

Xcelerator Academy Learning Maps

Your learning: At a Glance





Collaboration

Connect people and processes across boundaries

Teamcenter® is the broadest and deepest PLM system available, providing a digital thread that connects people and processes across traditional functional silos.

[Teamcenter Learning →](#)

Bring your software lifecycle under control

Polarion ALM unifies the software development lifecycle with real-time management data, allowing teams to respond faster to new opportunities and demands.

[Polarion Learning →](#)





Applications

Low-code app development drives digitalization

The Mendix low-code application development platform helps developers rapidly build, deploy and operate enterprise-grade software applications.

[Mendix Learning](#) →

Coming soon!





Analytics

Connect your enterprise with the IoT

Insights Hub uses IoT solutions to optimize operations, create better products and drive new business models by connecting data from products, plants, and systems.

[Insights Hub Learning →](#)





Operations

Digitalize manufacturing operations management

Opcenter enables the complete digitalization of manufacturing operations providing users end-to-end visibility into design, production and manufacturing.

[Opcenter Learning →](#)





Manufacturing

Synchronize engineering, manufacturing and service

Tecnomatix helps transform ideas into products and achieve synchronization between product and manufacturing engineering, production, and service operations.

[Tecnomatix Learning →](#)

Digitally transform part production

NX for Manufacturing drives efficient end-to-end part manufacturing operations and delivers high-precision parts through digitalization for increased productivity and profitability.

[NX for Manufacturing →](#)





Simulation

A complete digital twin simulation solution

Simcenter™ software combines system simulation, 3D CAE, and test to help you optimize designs and deliver innovations faster and with greater confidence.

[Simcenter Learning](#) →





Electronics

Smarter products, faster

Achieve smarter, more capable products with the help of an industry-leading suite of IC, PCB and electronics design, verification and manufacturing solutions.

[Siemens EDA Learning](#) →

A comprehensive E/E systems development solution

Capital offers capabilities for the design, manufacture, and service of electrical systems and is now expanded to encompass software architectures, network communications, and embedded software development.

[Capital Learning](#) →





Mechanical

The next generation of mechanical design, simulation, and manufacturing

Siemens NX delivers the next generation of mechanical design, simulation, and manufacturing solutions to help companies develop better products, faster.

[NX Learning](#) →

Enable creative design, fast

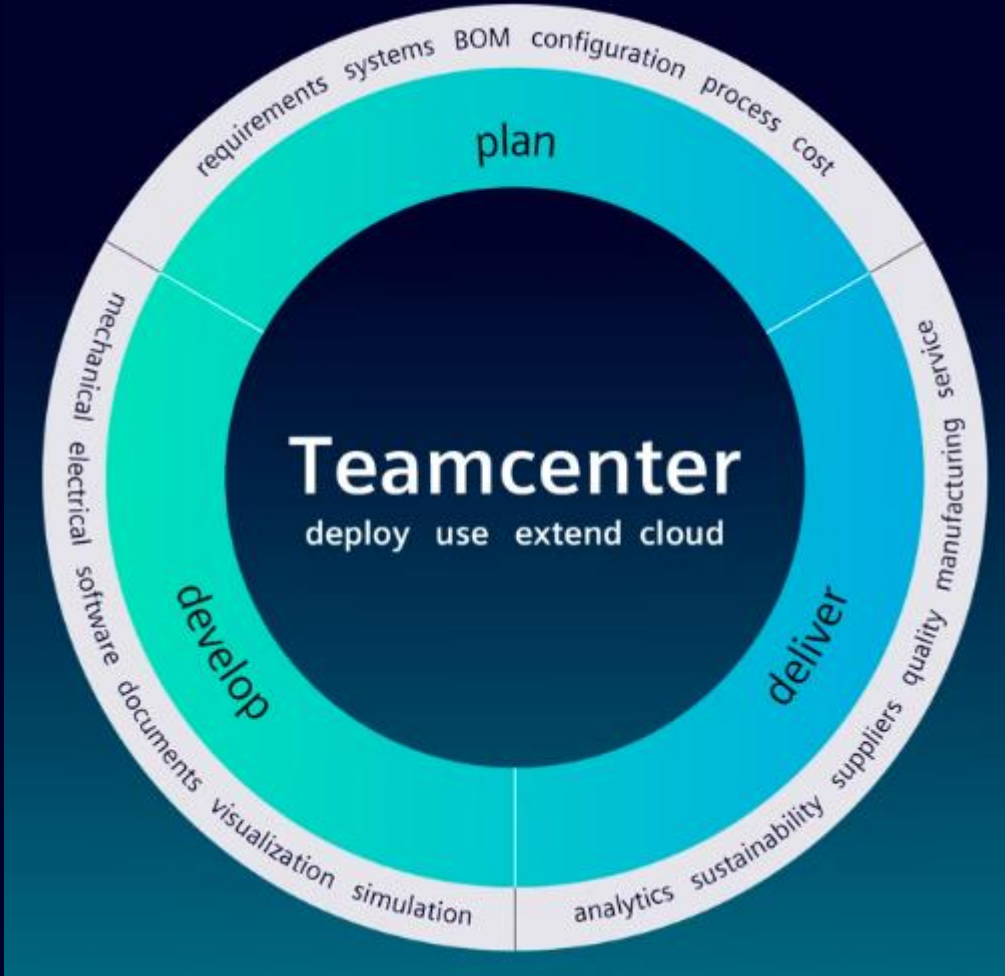
Solid Edge offers fast, flexible tools in an affordable and easy-to-use package, allowing companies of all sizes to digitalize product development.

[Solid Edge Learning](#) → **Coming soon!**



Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below



LEARN THE PLATFORM

Team Members

Learn the fundamentals of using the Teamcenter PLM Foundation Platform

INSTALL, CUSTOMIZE, OR ADMINISTER TEAMCENTER

Installers, Customizers or Administrators

Learn how to install the Teamcenter Database, Server, and Rich Client / Active Workspace, customize Teamcenter to meet business requirements or Administer Teamcenter data and processes

GET CERTIFIED

Teamcenter-Teamcenter X Associate

Learn features of Teamcenter / Teamcenter X to prepare for associate consultant certification.

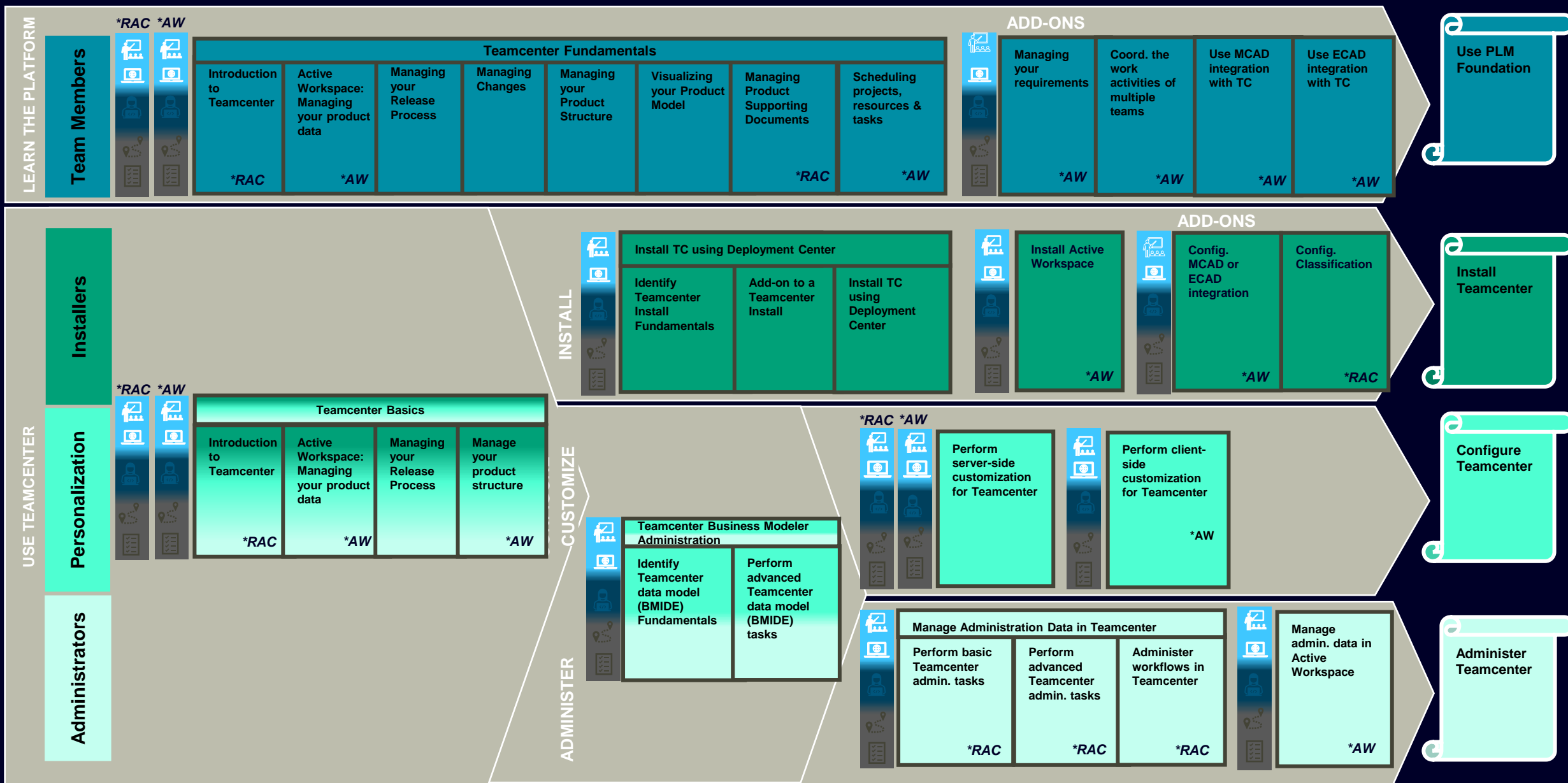
Teamcenter Product Professional

Learn features of Teamcenter / Teamcenter X to prepare for associate consultant certification.



