

# The BD LSRFortessa™ X-20 and BD FACSCelesta™ Operator Course

## Course Overview

Aim:	Learn how to operate & maintain the BD LSRFortessa X-20 or the BD FACSCelesta and generate & analyze multicolor panels
Length:	4.5 days
Participants:	6 (maximum)
Location:	BD European Training Center in Belgium
Language:	English

## Course Description

This 4.5 days course teaches the operation of the BD LSRFortessa, BD LSRFortessa X-20 and BD FACSCelesta.

Additionally, the challenges of successful multi-parameter analysis in terms of antibody-fluorochrome selection, instrument setup including High Throughput Sampler (HTS) & Quality Control (BD™ CS&T software), compensation, selection of controls (FMO) and statistical correct analysis of data will be addressed.

A special focus is set on the official maintenance procedures by a BD Technical Specialist.

This course transfers the necessary knowledge to maintain your instrument properly and master the challenges of designing & analyzing multi-parameter experiments to get accurate & reproducible results.

Theory and hands-on exercises will be equally balanced.

The small class size offers an optimal setting for hands-on learning and interaction with the instructor.

## Who should attend

This course is intended for participants with a BD LSRFortessa, BD LSRFortessa X-20 or a BD FACSCelesta who want to learn the official procedures for maintenance as well as getting the knowledge necessary to make optimal use of the multiple options that these instruments offer.



Special  
Group  
Offers!

## Course Prerequisites

None. Participants not yet familiar with the BD FACSDiva™ software will be trained separately on the first day to be able to follow the class, while already experienced users will get an advanced insight into this software.

## What you will learn

After completing this course you will be able to:

- Operate & maintain the BD LSRFortessa/X-20 or the BD FACSCelesta (incl. HTS if applicable)
- Perform all functions of Quality Control using the BD CS&T software
- Use the BD FACSDiva software for basic and advanced functions (Batch Analysis) to do correct and sensitive analysis of your samples
- Manage the challenges of accurate compensation
- Select the best reagent combinations for intra- and extra-cellular staining (incl. necessary controls)

## Dates and Registration

To view available dates and register for a course, please click on the link below and select your country:  
<http://www.bdbiosciences.com/eu/s/training/classroombased>

If you have any questions, please contact:  
[BDB.Training@bd.com](mailto:BDB.Training@bd.com)

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	Theory	PRACTICAL EXERCISES two participants per instrument
<b>BD LSRFortessa X-20 &amp; BD FACSCelesta</b>	Generation & Analysis of Flow Cytometry Data using the BD LSRFortessa X-20 or the BD FACSCelesta.	Operation of the BD LSRFortessa X-20 or BD FACSCelesta incl. all startup / shutdown procedures. Acquisition & analysis of human blood (BD™ MultiCheck) and mouse spleen samples using tubes or the High Throughput Sampler (HTS).
<b>Maintenance &amp; Cleaning</b>		Cleaning & Maintenance Procedures for the BD LSRFortessa X-20 and the BD FACSCelesta including the HTS. Tips & Tricks from a Technical Service Specialist.
<b>The BD FACSDiva software</b>	<b>Advanced use of the BD FACSDiva software:</b> FAQ: What you always wanted to know. Digital Theory, Statistics. Use FCS Files to learn more about: Ratio and Batch Analysis.	<b>Basic use of the BD FACSDiva software:</b> Data-acquisition, display, gating & quantification. Data Management.
<b>BD CS&amp;T software</b>	QC that guarantees reproducibility and accuracy using BD instruments.	Generate Configurations, run a Baseline, Reset Target Values, Daily Performance Check. Interpretation of Baseline & Daily Performance Check Reports.
<b>Instrument SetUp &amp; Compensation</b>	Application Settings – how to setup BD Flow Cytometers properly.  The Rules of Compensation.	Generate, save & re-use Application Settings.  Automated compensation using tubes or a 96 well plate (HTS, if applicable). The Label-Specific Compensation.
<b>Fluorochromes &amp; Panel Design</b>	BD Fluorochromes – 16 Colors for Success.  Optimized Panel Design.	Analyzing differently stained samples and already prepared FCS Files to experience the result of “Data Spread Effects”. Understand their origin and how to overcome them.

## What you will receive

- A printed training manual that includes the presentations and exercises
- Sample preparation protocols and reagent data sheets
- A 2 GB memory stick to save FCS files of all data generated during the training
- A Certificate of Completion

Lunch is provided on all days at our facilities.

**This course includes transportation and accommodation as well as one group dinner.**

## Location

BD Biosciences European Training & Education Center  
Erembodegem-Dorp 86  
9320 Erembodegem  
Belgium

## SPECIAL GROUP OFFERS

Any institute / department that pays for the same training date **more than three places** can optionally:

- Add one **additional participant** for free, or receive a **discount** of 20% on the tuition fee.
- Discuss the possibility of **adaptation** of the course content according to individual needs (request must be made at least 4 weeks before the training date).
- Choose to get the training delivered in Dutch, French or German course language (request must be made at least 4 weeks before the training date). Printed materials are always English.