The BarthHaas Hops Academy is a source of inspiration for people with a thirst for knowledge about our shared passion: the wonderful natural hop.
PURE HOP EXPERTISE
BECOME A FLAVOR PROFESSIONAL WITH THE 5 LEVELS OF THE HOP FLAVORIST COURSE

HOP FLAVORIST COURSE LEVEL 1 | THE CONNOISSEUR
THE BASICS OF SENSORY FLAVOR EVALUATION

HOP FLAVORIST COURSE LEVEL 2 | THE SOMMELIER
HOW BOTANY AND BREEDING INFLUENCE HOP FLAVORS

HOP FLAVORIST COURSE LEVEL 3 | THE SNIFFER
PRODUCTION AND CREATION OF AROMAS IN THE BREWING PROCESS

HOP FLAVORIST COURSE LEVEL 4 | THE CLAIRVOYANT
HOW MICROCLIMATE AFFECTS HOP FLAVORS

HOP FLAVORIST COURSE LEVEL 5 | THE MASTER
TOOLS FOR INNOVATIVE FLAVOR DESIGN & FINAL COURSE ASSESSMENT

FOR OUR GROWERS
EXPAND YOUR GROWING EXPERTISE

CUSTOM WORKSHOPS
UNIQUE COURSES WITH TAILORED CONTENT

FIELD TRIP HALLERTAU
EXPERIENCE CULTIVATION, HARVEST & BOTANICAL SCIENCE AT WORK - LIVE IN THE HALLERTAU

HOP SELECTION
ASSESS HOPS AND HOP AROMAS PROFESSIONALLY

HOP FLAVOR IMPACT DAY
EVALUATE AND CREATE HOP FLAVORS IN YOUR BEER

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EVALUATE AND CREATE HOP FLAVORS IN YOUR BEER
DEVELOP YOUR NOSE FOR HOPS:

Theory and background of the BarthHaas quality system
Recognizing pests and diseases in the field
Introduction to HOPSESSED* - The language of hops

Assessing hops: Identifying varietal differences using three examples
Assessing hops: Creating an aroma profile based on whole cone hops or pellets and cold extracts

Providing selected tools for hop assessment, practical examples and aroma training, this course gives you all you need to assess hop harvests professionally and create your own hop portfolio.
The BarthHaas Brewing Solutions Team spill the beans on how they brew characterful beers, by combining their knowledge of varieties, feel for quality and brewing expertise to achieve the perfect flavor.

**HOP FLAVOR IMPACT DAY**

**EVALUATE AND CREATE HOP FLAVORS IN YOUR BEER**

The BarthHaas Brewing Solutions Team spill the beans on how they brew characterful beers, by combining their knowledge of varieties, feel for quality and brewing expertise to achieve the perfect flavor.

**1-DAY SEMINAR**

**HOP ACADEMY HOP FLAVOR IMPACT DAY**

**THE FLAVOR EXPLOSION:**

- An overview of the planet’s most flavorful hop varieties
- Update on breeding and market developments and information on the latest, new hop products from primary sources
- HOPSESSED® – The language of hops. An effective sensory tool for evaluating hops
- Sensory training using cones and pellets from powerfully flavored hop varieties
- Selecting varieties and building your own personal flavor profile
- Hints and tips for using hops in the brewing process
- Tasting and assessing hop flavors in cold extracts and single-hop beers
- Includes the final certificate and course materials
- Your personal Hop Aroma Standards Kit to take home
FIELD TRIP TO THE HALLERTAU

EXPERIENCE CULTIVATION, HARVESTING AND BOTANICAL SCIENCE

Active field research, key hop knowledge, valuable tasting tools and much more await you on our one-and-a-half day harvest expedition through the Hallertau, one of the largest hop-growing areas in the world.