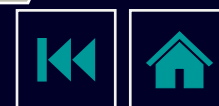
SIEMENS

Teamcenter Learning → At a Glance



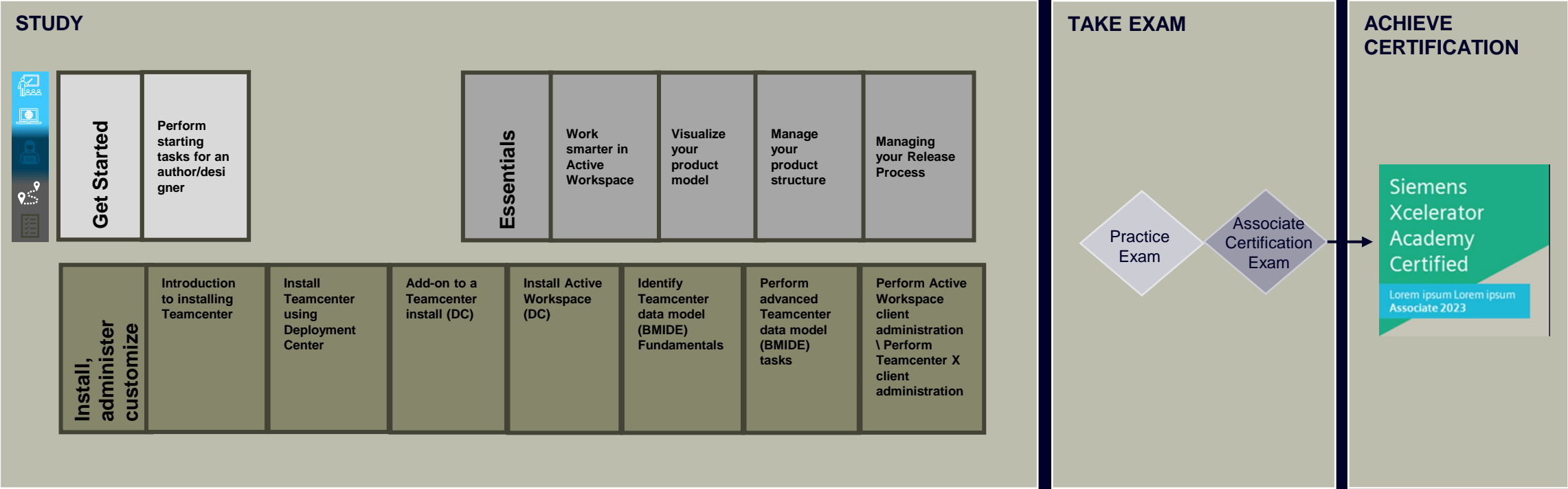
Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer	

*AW = for Active Workspace users only
 *RAC = for Rich Client users only

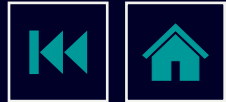


SIEMENS

TC / TCx Associate Package Offering → At a Glance



Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer	

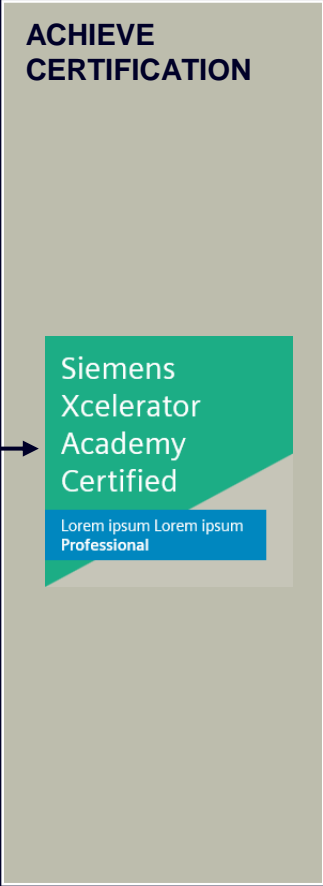
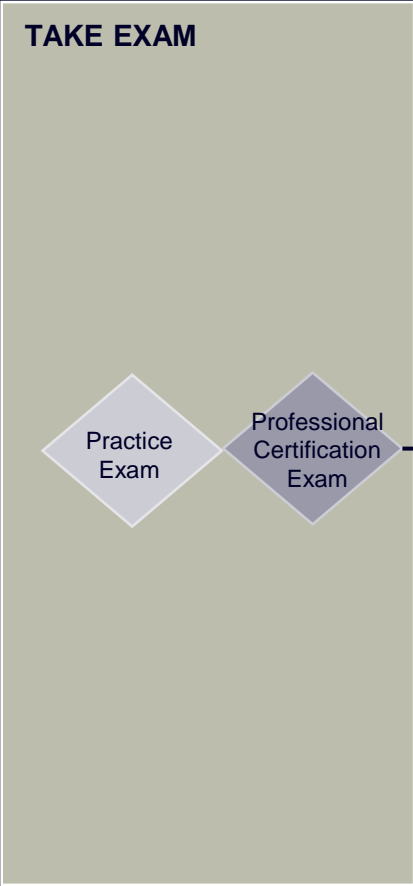


Teamcenter Product Professional Package Offering → At a Glance

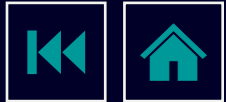


Pass the mandatory prerequisite Teamcenter-Teamcenter X Associate exam

STUDY						
Teamcenter Active Workspace	Use MCAD integration 1 & 2	Use ECAD integration 1 & 2	Configure MCAD integration 1 & 2	Configure ECAD integration 2	Manage changes for Teamcenter in Active Workspace	Manage and search classification
	Teamcenter Administration & Customization	Perform Active Workspace client administration	Advanced workflows and access control	Perform server-side customization For Active Workspace	Perform Active Workspace client-side customization	
Teamcenter Visualization	Exploring the Interface	Optimizing Part Appearance	Initial Analysis	Performing Additional Analysis	Capturing Images and Video	Advanced Assembly Management

