

HAMILTON 

INSTINCT V

Software Training



HAMILTON Bonaduz AG

Software Training INSTINCT V

FOR MORE THAN 50 YEARS,
THE NAME HAMILTON HAS BEEN...

...associated worldwide with uncompromising quality in precision fluid-measuring products. Because of the dedicated nature of the products we supply, it is important to us that our customers have the opportunity to become fully trained on the operation of our products. Our software training covers the needs of both laboratory operators and assay programmers.

TAKE THE MAXIMUM ADVANTAGE OF YOUR INSTRUMENT BY:

- Ensuring the safety for your staff and equipment
- Enabling your staff to adapt the instrument to new protocols or workflows
- Increase efficiency through optimization of processes
- Reducing downtime due to erroneous operation

WHAT WE OFFER

- eLearning lessons and current software packages to prepare for the Basic Training
- Small group size (limited to 8 participants for maximum efficiency)
- Mix of theory and practical exercises
- Availability of trainer for responding to questions after the training
- All training material and files generated during the training provided for later reference
- Training certificate upon successful completion of a course

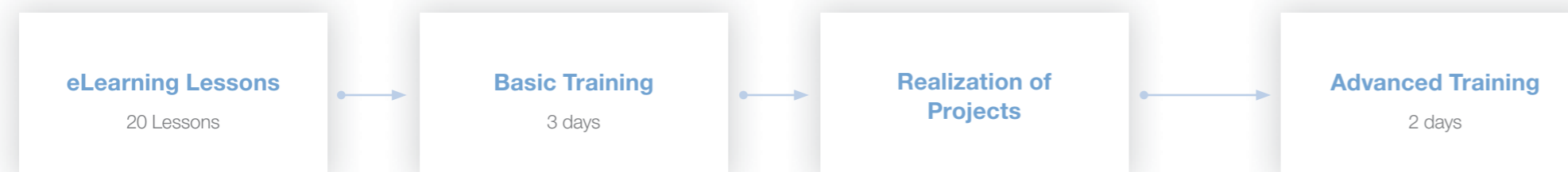
**We are looking forward to welcoming you to one of our trainings
and to sharing our knowledge with you!**



Software Trainings INSTINCT V

BEGINNER TO MID-LEVEL

ADVANCED



eLEARNING

(20 lessons, each approx. 15 minutes to complete, free of charge)

- VANTAGE Overview
- INSTINCT V Overview
- Starting and Managing a simple Assay
- Scheduler Handling
- XSL (Text-oriented programming) Basics
- ...

BASIC TRAINING

(Bonaduz/virtual, 3 days, 2160 Euros per participant)

This course transmits entry- to intermediate level knowledge to users and conveys both programming with the Graphical Assays Editor, as well as with XSL Programming.

- Programming using the Graphical Assay Editor
- Transfer Patterns
- Scheduling and Running Assays
- Interpreting Messages from INSTINCT V
- Input Dialogs
- Using Worklists
- Using Libraries
- Generating Run Reports
- Error Handling
- Liquid Handling Introduction
- XSL Programming Basics
- XSL Functions/Methods
- XSL Conditionals and Loops
- XSL Creating and using Libraries

ADVANCED TRAINING

(Bonaduz/virtual, 2 days, 1440 Euros per participant)

This course aims at users who want to explore the extended capabilities of INSTINCT V and therefore focuses on XSL Programming.

Please note that the attendance of a basic training is a pre-requisite for attending the advanced training.

- File Handling
- Transportation
- Custom Dialogs
- Dynamic Transfer Patterns
- Advanced use of Variables, Objects, Functions, and .NET
- Simulation Data
- ...

LABWARE TRAINING

(Bonaduz/virtual, 1 day, 720 Euros per participant)

This training aims at users who want to create and use customized Labware.

- Creating models of customized Labware



On-Site/Virtual/Customized TRAINING

DEPENDING
ON YOUR NEEDS

If desired, we can send instructors to provide a regular training session at your company. Furthermore, there is the option of organizing customized trainings either at your company, in Bonaduz or virtually, depending on your individual needs.

Please contact us for further information regarding training at your company or customized training.

Software Training REGISTRATION

The fee for trainings in Bonaduz includes lunch at the Hamilton "Green Sense" Canteen and excludes taxes, traveling and accommodation expenses.

Thanks to the powerful simulation capabilities of INSTINCT V, we can also offer trainings in a virtual* format.

For dates, availability, prices and registration of our regular local and virtual trainings, please scan the **QR code** or **see here**.

Note: The deadline for registration is three weeks before the training starts



CONFIRMATION

After booking, a detailed confirmation for the training session will be sent via email. If desired, Hamilton can support you with accommodation arrangements. Please bear in mind that a sufficient number of participants must be confirmed for the training; otherwise, Hamilton is permitted to cancel or postpone the training course. The registered participants will be informed as soon as possible.

