



## MANUFACTURING AND PRODUCTION

# Edible Oil Extraction and Refining

5 day course

Classroom, online or in-house

## Course overview

Oil quality is largely inherited from the seed, and a refinery can remove colour, odour and free fatty acid only at a cost in yield that grows with every unit it has to take out. This course works through that economy. Delegates work through oilseed preparation, cleaning, dehulling, flaking and cooking, and what each step does to extraction efficiency. Mechanical pressing and solvent extraction are covered, including the safety regime solvent plants require. Crude oil quality parameters follow. Refining is worked through in sequence: degumming, neutralisation, bleaching and deodorisation, with the losses and the quality gain at each stage. Winterisation and fractionation are addressed. Hydrogenation and interesterification are covered where hardened fats are produced. Oxidation, antioxidants and shelf life follow. The course closes on refinery yield accounting, on effluent and on the by products that carry real value.

## What you will learn

- Prepare oilseed through cleaning, dehulling, flaking and cooking
- Operate mechanical pressing and solvent extraction safely
- Assess crude oil quality parameters
- Run degumming, neutralisation, bleaching and deodorisation
- Apply winterisation and fractionation
- Produce hardened fats by hydrogenation or interesterification
- Control oxidation and shelf life, and account for refinery yield

## Who should attend

- Edible oil plant operators and supervisors
- Refinery process engineers
- Quality assurance staff in oils and fats
- Production managers at crushing and refining plants
- Technical staff entering the oils and fats industry

## Course outline

- 01 Quality inherited from the seed
- 02 Oilseed preparation and its effect on yield
- 03 Mechanical pressing
- 04 Solvent extraction and its safety regime
- 05 Crude oil quality parameters
- 06 Degumming, neutralisation and bleaching
- 07 Deodorisation, winterisation and fractionation
- 08 Hardened fats, oxidation, yield accounting and by products

## Upcoming dates

| Dates                              | Venue                   | Format    | Fee per delegate |
|------------------------------------|-------------------------|-----------|------------------|
| 12 to 16 October 2026              | Kampala, Uganda         | Classroom | USD 1,325        |
| 28 December 2026 to 1 January 2027 | Cape Town, South Africa | Classroom | R19,950          |
| 8 to 12 February 2027              | Online                  | Online    | R8,500           |



## Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit [www.afrisciencegroup.com](http://www.afrisciencegroup.com), email [info@afriScience.co.za](mailto:info@afriScience.co.za), or WhatsApp us on **+27 63 479 1136**.

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