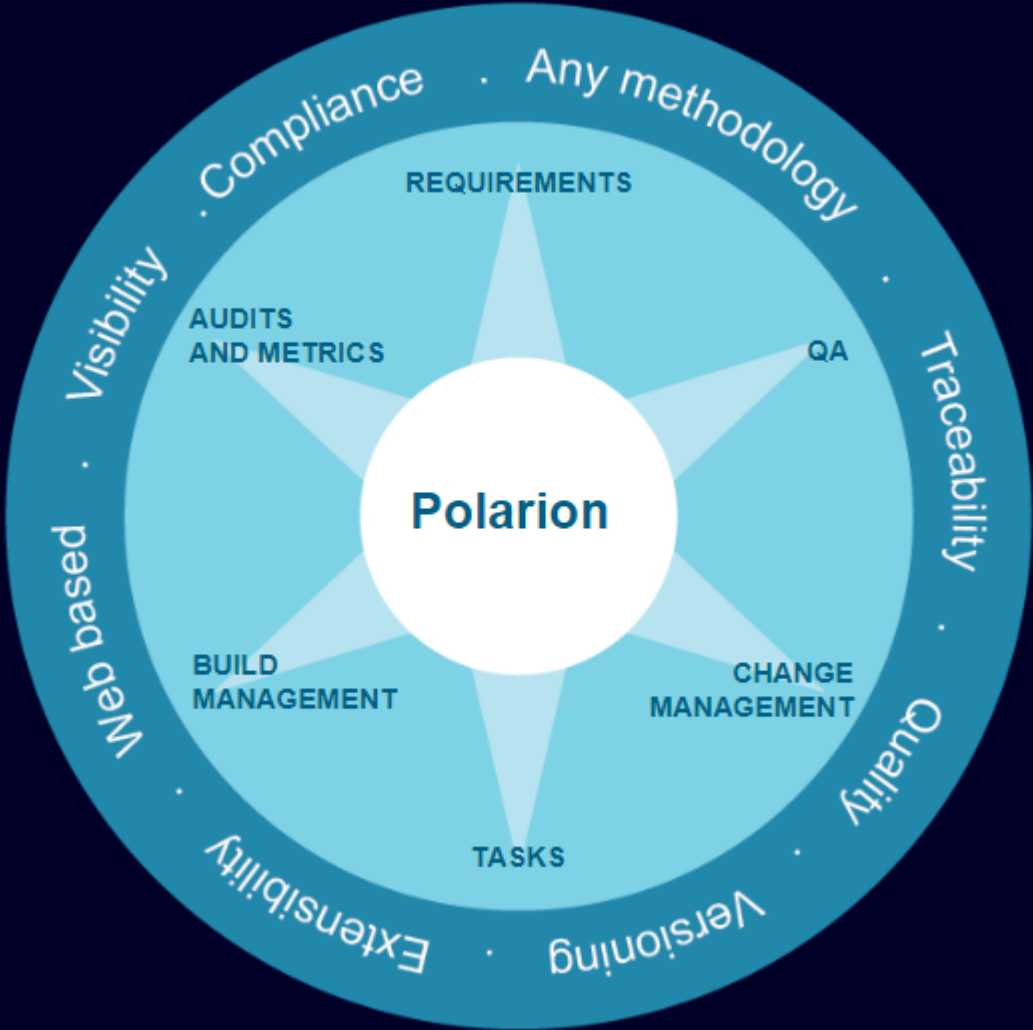


Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer	



Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.

Select a role below

Requirements Manager (V-model)

Learn to track and manage requirements with Polarion. Master the basic skills to navigate Polarion and work with project data.

Test Manager

Learn to track and manage test cases within Polarion QA. Plan and execute test cases and track defects found during test executions.

Administrator

Learn how to install, configure and administer Polarion.

Polarion Associate

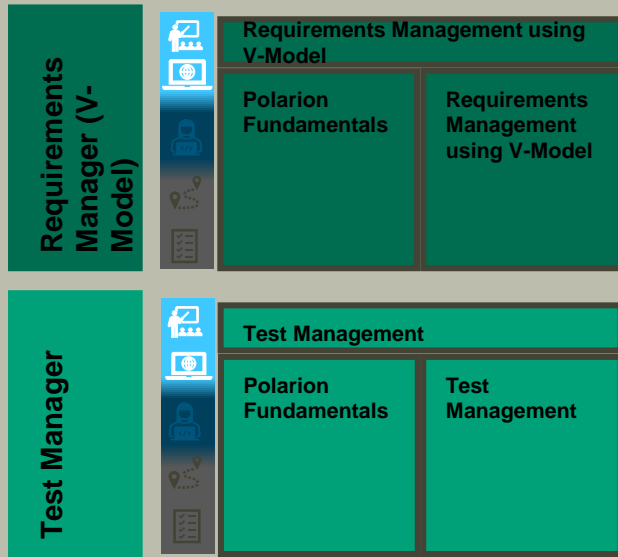
Pass the Polarion Associate Exam to become Siemens Xcelerator Academy Certified

Polarion Professional

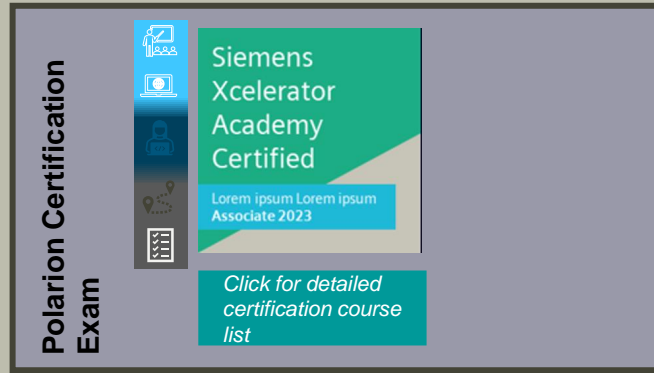
Pass the Polarion Professional Exam to become Siemens Xcelerator Academy Certified



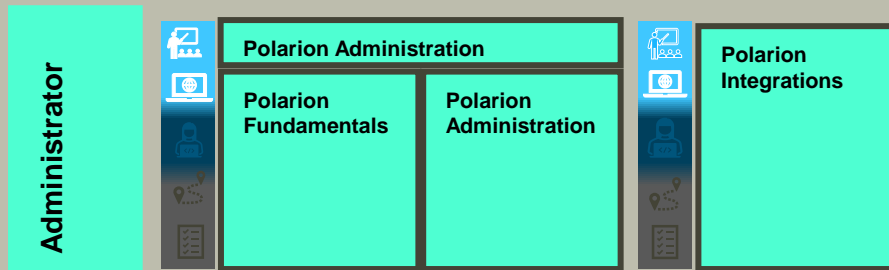
Polarion: Managing and controlling your project data



Polarion: Get Certified



Polarion: Install, configure, administer and integrations



Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer	

 Instructor-led training	 On-demand training library	 Xcelerator Academy Membership
**Virtual lab environment included in offer		 Add-on vLab hours available for purchase

Complete Course List: Polarion Associate Certification



9 Chapters

LEARNING PATH

Polarion Fundamentals

Master the basic skills to navigate Polarion and work with project data.

3 Core Pillars of Polarion ALM

Collaboration	Trace	Reuse
<ul style="list-style-type: none"> Collaborate on shared assets Control who can see what Control who can change what Control when it can be changed 	<ul style="list-style-type: none"> Link Filter Change Trace 	<ul style="list-style-type: none"> Search and reuse your data Share artifacts between projects Enable product line development

PREVIEW CHAPTER
Introduction to Polarion

8 Chapters

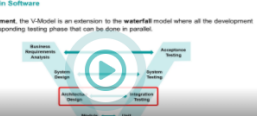
LEARNING PATH

Requirements Management using V-Model

Define your project requirements, specifications, risks, manage their changes in the context of a V-Model process.

V-Model Process in Software

In software development, the V-Model is an extension to the waterfall model where all the development phases have a corresponding testing phase that can be done in parallel.



PREVIEW CHAPTER
V-Model Process Overview


7 Chapters

LEARNING PATH

Test Management

Execute test cases and track defects to validate project data.

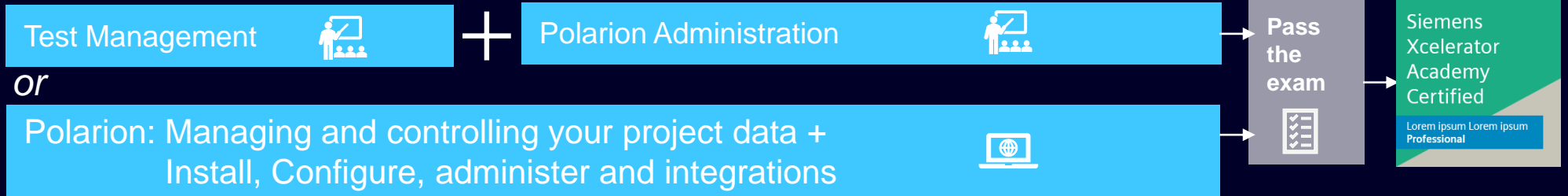
Testing Goals and Objectives



PREVIEW CHAPTER
Test management Overview

Instructor-led training	On-demand training library	Xcelerator Academy Membership
**Virtual lab environment included in offer		Add-on vLab hours available for purchase

Complete Course List: Polarion Professional Certification



Pass the mandatory prerequisite Polarion Associate exam

7 Chapters

LEARNING PATH

Test Management

Execute test cases and track defects to validate project data.

PREVIEW CHAPTER
Test management Overview

4 Chapters

LEARNING PATH

Polarion Reporting

Understand how the various reporting functionalities, widgets, and APIs work in Polarion.

PREVIEW CHAPTER
Polarion Reports: Overview

7 Chapters

LEARNING PATH

Polarion Integrations

Configure and administer Polarion Integrations according to customer requirements.

PREVIEW CHAPTER
Polarion Integration with Jira Overview

12 Chapters

LEARNING PATH

Polarion Administration

Install, configure, and administer Polarion according to customer requirements.