* Requirements:

- Compatible computer with a reliable internet connection via cable, headset
- Access via Skype For Business Web App or Zoom

CONTACT

HAMILTON Bonaduz AG

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Email: svandemoosdijk@hamilton.ch

Activities in-and-around BONADUZ

SIGHTSEEING IN CHUR AND LEISURE ACTIVITIES IN THE DOMLESCHG AREA

If you arrive over the weekend, you'll have enough time to discover our surroundings in the beautiful canton of Graubünden. You might even be interested in spending your evenings in Chur, the city closest to HAMILTON Bonaduz AG.

An impressive walk through the Viamala gorge will show you the power of water on solid stone over centuries.

EXCURSIONS

- Rhäzüns-Feldis-Scheid-Rothenbrunnen-Bonaduz/Chur (by cable car, on foot or by train) 3 hrs
- Chur-Lenzerheide-Chur (by bus or car or on foot around Lenzerheide Lake) 4 hrs
- Chur-Arosa-Chur (by train or car - 368 turns in the road!) ½ day
- Bonaduz-Viamala-Zillis-Bonaduz ½ day
- Bonaduz-Thusis-Davos-Thusis-Bonaduz 1 day
- The Bernina Express (train) Chur-Tirano-Chur 1 day
- The Glacier Express (train) Chur-Zermatt-Chur 2 days

ADDITIONAL INFORMATION

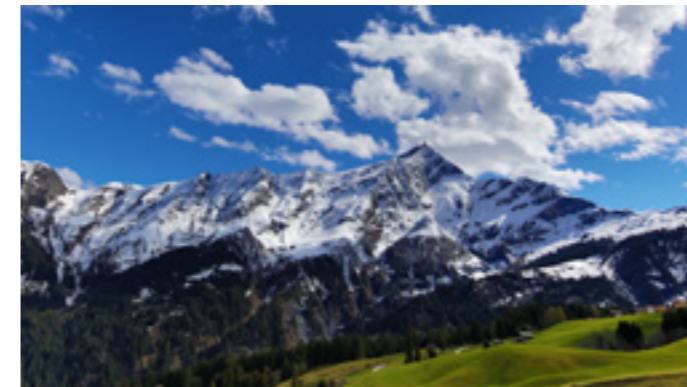
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Tel: +41 81 252 18 18
Fax: +41 81 252 90 76

Email: info@churtourismus.ch

Internet: <http://www.churtourismus.ch> (German only)

The Tourism Office can provide you with information about alpine and cross-country skiing, ice skating, hockey games, sledding, rafting, canyoning, fishing, swimming, golf, tennis, squash, ballooning, cycling, paragliding, mountain-biking, horse riding, hiking and much more.



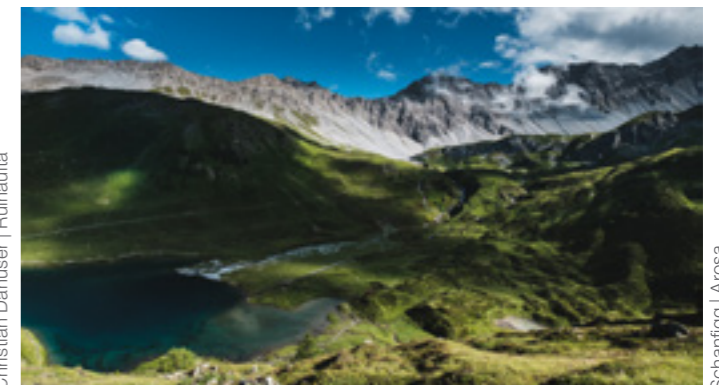
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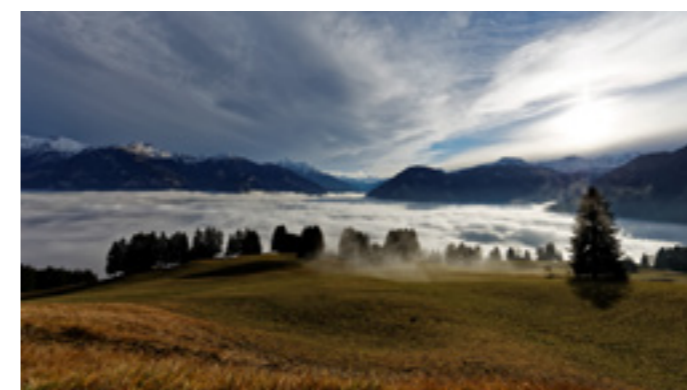
Davos Klosters | Lake Davos



