



Grain processing for ethanol industry

What you will learn

You will learn how to make a starch mill efficient - about basic milling processes, machine design and plant operation, and learn about ethanol equipment and process technology.

You will also become aware of how the principles of milling are applied in the ethanol industry and come to understand finished products and how they are used. But this isn't just theoretical training. You will spend an entire day at our fully operational school mill to learn cleaning, conditioning and milling techniques. You also have access to some of the latest milling machines for a close-up look at how they work.

Required skill level

Moderate milling experience. This course is well-suited for machine operators, technicians and maintenance personnel.



Next course dates and more information

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

Price

CHF 2'100.00 per person / 1 week

What is included

- Invitation letter for visa application
- Hands-on access to some of the latest milling machines
- One day of practical experience at our fully operational school mill
- Printed training documents
- One social event with dinner
- Unlimited access to Wi-Fi and Internet

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Detailed program



Monday

Welcome at the Milling Academy

- Formalities and administrative matters
- Bühler factory visit, including research centers

S1: Cereal varieties

- Composition and quality grading of grain and grain trading

S2: Categories of grain processing plants

- Flour mill/starch mill/corn mill/feed mill

Tuesday

S3: Preparation and cleaning of grain for milling

- Removal of contamination. Function of cleaning machines

P1: Practicals: cleaning / conditioning of wheat for milling

S4: Hammer mill and roller mill technology

- Horizontal and vertical constructed hammer mills
- Granulation spectrum analysis of roller mill and hammer mill

S5: Milling machines I

- Design and function roller mill

Social event in the evening

Wednesday

S6: Milling machines II

- Design and function of plansifter and bran finisher

P2: Practicals: Flour mill operation

- Running of the school mill – granulation evaluation

S7: Milling concepts for the ethanol industry

- Selective milling, corn fractionation, hybrid plants (1st & 2nd generation)

Thursday

S8: DDGS-processing

- Pellet presses
- Cooling and handling
- Storage and outload

Visit: Swissmill in Zurich

Friday

S9: Value added products

- LEURON® (extracted Aleurone cells from bran)

S10: Second generation

- Biomass pre-treatment
- Hybrid plants

Q&A session and certification

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.