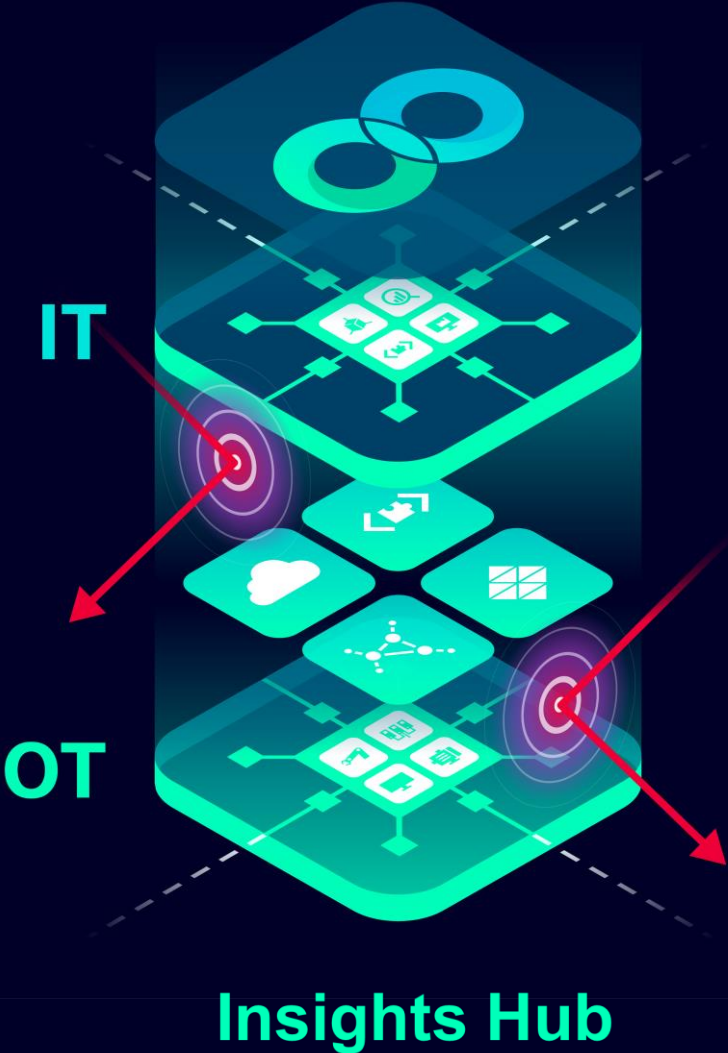
PREVIEW CHAPTER
Polarion architecture overview



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Xcelerator Academy Learning Maps

Your learning: At a Glance



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Select a role below



LEARN ESSENTIALS

Team Members

Introduces terminologies and concepts essential for the MindSphere journey.

LEARN ABOUT APP DEVELOPMENT

App Developer

Learn how to develop, register, configure, test, run and publish your MindSphere apps.

LEARN ABOUT CONNECTIVITY

Connectivity Developer

Learn how to connect devices to MindSphere

LEARN ABOUT ANALYTICS

Data Analyst

Learn how to explore various means of analyzing data in MindSphere.

GET CERTIFIED

Insights Hub Associate Certification

Choose your learning and take your exam to complete the MindSphere Associate certification.



SIEMENS

Team Members

- Introducing Insights Hub and Industrial IoT
- Exploring Essentials of Insights Hub and Industrial IoT
- Overview of MindConnect Elements
- Inspecting Insights Hub Security

LEARN ABOUT APP DEVELOPMENT

App Developer

- Developing Applications for Insights Hub with Mendix
- Developing Applications for Insights Hub

LEARN ABOUT CONNECTIVITY

Connectivity Developers

- Creating Custom Agents with MindConnect Library
- Creating Custom Agents with MindConnect API
- MindConnect IoT Extension
- Exploring MindConnect Integration
- Extending MindConnect Library Custom Agents

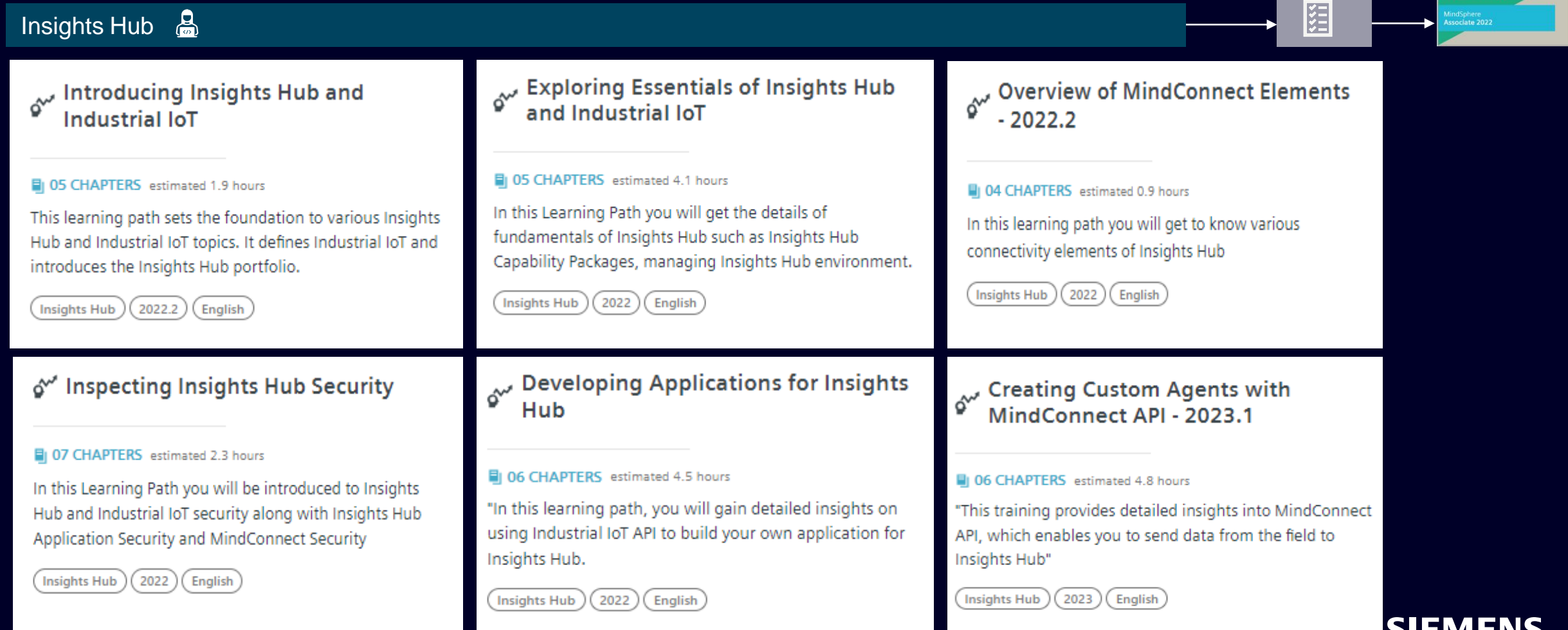
LEARN ABOUT ANALYTICS

Data Analyst

- Introduction to Insights Hub OEE
- Introduction to Insights Hub Monitor
- Creating Dashboards with Insights Hub Visual Flow Creator

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
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Course List: Insights Hub Associate Certification




Introducing Insights Hub and Industrial IoT

 **05 CHAPTERS** estimated 1.9 hours

This learning path sets the foundation to various Insights Hub and Industrial IoT topics. It defines Industrial IoT and introduces the Insights Hub portfolio.

Insights Hub 2022.2 English


Exploring Essentials of Insights Hub and Industrial IoT

 **05 CHAPTERS** estimated 4.1 hours

In this Learning Path you will get the details of fundamentals of Insights Hub such as Insights Hub Capability Packages, managing Insights Hub environment.

Insights Hub 2022 English

Overview of MindConnect Elements - 2022.2

 **04 CHAPTERS** estimated 0.9 hours

In this learning path you will get to know various connectivity elements of Insights Hub

Insights Hub 2022 English


Inspecting Insights Hub Security

 **07 CHAPTERS** estimated 2.3 hours

In this Learning Path you will be introduced to Insights Hub and Industrial IoT security along with Insights Hub Application Security and MindConnect Security

Insights Hub 2022 English


Developing Applications for Insights Hub

 **06 CHAPTERS** estimated 4.5 hours

"In this learning path, you will gain detailed insights on using Industrial IoT API to build your own application for Insights Hub.

Insights Hub 2022 English

Creating Custom Agents with MindConnect API - 2023.1

 **06 CHAPTERS** estimated 4.8 hours

"This training provides detailed insights into MindConnect API, which enables you to send data from the field to Insights Hub"

Insights Hub 2023 English

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Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below

LEARN THE PLATFORM	
Team Members	Learn to successfully implement the Opcenter Execution Core Product
INSTALL AND ADMINISTRATION	
Installers	Learn to install and configure the Opcenter Execution Core Product and be able to perform system administration and troubleshooting
CUSTOMIZE	
Designers /Developers	Learn to customize and extend the functionality of the Opcenter Execution Core Product.
GET CERTIFIED	
Opcenter Ex Core Associate Certification	Choose your learning and take your exam to complete the Opcenter Ex Core Associate certification.



