

CORN WET MILLING

PURPOSE

To provide fundamental understanding of the corn wet milling process, equipment, unit operations and industry trends. Short course is intended for representatives of the wet milling industry and allied industries. The course is ideal for corn wet millers, equipment vendors, enzyme companies, trade organizations and companies associated with the corn processing industry.

OVERVIEW

Monday, January 9, 2012

- 8:00 Introduction of wet milling
 - Corn structure, chemistry
 - Wet milling
 - Other commercial corn processes
 - Interaction with course faculty during laboratory wet milling demonstrations
- 5:00 Adjourn for the day

Tuesday, January 10, 2012

- 8:00 The wet milling process
 - Starch products, modeling of wet milling and alternative milling technologies
 - Equipment for germ, fiber, gluten and starch separations
- 3:30 Course conclusion

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CORN WET MILLING

January 9-10, 2012



SHORT COURSE OFFERED BY
the Agricultural and Biological
Engineering Department
at the University of Illinois

COURSE VENUE
ACES Library, Heritage Room
University of Illinois
1101 South Goodwin
Urbana, IL 61801

CORN WET MILLING

DESCRIPTION

This course is designed for those wanting a fundamental understanding of the technology and science associated with the corn wet milling process. The course will cover topics on the whole kernel through finished starch products, discuss industry trends and provide laboratory demonstrations. The course is designed for a broad audience to serve representatives from corn wet milling and allied industries, and is taught by faculty having a range of expertise from industry, academia and government research areas.

DIRECTOR

Kent Rausch, University of Illinois
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krausch@illinois.edu

Kent Rausch is an associate professor in the area of corn processing at the University of Illinois. He has coauthored 50 peer reviewed publications on corn processing, coproducts and membrane filtration. Prior to joining the University of Illinois in 1997, he was employed by American Maize Products Company and served on the faculty at Kansas State University.

FACULTY

Bruce Dien, USDA/ARS/NCAUR
Steve Eckhoff, University of Illinois
Dell Hummel, Alfa Laval
David Johnston, USDA/ARS/ERRC
Marvin Paulsen, University of Illinois
Kent Rausch, University of Illinois
Eric Shinsato, Corn Products International
Vijay Singh, University of Illinois
Mike Tumbleson, University of Illinois

PROGRAM (TENTATIVE)

MONDAY, JANUARY 9, 2012

- 8:00 Welcome
The corn refining industry
Kernel structure, composition and cereal chemistry
Other corn processes
Corn dry grind
Corn dry milling
Mycotoxins
Cellulosic ethanol overview
- 12:00 Lunch (included in registration fee)
The corn wet milling process
Steeping
Process simulation
Methods to predict wet milling yields
NIR prediction of starch yield
Laboratory methods: introduction
Wet milling laboratory
- 5:30 Adjourn for the day

TUESDAY, JANUARY 10, 2012

- 8:00 Alternative corn fractionation processes
Enzymatic wet milling
Modified starch products
Starch products and applications
- 12:00 Lunch (included in registration fee)
Separations: germ, fiber, gluten, starch; hydrocyclones, screens and centrifuges
Removal of water: steepwater, corn gluten feed, corn gluten meal; dewatering and drying
- 3:30 Course wrap up and adjournment

ACCOMMODATIONS

A block of rooms has been reserved at the Hawthorn Suites at a rate of \$94.99 plus tax per night. The rate includes complimentary continental breakfast and is guaranteed until December 9, 2011. Contact the hotel directly for reservations:

Hawthorn Suites
101 Trade Centre Drive
Champaign, IL 61802
217.398.3400

Block name: Wet milling short course
Shuttle service is available between the hotel and the short course venue. Parking on campus is only at limited metered spaces and is not recommended.

REGISTRATION

Visit our website to register:
<https://ecommerce.aces.illinois.edu/wetMilling/>
(note: case sensitive)

Advanced: \$995 (until Oct. 10, 2011)
Regular: \$1395 (after Oct. 10, 2011)

Contact Mary Schultze (217.333.5423) for registration questions.

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