



UK FLOUR  
MILLERS

# Course Guide 2022-23



Flour Milling  
Training



Distance  
Learning  
Programme

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# UK Flour Millers

For many decades the UK flour milling industry has run correspondence courses for students across the world, always aware of the need to review its training resources on a regular basis and make improvements as and when appropriate. As such, the distance learning programme has evolved into the leading industry standard it is today

# Welcome

Welcome to UK Flour Millers, formerly known as nabim. We are the trade association and industry training organisation for the UK flour milling industry. Each year we run our modular correspondence courses to provide millers with an essential knowledge and understanding of the flour milling industry. Each year the courses are studied by hundreds of students from around the world and lead to the Advanced Certificate in Flour Milling. During and beyond the Covid-19 pandemic, UK Flour Millers will continue to deliver its distance learning programme through hard copy and the virtual world.

“The UK Flour Millers distance learning programme continues to be the Gold Standard for flour milling training, providing a breadth of technical information and background understanding for students across every aspect of the business. The programme is continually reviewed and updated so that it remains at the forefront of technological advances and industry innovation, ensuring we equip the next generation of technical millers with the knowledge and skills to succeed in the industry”

**Steve Britton,  
Head of Technical and Milling, Allied Mills  
& Chairman, UK Flour Millers Training  
Committee**

## Flexible Training

The modules may be studied in any order and in any combination; students are not required to have any previous qualifications. Students are encouraged to study between 1 and 3 modules in their first year (approx 12 hours minimum study time per module).

Detailed information about each of the modules and the subjects they cover can be found on pages 6-19.

Details of our programme's tutor support and the role of the mentor can also be found on page 24.

# Increase your potential

Whilst our distance learning programme dates back over one hundred years, it continues to meet the training needs of the milling industry. The programme works, so we don't mess around with it too much. Now this tried and trusted programme is backed by 21st century resources such as our virtual flour mill, which has excited tutors, mentors and students alike.

The courses are an excellent training programme for those new to the industry, an indispensable tool for developing the skills of the competent miller, and valuable refresher training.

The programme is designed and delivered by millers for millers.



## Seven Modules

**Developed and  
Delivered by  
Millers for  
Millers**



# Modules

Our Flour Milling Training Programme is structured into seven modules, providing a flexible training package that covers the full spectrum of milling subjects.

- 1 – Safety, Health and Hygiene**
- 2 – Wheat and the Screenroom**
- 3 – Mill Processes and Performance**
- 4 – Product Handling, Storage and Distribution**
- 5 – Flour**
- 6 – Power and Automation**
- 7 – Flour Milling Management**

For each module, students are allocated a tutor to whom they submit work throughout the course year. The tutors are all experienced in the operation and management of flour mills, providing students with expert assistance in their training.

Past exam papers may be found at  
[www.flourmillingtraining.com/exam-papers](http://www.flourmillingtraining.com/exam-papers)



## Module 1

# Safety, Health and Hygiene



# Module 1 Safety, Health and Hygiene

This course emphasises the importance of health and safety to the individual and the organisation; introduces the student to risk assessment and control; considers specific safety hazards to be found in a flour mill, including fire and dust explosions and the means of avoiding them; and covers good hygiene practice and the dangers of infestation.

Module 1 is an essential course for all new flour millers, health and safety personnel and those working towards the UK Flour Millers Advanced Certificate.



## Module 1

## Safety, Health and Hygiene



# Topics covered

- Environmental impact
- Fire and explosion prevention
- Good health and safety
- Hazards and precautions
- Hygiene strategies
- Infestation prevention
- Legal responsibilities
- Pests
- Risk assessment
- Risk control

### Examination

The date for examination on this module is Tuesday 2 May 2023 and will accord with the test specification.

Duration: 2 hours, 8 questions

### Test specification

Importance of health and safety - 1 question

Risk assessment and control - 2 questions

Hazards and precautions - 4 questions

Hygiene and pest prevention - 1 question



## Module 2

# Module 2 Wheat and the Screenroom

From the wheat in the field, to cleaned and conditioned grains, ready for milling, this module covers the structure, characteristics and production of the industry's major raw material.

The module provides a comprehensive introduction to wheat intake, storage and cleaning procedures; the operation of a modern screenroom; the conditioning, drying and mixing of wheats.



## Wheat and the Screenroom



## Module 2

## Wheat and the Screenroom



# Topics covered

- Adjustment and maintenance of plant
- Conditioning and drying wheat
- The screenroom
- The wheat plant
- Treatment and disposal of screenings
- Wheat cleaning
- Wheat damping
- Wheat intake
- Wheat production
- Wheat storage
- Wheat varieties

### Examination

The date for examination on this module is Wednesday 3 May 2023 and will accord with the test specification below.