SIEMENS

LEARN THE PLATFORM

Team Members

- Introduction to Opcenter Execution Core
- Configuring the Factory Model in Opcenter Core
- Managing Resources in Opcenter EX Core
- Utilizing Features to Expand the Factory Model

MEDICAL DEVICE & DIAGNOSTICS

Team Members

- Exploring Medical Device & Diagnostics Features

INSTALL AND ADMINISTRATION

Installers

- Opcenter Execution Core Platform Administration

Install to perform system administration and troubleshooting

CUSTOMIZE

Designers / Developers

- Portal Studio Developer
- Object Design

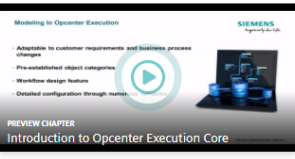
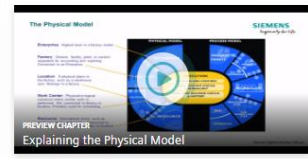

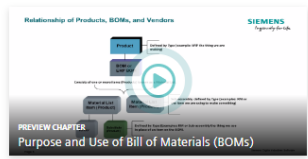

Customize and extend the functionality

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Opcenter Ex Core Associate Certification



<p>4 Chapters</p> <p>LEARNING PATH</p> <p>Introduction to Opcenter Execution Core</p> <p>Provides a brief introduction to Opcenter EX Core including navigation of the Portal Interface, Login and Security and exploring Portal Studio Developer.</p>  <p>PREVIEW CHAPTER Introduction to Opcenter Execution Core</p>	<p>5 Chapters</p> <p>LEARNING PATH</p> <p>Configuring the Factory Model in Opcenter Core</p> <p>Describes the Physical, Process and Execution Models in Opcenter Core. Topics include Products, Containers and Workflows and shop floor transactions.</p>  <p>PREVIEW CHAPTER Explaining the Physical Model</p>	<p>4 Chapters</p> <p>LEARNING PATH</p> <p>Managing Resources in Opcenter EX Core</p> <p>Defines Resources and describes how they are configured and used in Opcenter EX Core.</p>  <p>PREVIEW CHAPTER Introduction to Resource Management</p>	<p>7 Chapters</p> <p>LEARNING PATH</p> <p>Utilizing Features to Expand the Factory Model</p> <p>Describes features within Opcenter EX Core that enhance the use and effectiveness of the application. (Material Issue, EProcedures, Data Collection, etc.).</p>  <p>PREVIEW CHAPTER Purpose and Use of Bill of Materials (BOMs)</p>	<p>6 Chapters</p> <p>LEARNING PATH</p> <p>Opcenter Execution Core Administration and Installation</p> <p>Provides information about installing and administrating Opcenter EX Core including software updates, migration and troubleshooting.</p>  <p>PREVIEW CHAPTER Introduction to Opcenter Execution Platform - Part 1</p>
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Opcenter Execution Discrete Associate Certification



2 Chapters

LEARNING PATH

Introduction - 2301

In this learning path, you will get the key information about how to navigate the platform to achieve your goals and get the overview of the key software product

4 Chapters

LEARNING PATH

Opcenter Execution Discrete: Development Essentials - 2301

In this learning path, you will discover how the manufacturing solution is built, get an overview of the main development stages, and more.

3 Chapters

LEARNING PATH

Frontend - 2301

In this learning path you will get essential information on how to develop and deploy Low Code UI screens based on Mendix.

12 Chapters

LEARNING PATH

Opcenter Execution Discrete: Backend - 2301

This Learning Path presents the OP EX Foundation Backend scenario and covers building, implementing and packaging functional blocks.

6 Chapters

LEARNING PATH

Foundation Apps - 2301

This learning path provides you with information on the basic Foundation apps, which are useful to perform engineering configurations.

5 Chapters

LEARNING PATH

Extensibility for Discrete Use Case - 2301

In this learning path you will get essential information on how to extend artifacts belonging to a Manufacturing Solution based on Opcenter Execution Discrete.

Opcenter Execution Process Associate Certification



2 Chapters

LEARNING PATH

Introduction - 2301

In this learning path, you will get the key information about how to navigate the platform to achieve your goals and get the overview of the key software product

4 Chapters

LEARNING PATH

Opcenter Execution Process: Development Essentials - 2301

In this learning path, you will discover how the manufacturing solution is built, get an overview of the main development stages.

3 Chapters

LEARNING PATH

Frontend - 2301

In this learning path you will get essential information on how to develop and deploy Low Code UI screens based on Mendix.

12 Chapters

LEARNING PATH

Opcenter Execution Process: Backend - 2301

This Learning Path presents the OP EX Foundation Backend scenario and covers building, implementing and packaging functional blocks.

6 Chapters

LEARNING PATH

Foundation Apps - 2301

This learning path provides you with information on the basic Foundation apps, which are useful to perform engineering configurations.

4 Chapters

LEARNING PATH

Extensibility for Process - 2301

In this learning path you will get essential information on how to extend artifacts belonging to a Manufacturing Solution based on Opcenter Execution Process.


Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below 

LEARN ABOUT TEAMCENTER QUALITY

Team Member	Learn about the key features of Teamcenter Quality and about the structure and components of a calculation.
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GET CERTIFIED

Teamcenter Quality Associate Certification	Choose your learning and take your exam to complete the Associate certification .
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Team Member	<p>Introduction to Active Workspace (PLM Foundation: Active Workspace)</p>	<p>Manage your product structure (PLM Foundation: Active Workspace)</p>	<p>Manage your release processes (PLM Foundation: Active Workspace)</p>	<p>Introduction to Teamcenter Quality Applications</p>
	<p>Quality Issue Management and Problem Solving in Teamcenter Quality Solution</p>	<p>Failure Modes and Effects Analysis (FMEA)</p>	<p>APQP and QAM</p>	<p>Control & Inspection plan</p>

Teamcenter Quality Associate Certification

Siemens Xcelerator Academy Certified
Teamcenter Quality Associate 2022

[Click for detailed certification course list](#)

<p>Instructor-led training</p>	<p>On-demand training library</p>	<p>Xcelerator Academy Membership</p>	<p>Learning Journey</p>	<p>Standalone Certification Exam</p>	<p>Optional</p>
<p>**Virtual lab environment included in offer</p>		<p>Add-on vLab hours available for purchase</p>	<p>**Virtual lab environment included in offer</p>		



Complete Course List: Teamcenter Quality Associate Certification

Teamcenter Quality


Pass the exam 

Siemens Xcelerator Academy Certified

Teamcenter Quality Associate 2022

Manage your product structure in Active Workspace


Learn and perform basic capabilities working with product structures and 3D models.



PREVIEW CHAPTER
Introduction to managing product structures

Manage your release processes in Active Workspace

In this learning path, you initiate workflow processes, complete task assignments, and monitor workflow progress.



PREVIEW CHAPTER
Introduction to workflow processes

Introduction to Teamcenter Quality Applications

Introduction to key quality concepts along with TCO capabilities, interfaces, specific commands and toolbars, basic configuration, master data and report.



PREVIEW CHAPTER
Introduction to Teamcenter Quality

Quality Issue Management and Problem Solving in Teamcenter Quality Solution


Introduction to quality issue, quality action management and problem solving along with root cause analysis, improvement actions within Problem Solving.



PREVIEW CHAPTER
Introduction to Quality Issue Management

Failure Modes and Effects Analysis (FMEA)


Introduction to FMEA structure, Functional and failure analysis, risk analysis and optimization, result documentation within the Teamcenter Quality solution.



PREVIEW CHAPTER
Introduction to FMEA

APQP and QAM

Introduction to Advanced Product Quality Planning (APQP) and Quality Action Management (QAM) within the Teamcenter Quality solution.



PREVIEW CHAPTER
Introduction to Advanced Product Quality Planning (APQP)

Control & Inspection plan

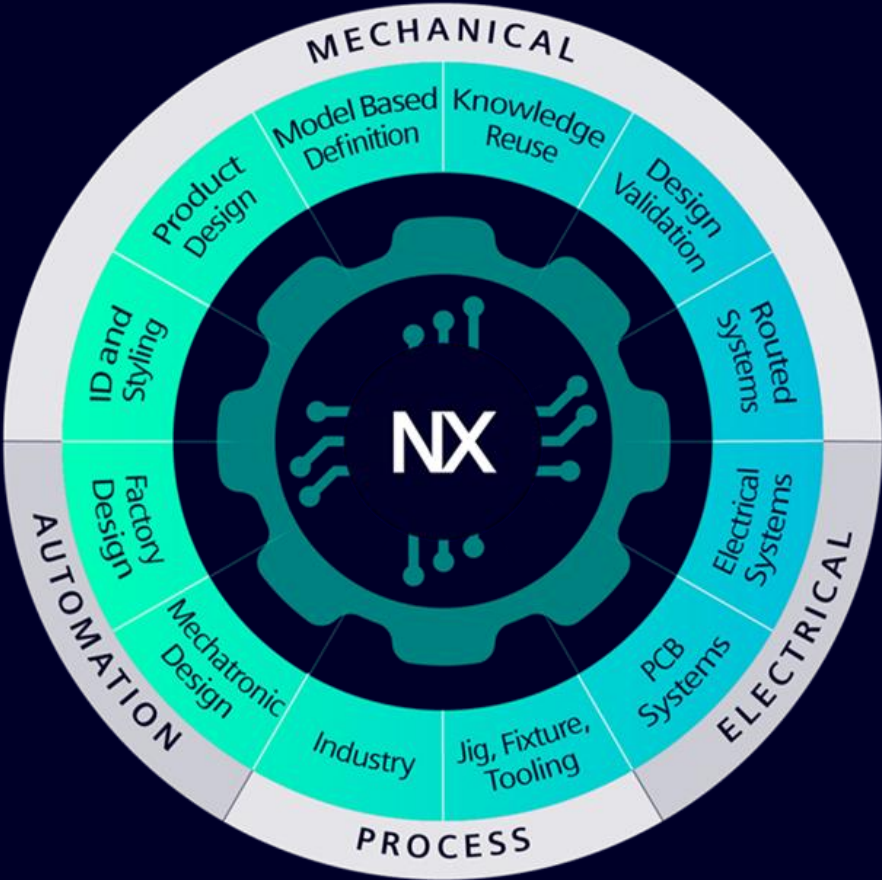
Introduction to Control and Inspection planning within the Teamcenter Quality solution.



