

DIGITAL

# PROFICY OPERATIONS HUB FOR MES

Instructor-led Training

## Topics

- Discuss the architecture and components of Proficy Operations Hub.
- Navigate the Operations Hub (Classic) and Configuration Hub design environments.
- Create, configure, and implement a basic application with queries and widgets/plugin-ins.
- Define and build an asset model.
- Use Proficy Historian and Plant Applications with Operations Hub.
- Create Apps that utilizes the Relational Database Connector.
- Deploy a custom MES dashboard with Plant Applications Plug-ins.
- Use the Plant Applications REST API inside an App.
- Apply Operations Hub security.

## Course Description

The Proficy Operations Hub for MES course is designed to provide the student with a good working knowledge of using Operations Hub as part of a MES implementation. Topics covered have an developer focus as you learn to use the designer environment. Extending the capabilities of Proficy Historian and Plant Applications with Operations Hub is the central theme of this training. The course provides lab time for building skills essential to developing applications and visualization solutions for a manufacturing environment.

## Who should attend?

This course is designed for process, automation, or instrumentation engineers and system integrators who will be developing, configuring, and using Proficy Operations Hub with the Proficy Historian and Plant Applications manufacturing solutions.

## Are there any pre-requisites?

Participants should have a working knowledge of industrial applications. IIOT exposure and experience with Proficy Historian and Proficy Plant Applications solutions is recommended.

## Time Commitment

16 hours

## Delivery

Instructor-led (Distance learning or classroom)

## Part #

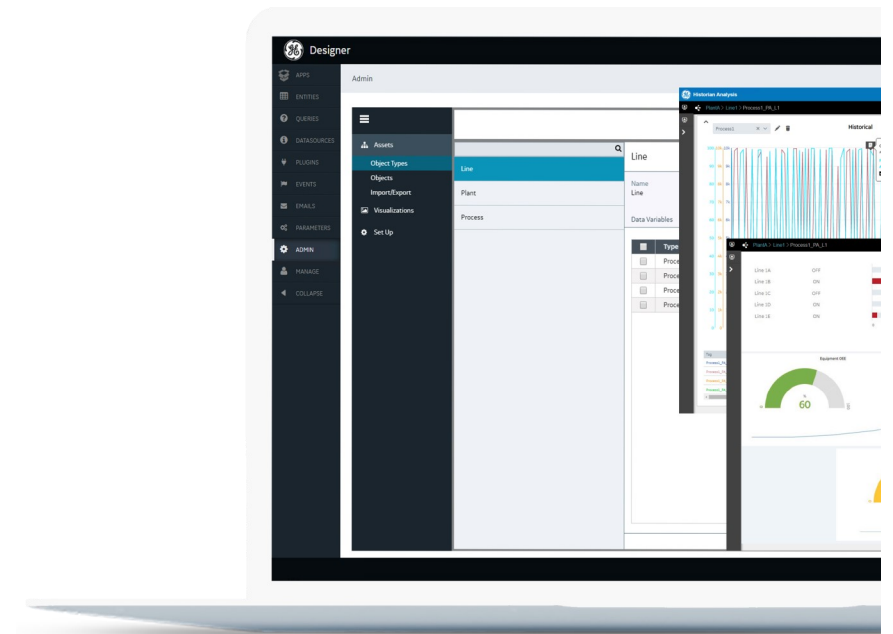
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## Level

Fundamentals

## Course Schedule

Click [here](#) for the latest details.





# DIGITAL EDUCATION SERVICES

## Session 1

### Introduction

Learn of the capabilities and positioning of Operations Hub in the digital plant product suite. Review the technologies within Operations Hub and the importance of security certificates and Proficy Authentication. Explore how to navigate the user interfaces of Operations Hub.

### Architecture

Look at deployable Operations Hub architectures, components and the installation process. Discuss licensing, data sources and connectivity types. Get familiar with the software by creating a basic app, configuring pages and setting up navigation.

### Applications

Explore the Operations Hub and Configuration Hub designers. Study application development tasks, application page creation and using cards and widgets.

## Session 2

### Operations Hub and Historian

Discover how to utilize Proficy Historian with Operations Hub. Examine creating a Historian data source and how to employ the Historian Analysis app and trend widget. Understand how to associate tags with the Operations Hub Asset Model.

## Session 2 (continued)

### Historian Data and Queries

Learn how to use Proficy Historian data to animate widgets. Discover how to build Operations Hub queries and add queries to pages. Build a KPI page with Proficy Historian values utilizing the container, breadcrumb, HTML and datetime widgets.

## Session 3

### MES Data Sources

Learn to add a relational database data source, create a query and design a page that utilizes relational database data. Investigate building and use REST API calls inside Operations Hub. Test API calls using tools like Swagger and Postman. Examine how to create entities using JSON results from a REST API call.

### Operations Hub and Plant Applications

Study the integration features and built in functionality of Plant Applications with Operations Hub. Understand the different Plant Applications web client applications while learning to utilize Proficy Plant Applications Plug-ins. Build an Operations Hub application leveraging the built-in Plant Applications web client applications. Manage application properties and use the Pivot Chart widget.

## Session 4

### Operations Hub Security

Examine the Operations Hub security model and the User Authentication and authorization (UAA) service. Study how to add new users, identify user types and apply Operations Hub UAA groups. Investigate Operations Hub roles and gain an awareness of LDAP accounts and the UAA mapping tool.

### Appendix I: Operations Hub Classic Labs

Use the appendix if supporting older versions of Operations Hub. Review the course labs to see the process of how to build pages using the original Proficy Operations Hub designer environment.

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### About GE Vernova

Building on over 130 years of experience and proven innovation, GE Vernova brings together and harnesses the collective power of GE's portfolio of energy businesses including Power, Wind, Electrification and Digital to focus on electrifying the world while simultaneously working to decarbonize it.

With focus, GE Vernova is accelerating the path to more reliable, affordable, and sustainable energy, while helping our customers power economies and deliver the electricity that is vital to health, safety, security, and improved quality of life.

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### About GE Vernova's Digital Business

GE Vernova's Digital business is putting data to work to accelerate a new era of energy. We deliver the platforms and intelligent applications necessary to accelerate electrification and decarbonization across the energy ecosystem – from how power is created, how it is orchestrated, to how it is consumed. More than 20,000 customers around the globe use our software to help plan, predict, manage, and optimize operations today for a sustainable tomorrow.

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