Duration: 2 hours, 8 questions

### Test specification

The wheat plant, varieties and production - 2 questions

Wheat intake and storage - 2 questions

Wheat cleaning and the screenroom - 2 questions

Wheat damping, conditioning, drying, mixing and measuring - 2 questions



## Module 3

## Mill Processes and Performance



# Module 3 Mill Processes and Performance

This course addresses the history and practice of the modern flour milling operation; mill machinery and processes; the manufacture of different flours and co-products; the importance and achievement of mill balance; the measurement and improvement of mill performance.

Students will gain an understanding of break, scratch and reduction systems; scalping and grading; purification; and flour dressing, whilst also being able to demonstrate a working knowledge of general milling principles.



## Module 3

## Mill Processes and Performance



# Topics covered

- Flour processing
- Mill balance
- Milling machines
- Mill performance
- Milling history
- Modern flour milling
- Production of bran, wheatfeed and germ
- Wholemeal and brown flours

### Examination

The date for examination on this module is Thursday 4 May 2023 and will accord with the test specification.

Duration: 3 hours, 10 questions

### Test specification

Milling - historical and modern - 2½ questions

Debranning and peeling; milling machines - 3 questions

Pneumatic conveying; flour processing and redressing; production of bran, wheatfeed, germ, wholemeal and brown flour - 2 questions

Mill balance and performance - 2½ questions



## Module 4

## Product Handling, Storage and Distribution



# Module 4 Product Handling, Storage and Distribution

This course considers the bulk storage of flour and co-products; the practice of flour blending; handling and storage of packed flour; warehousing; logistics; vehicles used to transport finished products and their loading and unloading; pests of stored wheat and flour and their control.

This module provides an indispensable guide to the blending, packing and storage of flour and to its despatch in bulk or bags.



## Module 4

### Product Handling, Storage and Distribution



# Topics covered

- Bulk storage
- Despatch
- Flour blending
- Infestation control
- Logistics and distribution
- Packed product storage and handling
- Packing

### Examination

The date for examination on this module is Monday 8 May 2023 and will accord with the test specification below.

Duration: 2 hours, 8 questions

### Test specification

Materials flow; bulk storage; flour blending - 2 questions

Packing and palletising; packed product storage - 3½ questions

Despatch and distribution - 1½ questions

Infestation control - 1 question



## Module 5

# Module 5 Flour

This course covers the functionality and types of flour commonly milled; the flour treatments the miller may use; the measurement and control of quality; the numerous laboratory tests a miller may perform on wheat and flour to ensure specifications are met; breadmaking and a wide range of other flour uses.

This module provides a comprehensive introduction to the miller's finished products. Upon completion, students should be able to demonstrate a good understanding of flour types and flour quality.

## Flour





## Module 5

## Flour



# Topics covered

- Biscuits, cakes and pastry
- Breadmaking
- Flour grades
- Laboratory tests on wheat and flour
- Quality assurance
- Types of flour

### Examination

The date for examination on this module is Tuesday 9 May 2023 and will accord with the test specification below.

Duration: 2½ hours, 7 questions

### Test specification

Definitions and types of flour; quality assurance - 1½ questions

Laboratory tests on wheat and flour - 3 questions

Breadmaking - 1½ questions

Other flour products - 1 question



## Module 6

# Module 6 - Power and Automation

This course studies the sources and transmission of power in the mill; pneumatic and mechanical conveying; instrumentation used for measurement in the mill; the programmable logic controller; process control systems in the milling industry.

Students will gain valuable knowledge of the principles governing electric motors and will be able to explain the importance of efficient use of energy within the mill.



**Power and  
Automation**



## Module 6

## Power and Automation



# Topics covered

- Evolution and automation
- Measurement
- Pneumatic conveying
- Process control systems
- The programmable logic controller
- Transmission of power
- Use and application of air
- Utilities

### Examination

The date for examination on this module is Wednesday 10 May 2023 and will accord with the test specification below.

Duration: 2½ hours, 7 questions

### Test specification

Automation; utilities - 1 question

Transmission of power; use of air; pneumatic conveying - 3 questions

Measurement - 1 question

PLCs and process control systems - 2 questions



## Module 7

# Module 7 Flour Milling Management

The final module in the set of 7, in 4 lessons this course gives the student a complete overview of Flour Milling Management.

This course provides a background to the flour milling industry; the location and design of flour mills; the staffing and organisation of mills; the role of the miller as an employer; the responsibility to protect product, people and environment; financial considerations of the flour milling business.