PREVIEW CHAPTER
Introduction to Control and Inspection Plan

Xcelerator Academy Learning Maps

Your learning: At a Glance



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Select a role below



LEARN THE ESSENTIALS

Core Mechanical Designers

New users are given an overview of NX. Users will be able to open and explore part files. Complete this level by passing the NX Design Associate certification exam.

LEARN PRODUCT DESIGN

Tooling Designers

Provides Mechanical Designers the foundation they need to be successful using NX Design.

LEARN ROUTING AND WIRING DESIGN

Routed systems

Provides Routed Systems Designers the foundation they need to be successful using NX Design.

Wiring designers

Provides Wiring Designers the foundation they need to be successful using NX Design.

LEARN MOLD/DIE DESIGN

Mold / Die Designers

Provides Mold/Die Designers the foundation they need to be successful using NX Design.

GET CERTIFIED

NX Associate Certification

Choose your learning and take your exam to complete the NX Associate certification.

NX Professional Certification

Choose your learning and take your exam to complete the NX Professional certification.



LEARN THE ESSENTIALS

Core Mechanical Designers

Designing Parts in NX

NX Basic Design Product Design Fundamentals

NX Associate Certification Exam

Siemens Xcelerator Academy Certified

NX Design Certified Associate 2022

[Click for detailed certification course list](#)

Core Mechanical Designers

Intermediate NX Design and Assemblies

Molded & Cast Part Design Loading and working with assemblies Design in Context of an assembly

Use NX Design!

LEARN PRODUCT DESIGN

Tooling Designers

Surface Modeling Processes

Documenting with Drafting

Advanced Assemblies

Sheet Metal Design

Model Based Definition using PMI

Design your Product!

LEARN ROUTING AND WIRING DESIGN NX

Routed systems/ Wiring designers

Routing Mechanical

Routing Electrical

Advanced Assemblies

Design Routing and Wiring!

LEARN MOLD/DIE DESIGN

Mold / Die Designers

Mold Wizard Fundamentals

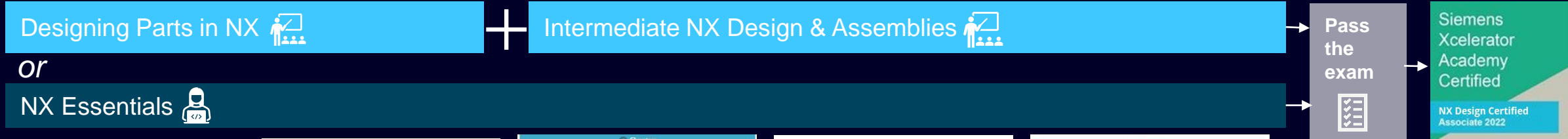
Mold Wizard Advanced

Progressive Die Wizard Fundamentals

Design for Mold/ Die!

<p>Instructor-led training</p>	<p>On-demand training library</p>	<p>Xcelerator Academy Membership</p>	<p>Learning Journey</p>	<p>Standalone Certification Exam</p>	<p>Optional</p>
<p>**Virtual lab environment included in offer</p>		<p>+ Add-on vLab hours available for purchase</p>	<p>**Virtual lab environment included in offer</p>		

Complete Course List: NX Core Associate Certification




13 Chapters

LEARNING PATH

NX Basic Design

In this learning path, you will explore methods for developing and editing basic solid models, assembly models, and drawings.




PREVIEW CHAPTER
Getting started in NX

8 Chapters

LEARNING PATH

Product Design Fundamentals

You will learn to determine a modeling strategy, resolve any failures that arise, and use workflows for copying, patterning, and mirroring to complete a model.



PREVIEW CHAPTER
Establish design intent

7 Chapters

LEARNING PATH

Molded & Cast Part Design

In this learning path, you will compare and contrast highly parametric vs. non-parametric modeling techniques.




PREVIEW CHAPTER
Add stiffening ribs to a model!

6 Chapters

LEARNING PATH

Loading and working with assemblies

Most products are assemblies of multiple parts. In this learning path, you will learn how to add components to an assembly and edit them to fit properly.



PREVIEW CHAPTER
Create and replace reference sets

6 Chapters

LEARNING PATH

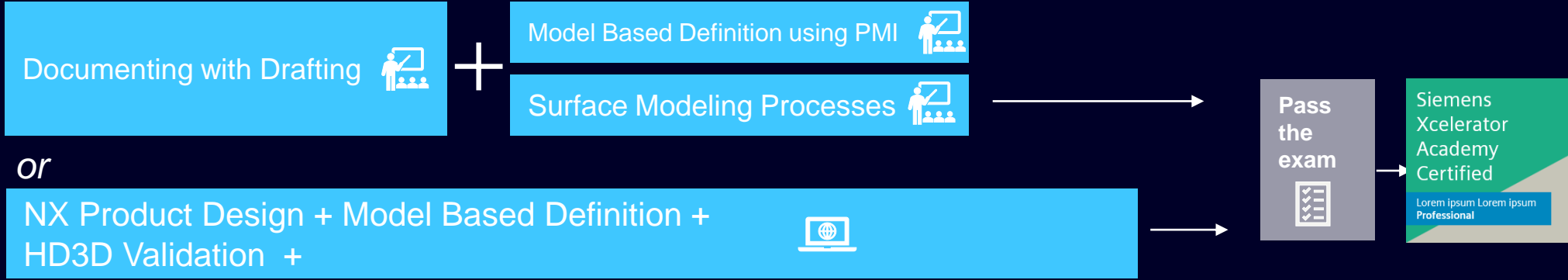
Design in Context of an Assembly

In this learning path, you will learn to create associative links between parts in the context of an assembly.



PREVIEW CHAPTER
Start a design using the top-down assembly method

Complete Course List: NX Product Professional Certification




Pass the mandatory prerequisite NX Associate exam

9 Chapters

LEARNING PATH

Documenting with Drafting - 2212

Create standards-compliant detailed engineering drawings that are fully associated to your 3D model.



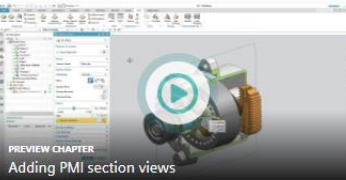
PREVIEW CHAPTER
Create a drawing

13 Chapters

LEARNING PATH

Model Based Definition using PMI - 2212

Learn to add text, dimensions, GD&T, and symbols to a 3D model for use by downstream applications such as tooling, manufacturing, inspection, and shipping.



PREVIEW CHAPTER
Adding PMI section views

16 Chapters X-LAB

NX

NX Surface Modeling Processes - 2206

Learn to create freeform parts that update reliably and shift smoothly to the manufacturing application.

version 2206 English [View Chapters](#)

5 Chapters

LEARNING PATH

HD3D Tools and Validation - 2206

Learn to use Visual Reports and Checkmate to analyze a model. Learn to use Design Optimization to improve the design of a model.