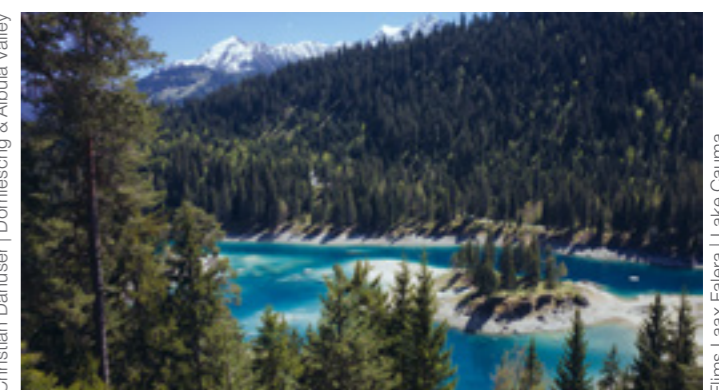
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Christian Danuser | Domleschg & Albula Valley



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Basic Trainings

APPENDIX

COURSE CONTENTS IN DETAIL

BASIC TRAINING

- Programming using the Graphical Assay Editor
 - Step by Step from Beginning to End (from building and configuring a system from scratch to the finished run)
 - Getting to know the three key terms: Position Resource, Processing Item, Transfer Pattern
- Transfer Patterns
 - How to define the relationship between source and target wells
- Scheduling and Running Assays
 - Understanding Scheduling and the information provided in the Schedule
 - Loading, running and unloading in Simulation Mode
- Interpreting Messages from INSTINCT V
 - Which information channels are available for what purpose
 - How to find the desired information in the Traces (Logfile)
- Input Dialogs
 - Opening the way to dynamically adapt the run to user inputs
- Using Worklists
 - How to control pipetting steps via Excel files
- Using Libraries
 - Extending the capabilities of the Graphical Assay Editor using the power and flexibility of XSL Code
- Generating Run Reports
 - Generating an Excel file that shows everything that has happened with each well of any Labware of interest
- Error Handling
 - How to deal with errors (like a cloth blocking a tip) in a way that the run can still be successfully finished for all the unaffected tests in an interactive, semi-automatic or even fully-automatic fashion
- Liquid Handling introduction
 - Tricky liquids and how to adapt the pipetting parameters to their specific properties
- XSL Programming Basics
 - The structure of the Code
 - Adding definitions of Variables, Position Resources, Processing Items, Transfer Patterns
 - Adding Commands for pipetting
 - The concepts of Variable Mutability and Variable Scope
 - Input Dialogs in XSL
- XSL Functions/Methods
 - Getting to know object oriented programming in XSL and the powerful capabilities of expressions
 - Using IntelliSense to quickly find the desired method among the vast number of built-in methods
- XSL Conditionals and Loops
 - How to create decision branches and iterations in the code, allowing for complex and highly-dynamic assays
- XSL Creation and using Libraries
 - How to pack code snippets into ready-to-use Subroutines (self-made functions) and wrap those into libraries that can be reused by other XSL Assays, as well as in the Graphical Assay Editor

IMPORTANT NOTICE

The content of these training programs is subject to change without notice. Every effort has been made to ensure the accuracy of this manual's content. Should any errors be detected, HAMILTON Bonaduz AG would greatly appreciate being informed of them. The above notwithstanding, HAMILTON Bonaduz AG can assume no responsibility for any errors in this brochure, or for changes to training dates or the consequences thereof.

ADVANCED TRAINING

- File Handling
 - How to open and read files (.csv or .xlsx)
 - How to represent the data inside XSL in the form of lists for further processing
- Transportation
 - How to choose the preferred transportation Tools (between Track Gripper, Internal Plate Gripper and Quad Core Gripper)
 - Transportation parameters for the Internal Plate Gripper
- Custom Dialogs
 - Creating advanced input and output dialogs as stand-alone documents that can be used by any Assay
 - How to map dialog element values to variables in the XSL Code
 - Event-controlled visibility of dialog elements
- Complex Transfer Patterns
 - Transfer Patterns with multiple source and/or target labware
 - How to modify a Transfer Pattern at a granular level for full programmatic access and flexibility
- Advanced use of Variables, Objects, Functions, and .NET
 - Using Variables or the Pipetting Context to specify values dynamically and/or to reduce redundancy in the code
 - XSL Object as a handle to many property fields which don't accept standard variable types, increasing the level of parametrization
 - Evaluating return values of pipetting commands for advanced Error Handling
 - Using .NET functionality to further-extend the flexibility of XSL Code

- Simulation Data
 - Using XML files to simulate the reading of barcodes

LABWARE TRAINING

- Content of a labware
- Terms of labware
- Design of a carrier and MFX Modules with the labware editor
- Design of plates (MTP, DWP, PCR) with the labware editor
- Design of tubes with the labware editor
- Design of troughs with the labware editor
- Test runs in simulation and reality
- Examples of changing a labware

REQUIREMENTS

- Windows-based PC knowledge
- For the INSTINCT V Advanced Training the completion of the INSTINCT V Basic Training is a prerequisite.
- English language skills



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