## Flour Milling Management





## Module 7

# Topics covered

- Commercial management
- Flour and food safety
- Hazard analysis critical control points
- Mill location and design
- Operations management
- People management
- The flour and wheat markets
- The flour milling industry

### Examination

The date for examination on this module is Thursday 11 May 2023 and will accord with the test specification below.

Duration: 3 hours, 9 questions

### Test specification

The flour milling industry; flour and wheat markets - 1½ questions

Commercial management - 2½ questions

Flour as a product; mill location and design - 2 questions

Operations management; people management - 3 questions

## Flour Milling Management



## The first step to success

### How to enrol for this year's courses

Enrolments should be made on the appropriate forms which can be downloaded from [ukflourmillers.org](http://ukflourmillers.org). Payment of the enrolment fee must be made by bank transfer or cheque (made payable to 'UK Flour Millers').

It is important that all parts of the enrolment form are completed.

Forms should be emailed to: [training@ukflourmillers.org](mailto:training@ukflourmillers.org) or sent to:

Distance learning programme  
UK Flour Millers  
21 Arlington Street,  
London SW1A 1RN, United Kingdom

Enrolments should be submitted by 21 August 2022; later enrolments may suffer a delay in processing.

**NB: All students will be given access to our virtual flour mill.**

# Course Enrolment

## Course Fees

Fees which include access to our virtual mill throughout the course year, have been held at last year's level.

The basic charge per module (including UK Flour Millers exam registration) is £600 (plus VAT at 20% where applicable).

## **Discounted rates**

UK Flour Millers members: £350 +VAT per module.

non-UK companies: £480 per module (+VAT where applicable).



## Procedures for May 2023

Each module will be examined in one written paper lasting for between 2 and 3 hours; the examination timetable is on page 27. There will be no choice of questions.

Students enrolling on our courses in 2022 will be working towards taking the UK Flour Millers written examination in May 2023. The course enrolment fee includes an exam element and all students enrolled on a course are automatically registered by us for the 2023 examination. However, students must also register at one of our approved examination centres and pay any administration fees due locally. The deadline for exam registration with UK Flour Millers is 28 February but examination centres may have their own earlier deadlines.

Mentors must contact the centres themselves to ensure that administrative arrangements are in place and local fees paid.

# Examinations

## Re-Sits

Students wishing to re-sit an examination but not re-enrol on the course may register for the examination only and will be charged a fee of £100 (£60 for UK Flour Millers members).

The deadline for UK Flour Millers to receive exam registrations – and requests from course students to change venue or to defer their exam for twelve months – is 28 February 2023.

UK Flour Millers no longer accepts exam registrations from candidates who have never enrolled on the relevant course.

In March 2023 UK Flour Millers will inform its examination centres of the candidates who have been registered to sit the examinations there; this will be done using the information supplied by students on their enrolment or registration forms.



# Certificates and Medals

## Qualifications

UK Flour Millers awards a Record of Achievement to students on passing individual modules. In addition UK Flour Millers also awards two certificates:

- The Intermediate Certificate on passing modules 1, 2, 3 and 4.
- The Advanced Certificate on passing all seven modules.

Two medals, Silver and Bronze, are awarded each year to the leading candidates amongst those who have completed their studies and obtained the Advanced Certificate. These award winners may later be given the opportunity to produce a thesis of interest to the industry and win the UK Flour Millers Gold Medal.

The coursework certificate will be awarded to all students who complete, to a satisfactory standard, all 4 lessons within the module lesson books.

The certificate is awarded to recognise the hard work and effort the student has put in throughout the course year, even if they do not pass the examination.



### Did You Know ?

Recently successful students have come from far and wide, including: Australia and Malaysia, Bahrain and Burundi, Fiji, St Vincent and many more.

## Written by industry professionals

The students' textbooks and lesson workbooks are sent to mentors once the enrolment has been processed, and should arrive by mid-September, provided that the enrolment was received before 21 August 2022. Enrolments received after that date may suffer a delay in processing.



# Lessons and Workbooks

Additional copies of the textbooks, for mentor or mill use, may be ordered from UK Flour Millers.

Email: [training@ukflourmillers.org](mailto:training@ukflourmillers.org)

Each textbook costs £80; a set of seven textbooks costs £450, prices inclusive of delivery.

(Discounts available for UK Flour Millers member companies.)

