

Kothe Distilling Technologies

Distillery Operations - Hands On Certificate Course

Cost: \$2750 per person

This course will provide participants with fundamental knowledge in starting and operating distilleries. A number of presenters will explain topics such as distilling equipment, fermentation, flavor development, legal aspects, sales and marketing. This course is intended for distillers looking to improve their operations, those interested in learning advanced techniques and aspiring distillers with a basic knowledge interested in starting a craft distillery. Students will be divided into groups of five for case study work and the hands on training.

On the first day fundamentals will be reviewed to insure a basic common understanding of distilling and needs for startup distilleries. The second day will focus on legal and business requirements as well as introduce students to alcohol flavor development techniques. Day three will address advanced equipment considerations including data logging and automation. In addition, Sales and Marketing topics will be discussed. Day four will be spent working on equipment. On the last day, students will present their case studies and evaluate sensory samples of spirits.

Upon completion, participants will receive a Certificate of Completion from Kothe Distilling Technologies.

List of Instructors:

Dr. Robert Birnecker – Kothe Distilling Technologies

Dr. Sonat Birnecker Hart – KOVAL Distillery

Richard Hobbs – The Barrel Mill

Oona Hart, Danny Timmins – DANDO Projects Design

Jason Schwerdt – Valparaiso Insurance

Joe Singerling – Fulton Boilers

Steven Baron – Mandell Menkes LLC

Sam Gordon – Imperial Packaging

James Beck – Cereal Byproducts

(Presenters contingent on availability)

DAY 1 (Fundamentals and Theory)

Introduction

History of Distilling

Theory and Fundamentals

Grain in Mashing and Grain out Mashing

Vodka, Whiskey & Gin – focus on grains

Rum and sugar based spirits

Basics of Fruit Mashing (includes microbiology, chemical basics)

Equipment Considerations

Pot Stills, Modern Pot Hybrid Stills and Continuous Systems

Quality Control and Consistency

Common Misconceptions & Discussion

Case Study – Explanation and Tutoring.

DAY 2 (Legal Aspects, Financing and Alcohol Development)

Alcohol and the Federal Government – TTB

Licensing and Regulations

COLAs and Formulations

Certifications (organic and kosher)

Common Pitfalls

Business Aspects of Starting a Distillery

Floor Planning and Additional Equipment

Financing for Distilleries

Expansion of Distilleries

Advanced Session 1 - Alcohol Development

Flavor Development and Macerations

Barrel Selection, Barrel Storage and Barrel Alternatives

Advanced Proofing Methods and Alcohol Finishing

Advanced Filtration - Cold Filtration, Charcoal Options and Unfiltered Product

Equipment Walk Through (KOVAL Distillery)

DAY 3 (Advanced Equipment and Marketing)

Advanced Session 2 - Equipment (Morning)

Technology in Distilling and Recent Developments

Advanced Equipment Tuning - Modern Pot-hybrid Stills

Automating Distilleries

Data Logging and Lessons to Learn

Maintaining Distilleries and Cleaning of Equipment

Insurance and Risk Management

Advanced Session 3 - Marketing and Sales (Afternoon)
Packaging, Branding and Re-Branding - The Key to Success
Distribution - From First Talk to Contract
Managing Your Distribution
Trademarks in Distilling - Pitfalls and Practice
Exporting and Export Markets
Mixology for Distillers - Selling to the Cocktail Community

DAY 4 (Working at a distillery)

Advanced Session 4 - Distilling Operations
Working at a Distillery
Groups in 5-6 per instructor (paired up with distillers and assistant distillers)
8 - 10 working stations
Mashing
Fermentation
Distilling
Alcohol Finishing
Barreling
Liqueur Making (include theory and test distillation)
Bottling
Warehouse Operations
General Maintenance

Held at KOVAL's production facility
Production will be in process
Hands on instruction on running equipment

DAY 5 (Evaluating Spirits and Case Study Presentations)

Case Study Presentations
Students have 20min to present their findings

Sensory seminar
9 samples – heads, hearts, tails, various alcohol strengths
Fruit samples & theory
Grain samples & theory
Whisky samples & theory
Grappa and Liqueurs samples & theory
Rum samples & theory

Graduation