1.5-DAY SEMINAR

Harvest expedition to the Hallertau

HOP EXPEDITION:

- Excursion to the Hallertau: Live field research during the harvest
- Theory and science behind growing, harvesting and botanical science from the BarthHaas Brewing Solutions Team
- First-hand advice directly from hop growers in the field
- Overview of the current market situation for varieties and products
- Introduction to using the BarthHaas HOPSESSED® flavor guide
- Hop tasting with cones and various pellet types plus cold extraction in beer

The ideal practical follow-on to the Hop Flavorist Course!
This course is unique – the world’s most comprehensive course for training true professionals in the flavors of hops. Immerse yourself in the universe of hops and follow a structured syllabus covering the language and secrets of experiencing hops through taste and other senses.
PURE HOP EXPERTISE

If you want to assess hops and create your own sensational flavors, you need the background knowledge:

The five levels of the HOP FLAVORIST COURSE will teach you how cultivation, breeding, varieties, analysis and the brewing process affect the flavor of hops.

HOP FLAVORIST COURSE
THE 5 LEVELS

BECOME A FLAVOR PRO IN 5 LEVELS

Level by level, you will develop your hop flavor expertise producing an individual taster profile, with expert knowledge and professional tools for unique flavor design.

Level 1 | THE CONNOISSEUR
Learn about aroma receptors and how they work

Level 2 | THE SOMMELIER
Shape your sensory memory for different hop varieties

Level 3 | THE SNIFFER
Become a member of an Expert Panel, and receive your own personal taster profile

Level 4 | THE CLAIRVOYANT
Gauge your personal threshold for key hop aroma compounds and bitterness

Level 5 | THE MASTER
On successful completion of the exam you will be able to proudly call yourself a Master Hop Flavorist
The task of training your senses starts with an extended warm-up for your sensory receptors and your brain. It is not easy to express in words what your senses are telling your brain. Fruits, herbs and other natural aromas give us the building blocks for learning how to work with a range of well-known hop varieties.

**THE A-Z OF AROMA:**

- **HOPSESSED®** – The language of hops
- **Training:** Recognize aromas, differentiate and describe 6 hop varieties
- **Theory:** Reading and understanding analyses
- **Aromas and their properties**
- **The physiology of aroma and flavor perception**
- **Sensory test:** Recognizing aromas
- **Exercise:** Categorizing and identifying hop varieties
Hop flavor is determined by many factors. In level 2 of the Hop Flavorist Course, we shed light on how the different varieties, growing regions and breeding techniques affect hop aroma.

**AROUND THE HOP WORLD AND BACK:**

- **Theory:** History of hop breeding and botany
- **Varietal categories:** National varieties, bitter/aroma varieties and how flavor and aroma interact
- **Identifying individual aromas**

**Training:** Describe and differentiate the aroma of 6 hop varieties from a range of growing regions

**Sensory test:** Recognizing aromas

**Exercise:** Categorizing and identifying hop varieties
The aroma of unique, characteristically flavored beers is predominantly produced and adjusted in the brewing process. Train your sensory skills so that we can help you identify your personal tasting profile at the end of the course.

If you successfully pass the Level 3 course, you are qualified for our BarthHaas Expert Panel! We will invite you to sample and evaluate freshly harvested hop samples comprising 40 different varieties!

**SNIFTING OUT THE AROMA:**

- Theory: Hops and brewing – how aroma substances are produced and transformed
- Hop products and their effect on the flavor/aroma of beer
- Training: Identifying individual aromas
- Training: Recall already recognized hop varieties in pellet form and in beer
- Sensory test: Identifying aromas
- Exercise: Identify and categorize hop varieties in the form of cones/pellets and in beer
- Create your personal tasting profile
FLAVOR: IT’S ALL IN THE DETAILS

Theory: Growing regions, cultivation methods, climate, weather, soil, harvest time, and their effect on flavor.

Training: Describe, differentiate and identify known hop varieties from large and small growing regions.

Sensory test: Identifying aromas.

Exercise: Identify growing regions/hop varieties.

Gauge your personal threshold for key hop aroma compounds and bitterness.

