

# SkySpark® Essentials 3



The “**SkySpark Essentials**” training program provides students with the essential information to start to use and implement SkySpark. SkySpark Essentials is an in-person, **three-day** session presented in a classroom setting. The training program consists of 5 Modules, each of which builds on the knowledge acquired in the previous Module. The Modules include:

- M1: SkySpark Overview - Working with the SkySpark User-Oriented Apps (Day 1)
- M2: Building a Project with SkySpark Builder Tools (Day 1)
- M3: On boarding data – Setting up Connectors and Importing data files (Day 2)
- M4: Creating Custom Visualizations with ViewBuilder (Day 2)
- M5: Introduction to Axon Programming (Day 3)

A brief description of each module is provided at the end of this section.

Completion of Module 1 provides an understanding of the capabilities, features and use of the product. This session is strongly recommended for technical salespeople, and is required for students that will participate in additional training modules 2, 3, 4 and 5. It provides the essential understanding of the features and capabilities of SkySpark Apps needed to take advantage of the additional training sessions. It is also the core material typical end users need to know to use SkySpark.

## Schedule and Costs for In-Person, Classroom SkySpark Essentials Training

Training begins at 9:00AM ends at appx 5PM each day. Lunch and breaks are provided on each day.

**Registration Cost for “SkySpark Essentials” training** is \$1400 per student (list price). SkyFoundry schedules classes on a regular basis. Typical classes have from 10-16 students. Classes are hosted in Richmond VA and other locations. Check the SkyFoundry Calendar latest schedule information:

<http://www.skyfoundry.com/forum/calendar/>

## Requirements and Recommended Preparation

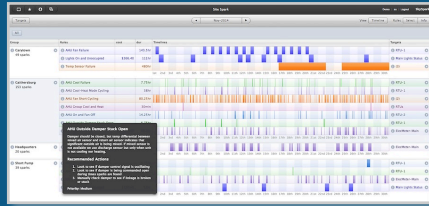
SkySpark Essentials makes extensive use of the SkySpark Demo database, which is available with all copies of SkySpark. It includes a real-world example of a 4-building portfolio with:

- A range HVAC equipment and energy meters
- Multiple years of sensor data that continues to automatically generate over time
- A selection of Rules that automatically generate sparks and produce views in the various Apps.

Students will need:

- A laptop computer with Admin access rights, SkySpark software installed with enough capacity to run the Demo project (130 Points)

# SkySpark<sup>®</sup> Essentials



**Preparation - continued: We strongly recommend** that students prepare for the SkySpark Essentials class by attending a live demonstration of the product presented by SkyFoundry personnel referred to as the SkySpark Deep Dive Demonstration Webcast. Attending the detail demonstration provides an essential understanding to support the activities of the SkySpark Essential course material. Upcoming demonstration sessions can be found on our calendar here: <http://www.skyfoundry.com/forum/calendar>

We also recommend that students review the training videos, which provide an overview the user-oriented SkySpark Apps. Students are requested to view the videos in **Sections I and III** as a minimum. The Training Videos can be found here: <https://skyfoundry.com/doc/docTraining/index>

**Note regarding fully self-directed learning:** The "SkySpark Essentials" training materials are provided at no cost to SkyFoundry customers and can be used for fully self-directed learning.

## Remote and On-Site Training

SkyFoundry can also offer customized training services, including remote training on specific topics/Modules via webcast, and On-site training for groups. Contact SkyFoundry for information on pricing and scheduling.

## SkySpark Certification Testing

SkyFoundry offers an online certification test in conjunction with SkySpark Essentials to validate student skills. The online certification test is available to anyone who attends an in-person class or learns on their own using SkyFoundry training materials. The Essentials Certification is made up of two sections.



1. General Knowledge questions. (true / false, multiple choice, fill in the blank)
2. Exercises completed working with a SkySpark database downloaded from SkyFoundry Secure site (you need to be able to use an up to date copy of SkySpark to do the exercises)

Each user is given a link and password to the online certification, which can be accessed from desktop, tablet or mobile device. Students have the ability to pause, save and resume as time allows and we expect that most people will take approximately 3 hours to complete. Upon successful completion a certificate will be generated ready or printing / downloaded. In addition, an email with summary information and link to certificate will be provided. Essentials certification is free within 60 days of completion of the course for new students. There will be a \$100 administration fee for the certification outside of 60 days or for those that utilize self-directed learning.

You can register here for the SkySpark Essentials Certification: <https://goo.gl/forms/tWwqTc2sasWlvhbL2>

# SkySpark Essentials: Description of Training Modules



**Module 1** Provides an understanding of the capabilities, features and use of the product. This session is strongly recommended for technical salespeople, and is required for students that will participate in additional training modules 2, 3, 4 and 5. It provides the essential understanding of the features and capabilities of SkySpark Apps needed to take advantage of the additional training sessions. It is also the core material typical end users need to know to use SkySpark.

**Module 2** is targeted at the implementers/programmers, but is also recommended for auditing by sales engineers and others that will be responsible for scoping, quoting and managing projects. The instructor leads the student through an exercise of building a Project database (Site, Equipment and Points) for a sample facility including a basic import of historical data, set up of an analytic rule, a KPI, a normalization formula, a custom energy baseline, and sample report queries. Module 2 makes up the afternoon of Day 1 of the in-person Classroom version of the Essentials course and follows a detailed workbook presented in Powerpoint format. This workbook is available for students that wish to complete this material on their own and is available at: <http://www.skyfoundry.com/file/57/Training-Module-2-Workbook-Using-Builder-v215.pptx>

**Module 3** focuses on the process for on-boarding data from external sources. It covers setting up connectors to external systems for data acquisition and on-boarding of data from files (CSV). Module 3 makes up the morning of Day 2 of the in-person Classroom version of the Essentials course.

**Module 4** provides a hands-on exploration of the SkySpark ViewBuilder tools, which enable users to go beyond the standard SkySpark Apps to build their own Apps, Views and Reports. Module 4 makes up the afternoon of Day 2 of the in-person Classroom version of the Essentials course.

**Module 5** takes students into the Axon programming language, which underlies all of SkySpark. It is used to write Rules, database queries, and data import and transformation functions. Module 5 starts with a review of Axon concepts and tools and continues on to present a range of real-world oriented exercises to help students learn key concepts and begin to become proficient as an Axon programmer. Module 5 makes up the entire third day of the in-person Classroom version of the Essentials course.

Note: Axon is a programming language so previous experience with programming is essential. Module 5 is targeted at students who will be involved in the development of Axon code to import data into SkySpark and write Axon functions and analytic rules.

**Module 5 Preparation:** It is expected that the attendees of Module 5 have accomplished the following:

- Completed Modules 1, 2, 3 and 4
- Familiarized themselves with the documentation including all videos in Sections IV, V, and VI
- Have programming experience with one of the following languages: Java, C#, VB, JavaScript, Python, Ruby, etc