PREVIEW CHAPTER
Activate and explore a visual report

1 Chapter X-LAB

NX

Create curves as construction geometry

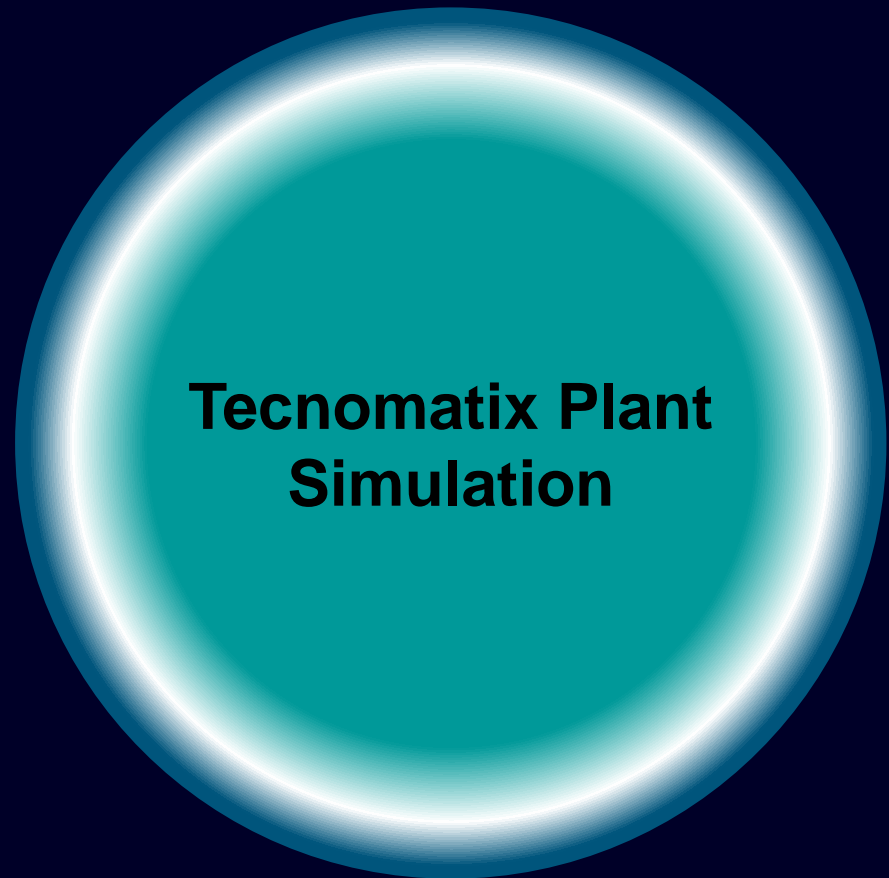
Learn to create curves as construction geometry. You will also create points and point sets associative to curve geometry.

version 1980 English [View Chapters](#)



Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below



LEARN BASIC SIMULATION ENGINEER

End user

Learn about creating Plant Simulation object flow simulations to validate the assembly process of a product.

LEARN ADVANCED SIMULATION ENGINEER

End user

Learn advanced topics for creating more sophisticated Plant Simulation object flow simulations.

GET CERTIFIED

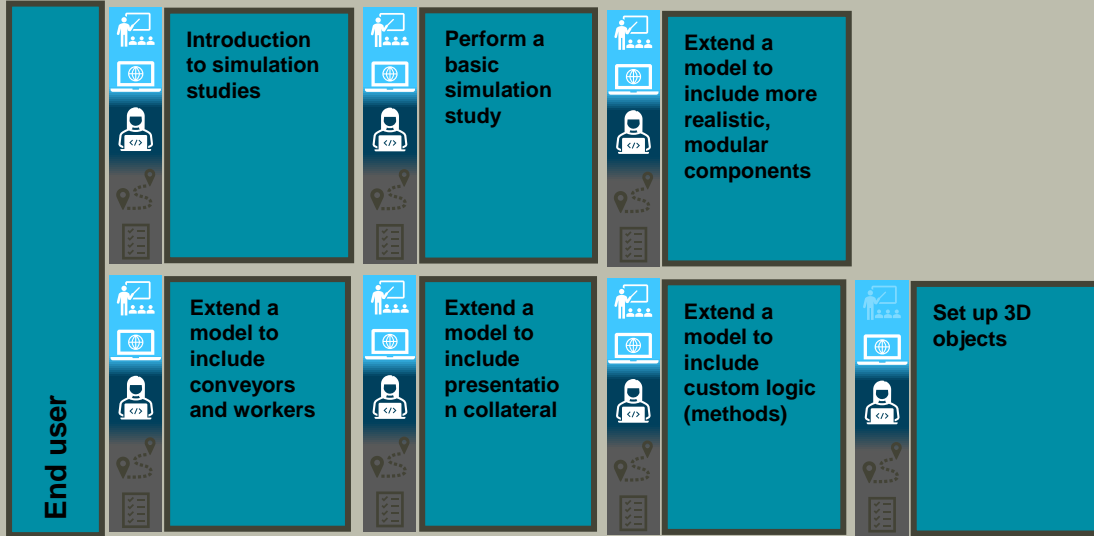
**Plant Simulation Associate
Certification**

Choose your learning and take your exam to complete the Plant Simulation Associate **certification**.

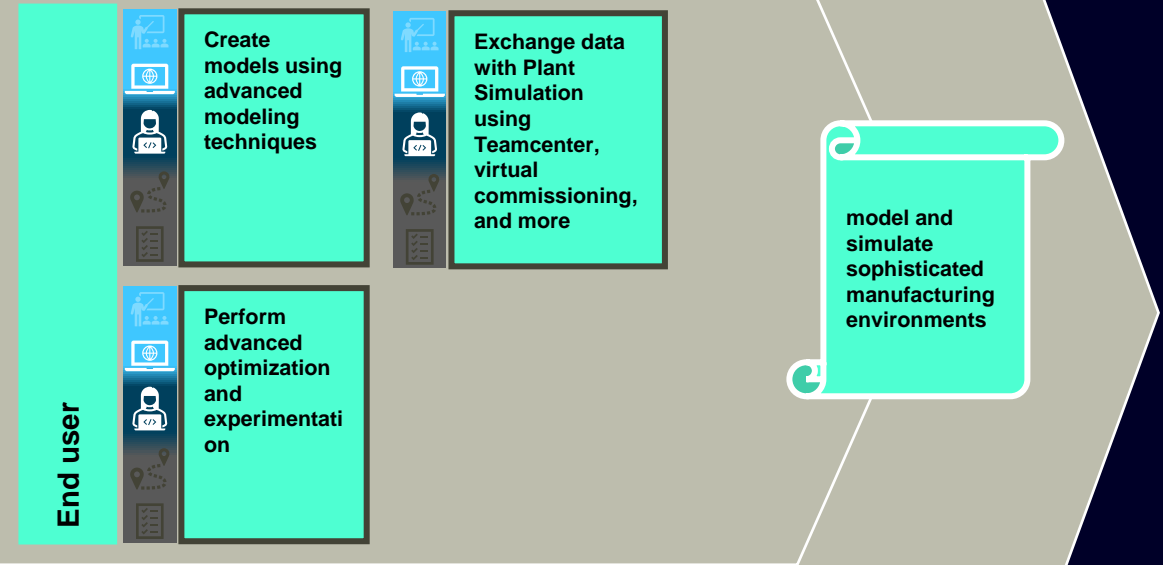


SIEMENS

LEARN BASIC SIMULATION ENGINEER



LEARN ADVANCED SIMULATION ENGINEER



Plant Simulation Associate Certification

[Click for detailed certification course list](#)



Instructor-led training



On-demand training library



Xcelerator Academy Membership



Learning Journey



Standalone Certification Exam

Optional

**Virtual lab environment included in offer

Add-on vLab hours available for purchase

**Virtual lab environment included in offer



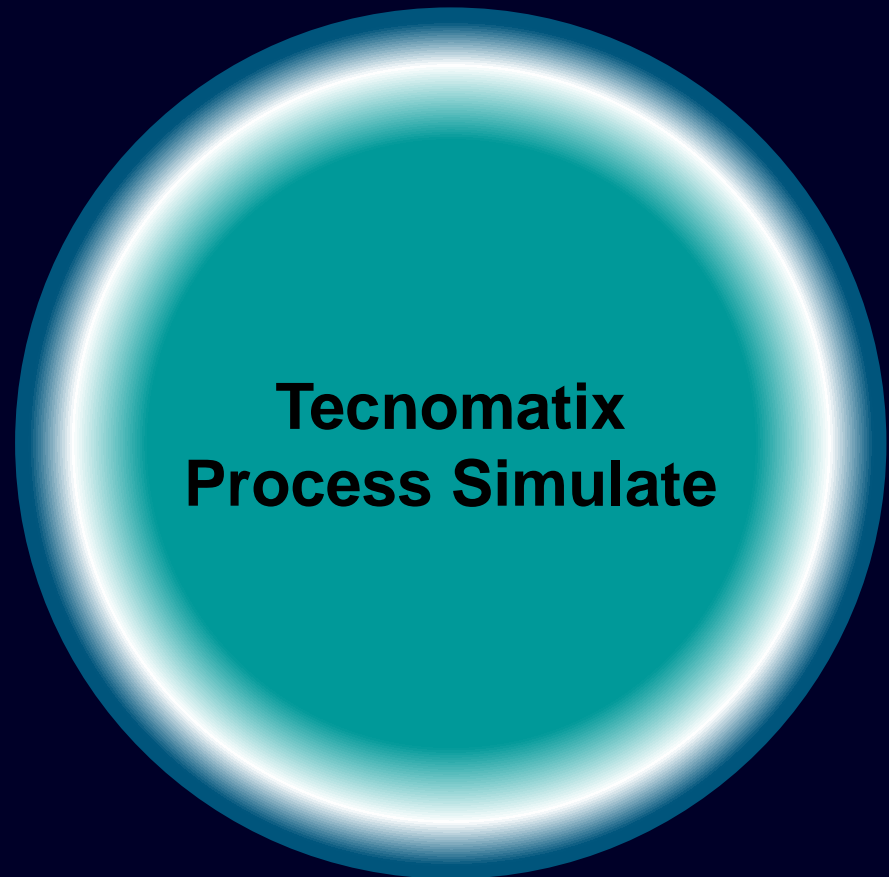
Complete Course List: Tecnomatix Plant Simulation Associate Certification