### Copyright

**Please note that photocopying of the textbooks would be a breach of UK Flour Millers' copyright. In such an event, UK Flour Millers will consider taking legal action to obtain compensation.**

# Millers supporting Millers

Tutors – appointed by UK Flour Millers

Every student is allocated one tutor per module. When the course books are sent out, the student will be informed of their tutor and be supplied with both email and postal address; the student should send all their work to the tutor allocated to them for that module, either electronically or by post. The tutor will mark and return the scripts. The tutors' depth of knowledge is reflected in the professional and specialist advice they provide for the student.



# Tutors

## Dedicated Tutor Support

Our programme provides dedicated tutor support for every student, giving professional guidance and specialist advice throughout the course year.

By submitting coursework, students will build a relationship with their tutor, which may be supplemented by meetings in the virtual mill.

## Millers supporting Millers

Mentors – appointed by the mill

It is strongly recommended that, for each student who enrolls on the correspondence course, the mill appoints a suitable person to be made specifically responsible for assisting the student in their studies. This person is hereafter referred to as the mentor. Where a mill enrolls more than one student, it may wish to allocate one mentor for all students. The mentor should be indicated on the enrolment form in the space provided.

# Mentors

## The role of the mentor

The mentor should encourage the student to participate fully in the course. For each lesson, the mentor should discuss the subject matter with the student; particularly where the lesson covers subjects outside their normal practical experience.

The mentor may also arrange for the student to spend time in the relevant area of the mill and/or to speak to suitably qualified personnel on site.

Mentors should address any difficulties the students may be having by discussing the students' marked coursework.

The mentor should ensure that the student is registered to take their examination at an approved centre and that they are aware of the date and venue for the examination.

## Learning Hub

UK Flour Millers is continually seeking new ways in which to assist companies deliver to their employees the knowledge and understanding of the milling process that they need.

The virtual mill and its website, [flourmillingtraining.com](http://flourmillingtraining.com), are the hub of all our learning resources, including training videos, using animation, e-learning and past exam papers. Apart from providing a further training resource, helping trainees to look inside the milling machines and process, the virtual mill provides a venue for tutorials and other meetings without the need to travel.

# The Virtual Mill

## Enter the Virtual Mill

Companies will be provided with the software and technical assistance to load the Virtual Mill on one or more computers for the duration of the course session.

For several years, students have enjoyed tutorials held in the virtual environment and, this year too, all students will be given access to the virtual mill for tutorials and will be encouraged to use the facility throughout the session.

# Timetable

## 2022

1 June – Enrolment for the 2022-2023 course year begins.

21 August – First ‘deadline’ for course enrolments.

September – Lesson workbooks and course textbooks delivered to mentors/students.

30 November - Second and final deadline for course enrolments.

December – Students should make sure that arrangements are in place for them to sit their May 2023 examinations at an approved centre.

## 2023

28 February – Deadline for registration for UK Flour Millers exam re-sits.

March – Student sponsors should contact their exam centres to ensure administrative arrangements are in place.

May – Examinations at approved UK Flour Millers exam centres.

July – UK Flour Millers issues examination results to students via their mentors.

Pass lists published on [www.ukflourmillers.org](http://www.ukflourmillers.org).

# Events and Examinations

## 2023 Examination Timetable

Module 1 - Tuesday 2 May, 09.30-11.30

Module 2 - Wednesday 3 May, 09.30-11.30

Module 3 - Thursday 4 May, 09.30-12.30

Module 4 - Monday 8 May, 09.30-11.30

Module 5 - Tuesday 9 May, 09.30-12.00

Module 6 - Wednesday 10 May, 09.30-12.00

Module 7 - Thursday 11 May 09.30-12.30

**Put the dates in your diary NOW!**

## UK Flour Millers

UK Flour Millers is the new name for nabim, which has run this programme for many years. Although our name has changed, the content and quality of the training we deliver will not suffer. The tutors, examiners, administrators and content will not change any more than is natural in working life. We will continue to provide a variety of training resources that millers need to develop their employees to the benefit of individuals, companies, cereals supply chain and the final consumer. Our distance learning programme is still the best means to gaining key knowledge and understanding of the milling process and industry.

# UK Flour Millers

Should you require any further information or assistance, please email us at [info@ukflourmillers.org](mailto:info@ukflourmillers.org) or visit our training website, [flourmillingtraining.com](http://flourmillingtraining.com)

**21 Arlington Street, London, SW1A 1RN,  
United Kingdom**

**Tel: +44 (0)20 7493 2521**

**Fax: +44 (0)20 7493 6785**

**E-mail: [training@ukflourmillers.org](mailto:training@ukflourmillers.org)**

**[ukflourmillers.org](http://ukflourmillers.org)**

**[flourmillingtraining.com](http://flourmillingtraining.com)**



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