Even small changes in the climate can influence the flavor of hops. Knowing how this happens allows us to evaluate aroma and train our sensory skills with regard to the growing region, harvest time and drying method.
In the final course, you will learn about professional flavor design and the tools you need to create innovative flavor combinations. Once you have demonstrated your skills in the final exam, we will prepare your personal taster profile. You will then be a real hop expert and flavor professional.
Hop experts need continuous professional development to keep up with the latest in agriculture, running a business, legal aspects, sustainability and brewing trends. Therefore, BarthHaas HOPS ACADEMY offers tailored courses with specific content for flavor professionals, groups, institutions, schools and universities.
**CUSTOM WORKSHOPS**

What topics are relevant to you? We are happy to put together tailored training with our hop experts and flavor professionals.

**HOPS IN BREWING**

Learn why hops are the most important detail in brewing, and how bitterness and hop oils affect flavor and aroma.

- Traditional and modern hopping
- The chemistry of hops in brewing
- Dry hopping
- Hops and hop products
- Assessing hops to prevent foam production in the brew house and during fermentation
- Calculating yield in the brewing process
- Using hops and hop products for non-alcoholic and reduced alcohol beers
- New hop products

**ANALYSIS**

We take a close look at these wonderful climbing plants and learn how to analyze hops and hop products.

- BarthHaas – product-specific analyses
- Recognized analysis methods for hops
- Specific analyses of relevant hops substances in beer

**HOPS ACADEMY CUSTOM WORKSHOPS**

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COMMERCIAL ASPECTS OF HOPS

The hop market is a niche market, so it is even more important to understand in detail the intricacies of hop production, hop growing regions and the structure of the hops industry.

- Hop supply chain
- Demand for hops
- Variables influencing the price of hops
- Costs of hops in beer
- Hop buying strategies

QUALITY MANAGEMENT/FOOD SAFETY

Anyone hoping to be a successful hop farmer has to ensure the continuous quality and safety of their raw materials.

- Quality management requirements for the EU hop industry
- Quality management requirements for the US hop industry
- International legislation
- Maintaining quality during hop processing
- Contaminants in hops – a critical view

SENSORY

Hops are the heart and soul of the beer. Understanding and expressing the aroma and flavors in words is an art form.

- Hop aroma in beer
- Hop bitterness in beer
- HOPSESS® – the language of hops and hoppy beers
- Guide for organizing a tasting panel
- Hops and flavor stability

SUSTAINABILITY

As a traditional craft, hop farming is intrinsically linked to sustainability, fairness and social responsibility, aiming for a benefit for all.

- Sustainability in hop production
- Sustainability in product safety
- Social sustainability
- Fair relationships between brewers and suppliers

HOPS ACADEMY CUSTOM WORKSHOPS
As a grower, you provide the foundations for what all the best beers around the world need. We will tread the path to unique flavors and assured hop quality together with you, sharing our knowledge and experience to establish the best partnerships in the hop business.
Learn all about sustainable production of the raw material hops, in tune with nature, the environment and your budget.

BarthHaas Grower Training
Sustainability in hop production
Social sustainability

When hops meet economics, it all comes down to planning and efficiency.

Hop market (supply, demand, alpha levels, key market trends, etc.)
Selling (strategies, etc.)
BarthHaas Grower Portal
BarthHaas Tool Box
Production and Profit

Essential details about hop cultivation, sale and regulations.

Hop supply contract and the General Agreements on the Hops Supply Contract (AVHLV)
Types of contract and additional contracts
Laws and regulations

Hop production changes as quickly as the market itself. Stay up-to-date with us.

Irrigation workshop
Pest control
Fertilization (soil analysis, fertilizers)
Harvest (drying, energy efficiency, etc.)
Processing, logistics and hop shipping
Sampling and troubleshooting
Production methods in hop growing regions in other countries

Be it cultivation methods, origin or aroma: get to know the great variety of hops.

Hop breeding
Beer tasting
Hop selection

If you have the choice, use your new knowledge to select the correct hop products for every brewing application.

Client demands
Quality assurance in hop production
PHA and downstream products
Products for use outside of brewing
Production plant tours
We share knowledge & love

Quench your thirst for information about the potential and creative possibilities of this green gold. At the BarthHaas HOPS ACADEMY, we give inspiration and expertise to everyone who loves this wonderful natural product, hops.