
Milk Value Addition

#### Vision

A preferred University of Scholarly Excellence Scholarship and Service delivery

#### Mission

Provide Scholarly Education through Training Research and Innovation for Industrial and socio-economic transformation of our communities.

#### Philosophy

Provide transformative leadership in Teaching, Training, Research, Innovation, Industrial and Technology transfer for wealth creation.

### About the Course:

Dairy development is a complex issue that requires a well-organized milk collection, processing and marketing system and managerial skills at all levels throughout the dairy value chain.

**Purpose:** to provide existing and potential dairy processors with sufficient information, skills and knowledge on milk value addition into processed dairy products such as Mala, Yoghurt, Butter, Ghee and Cheese as well as related fermented dairy products; in a “learning *by doing*” environment.

**Objectives:** Main objective is to equip learners with cutting-edge skills, knowledge and attitude necessary for the milk processing industry in line with changing trends in globalization.

### Learning outcomes:

At the end of the course, learners should be able to:

- a) Have an understanding of all milk processing technology skills
- b) Apply value addition skills in milk processing

### Eligibility

The course on Milk Processing Technology is useful to those who are working in the dairy industry or who want to build their career as entrepreneurs along the dairy value chain. Specifically, the following groups are highly recommended for this course:

Owners and managerial staff of private, public, or cooperative dairy farms

Dairy training institute staff

Extension workers

Staff of advisory services and development partners dealing with management aspects of dairy farms - including youth and women, farmer groups, individuals as well as development partners.

**Mode of delivery:** a team of experienced trainers have been prepared to guide the learners through all aspects of milk value addition. The course will be delivered in a “*learning by doing*” approach and supported by 'hands on' practical work, visual demonstrations and a manual that will have diagrams, photographs and illustrations for ease of imparting skills.

**Course Overview:** With a certificate course in Dairy Management offered at Machakos University, you will gain a broad and comprehensive understanding of all aspects of value addition to raw milk, processing technologies to achieve marketable, consumable, safe and healthy dairy products. You gain preservation techniques, quality control analyses, and marketing and organization skills. You also learn how to run a profitable dairy through correct financial calculations, risk management, organisation, and communication. With your newly developed competencies, you return to your work place a confident and well-trained professional.

There's something here for everyone whether you are just looking for the basics or have years of experience in milk processing.

### Course Syllabus:

1. Introduction: The detailed course will cover:
2. Rural dairy development, dairy husbandry and dairy farm management: for managers of (large) milk production units, research or breeding farms. A wide range of technical subjects is completed with management tools such as applied farm economics, technical and financial analysis of farm performance and planning.

3. Training and extension: for persons working in smallholder dairy development projects, dairy producers' organisations and for lecturers and trainers at vocational training centres and/or agricultural colleges. Technical and socio-economic aspects of smallholder mixed farming, service supply, producers' organisations, rapid rural appraisal techniques are core issues.
4. The milk chain (Production – Collection – Processing – Marketing) and Small-scale milk processing: for persons who are, or will be, working in the field of small-scale processing. Detailed study of the complete chain (procurement-processing-marketing) in small to medium scale private enterprises and dairy co-operatives, with a strong emphasis on its practical implications and on quality management.
5. The training on Milk Value Addition specifically covers:
  - a. Milking techniques
  - b. Milk handling
  - c. Cleaning of Milk Containers
  - d. Milk quality testing
  - e. Milk Processing
  - f. Processing of Yoghurt
  - g. Processing of Mala
  - h. Propagation of Starter Culture
  - i. Cheese Processing
  - j. Ghee Processing
  - k. Sensory Evaluation of Processed Dairy Products