



Milling for executives at KSU, USA



What you will learn

You will learn how to make a mill efficient. Understand the underlying principles of the flour milling process, machine design and plant operation. But this isn't just theoretical training. You will spend two days in the fully operational Hal Ross Flour Mill at the university's Department of Grain Science and Industry. There you will learn cleaning, conditioning and milling techniques. You have access to some of the latest milling machines for a close-up look at how they work. You will also learn to judge whether a milling operation is running well, covering everything from intake to the finished product.

Required skill level

No working experience in a flour mill. This course is well-suited for mill managers and mill owners who are new to milling.



Next course dates and more information

Scan the QR code or go to buhlergroup.com/academy

Price

Course fees for IAOM members are \$1,900 and the non-member fee is \$2,100 / 1 week

→ [Courses and costs 2021](#)

What is included

- Invitation letter for visa application
- Hands-on access to some of the latest milling machines
- Two days of practical experience at the fully operational Hal Ross Flour Mill of Kansas State University's Department of Grain Science and Industry
- Printed training documents
- One social event with dinner each course week
- Unlimited access to Wi-Fi and Internet

Milling for executives at KSU, USA

Detailed program, part 1



Monday

Reception at IGP Executive Conference Center

- Explanation of administrative matters, formalities
- Introductions
- Short introduction of Bühler group

Cereal varieties and their application for food (Info only)

Wheat

- Composition of the wheat kernel and its structure
- Details about wheat classes
- Quality control
- Storage conditions of wheat

Silo/storage

- Function of traditional pre-cleaning machines & conveying elements
- New developments

Cleaning section

- Design and function of cleaning section machines

Practical: Hal Ross Mill

- Mill tour
- Combi-cleaner
- Indented cylinder
- Sortex

Tuesday

Mycotoxin reduction

- Eminent danger and solutions to mycotoxin content in wheat
- Sortex, peeling

Conditioning

- Tempering of wheat with ideal moistures and tempering times
- Tempering philosophies

Milling machines I

- Design and function of roller mills
- Design and function of sifters
- Design and function of purifier, bran finisher, detachers

Dinner with the group

Wednesday

Practical in the Hal Ross mill:

- Demo of roller mills, sifters, purifier, detacher and bran finisher
- Cleaning and conditioning of wheat for Thursday's milling

Basic mill flow sheet technology

- Basic principles for understanding a mill flow sheet
- Granulation and quality
- Design of hard wheat vs. soft wheat flow sheets
- Application of double-high roller mill in flow sheets

Food safety

- Most important aspects in food safety today and tomorrow
- The role of the consumer
- The role and the responsibilities of the industry

Optimal sanitation in flour mills



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Detailed program, part 2



Thursday

Practical: Milling

- Adjustments of break rolls with break release
- Adjustment of purifier P1
- Adjustment of reduction rolls
- Collecting and evaluating samples

Performance evaluation of a flour mill

- KPI of a flour mill
- Various mill yields
- Mill performance from a financial perspective
- A different view of through put

Investment decision

- Most important factors to consider for taking informed decisions
- Design to minimize power consumption

Dinner with the group

Friday

Finished product handling

Flour quality

- Most important quality parameters of flour

Lunch at IGP

Working hours

08.00 – 09.30 / 10.00 – 12.00
13.15 – 15.00 / 15.15 – 17.00

We reserve the right to adjust the schedule for organizational reasons.