<p>4 Chapters</p> <p>LEARNING PATH</p> <p>Introduction to simulation studies</p> <p>In this learning path, you identify the three phases to performing a simulation study. They provide the framework that is critical to using Plant Simulation.</p> <p>PREVIEW CHAPTER How to use Plant Simulation effectively</p>	<p>6 Chapters</p> <p>LEARNING PATH</p> <p>Perform a basic simulation study</p> <p>In this learning path, you apply the phases of a simulation study to make a wooden table. Other paths build add to this model to solve more complex problems.</p> <p>PREVIEW CHAPTER Describe system analysis techniques used in Plant Simulation</p>	<p>5 Chapters</p> <p>LEARNING PATH</p> <p>Extend a model to include more realistic, modular components</p> <p>In this learning path, you extend the wooden table example by creating a hierarchical model with buffers, failure profiles, and realistic processing times.</p> <p>PREVIEW CHAPTER Add hierarchy and interfaces to the simulation</p>	<p>4 Chapters</p> <p>LEARNING PATH</p> <p>Extend a model to include conveyors and workers</p> <p>In this learning path, you extend the wooden table example by creating components to convey parts for assembly and use workers.</p> <p>PREVIEW CHAPTER Create length-oriented (extrusion) objects</p>	<p>3 Chapters</p> <p>LEARNING PATH</p> <p>Extend a model to include presentation collateral</p> <p>In this learning path, you extend the wooden table example by creating the collateral needed to present your recommendations.</p> <p>PREVIEW CHAPTER Create a CompShip element</p>	<p>6 Chapters</p> <p>LEARNING PATH</p> <p>Extend a model to include custom logic (methods)</p> <p>In this learning path, you extend the wooden table example to include methods to collect statistics, modify attributes, and read/write files.</p> <p>PREVIEW CHAPTER Insert custom logic</p>	<p>6 Chapters</p> <p>LEARNING PATH</p> <p>Set up 3D objects</p> <p>In this learning path, you create and use cameras, create and import 3D graphics, and create a custom library of objects.</p> <p>PREVIEW CHAPTER Configure camera settings</p>
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Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below



LEARN PROCESS SIMULATE ESSENTIALS

End user

New users are given the basic skills required to work with process simulation to digitalize manufacturing processes and layouts

LEARN ABOUT OBJECT FLOW SIMULATIONS

Digital Assembly Validation Engineer

Learn about performing Process Simulate object flow simulations to validate the assembly process of a product

LEARN ABOUT HUMAN REACH CHECKS, SIMULATIONS

Human Simulation Engineer or Ergonomist

Learn about performing Process Simulate Human reach checks, simulations, and reports to validate the assembly process of a product

LEARN ABOUT ROBOTICS REACH CHECKS, SIMULATIONS

Robot simulation Engineer

Learn about performing Process Simulate robotics reach checks, simulations, and off-line programming.

GET CERTIFIED

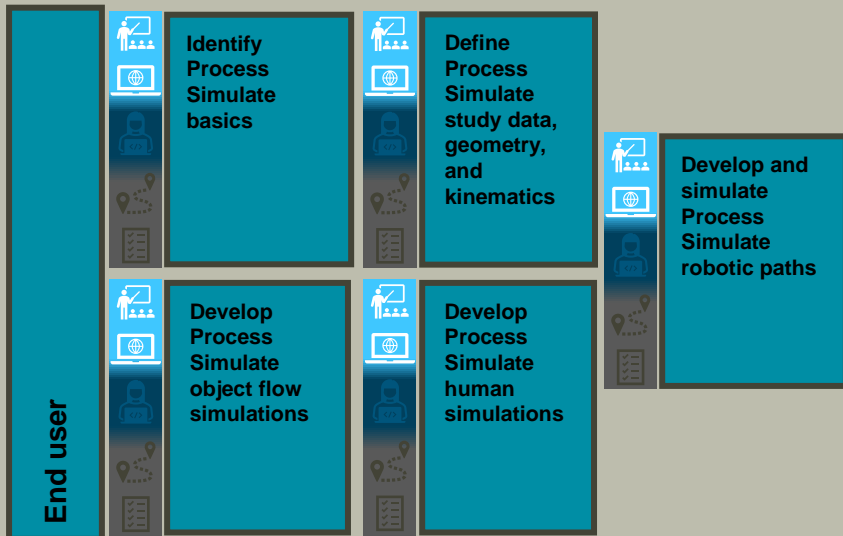
Tecnomatix Process Simulate Associate Certification

Choose your learning and take your exam to complete the Process Simulate Standalone Associate certification.

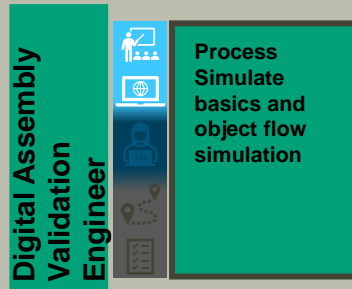


SIEMENS

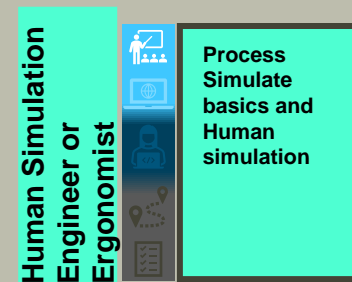
LEARN PROCESS SIMULATE ESSENTIALS



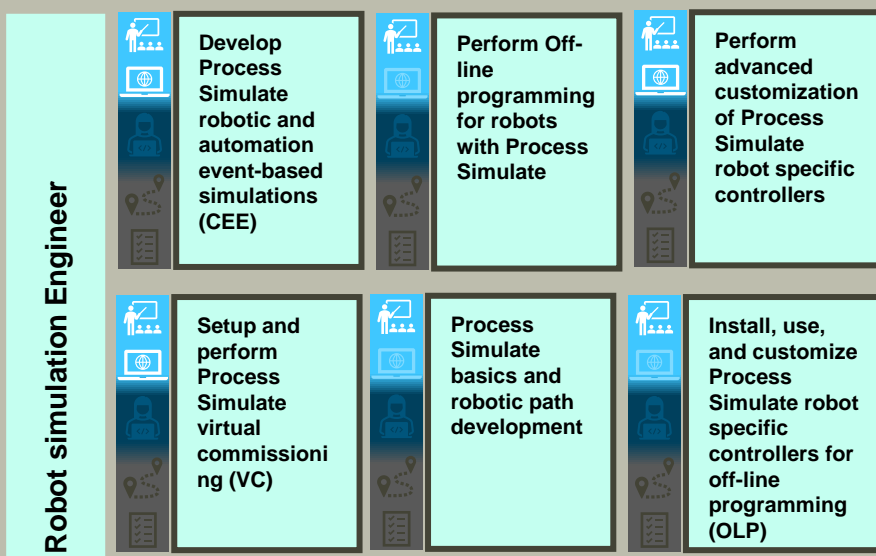
LEARN ABOUT OBJECT FLOW SIMULATIONS



LEARN ABOUT HUMAN REACH CHECKS, SIMULATIONS



LEARN ABOUT ROBOTICS REACH CHECKS, SIMULATIONS



Process Simulate Associate Certification

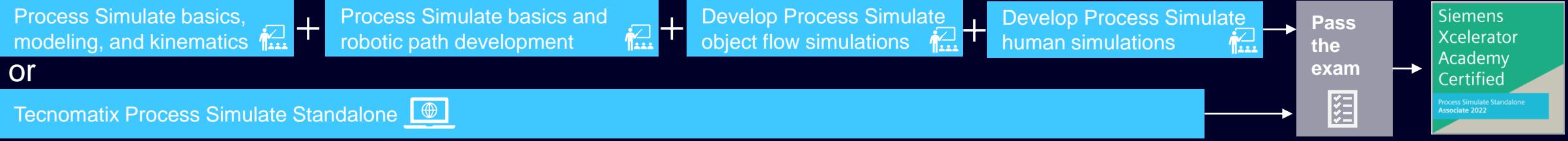
Process Simulate Standalone Associate 2022

[Click for detailed certification course list](#)

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Complete Course List: Tecnomatix Process Simulate Associate Certification



7 Chapters

LEARNING PATH
Identify Process Simulate basics

In this learning path, you identify the Process Simulate basic methodology and perform basic tasks in the Graphic Viewer and tree views.

- Identify Process Simulate tasks
- Basic tasks including modeling and kinematics
- Human Simulation
- Human pose visualization, FLC kinematic programming
- Part and resource flow visualization

PREVIEW CHAPTER
 Identify the Process Simulate basic methodology and purpose

8 Chapters

LEARNING PATH
Develop and simulate Process Simulate robotic paths

In this learning path, you develop robotic paths for spot welding, arc welding, painting, drilling/riveting, and other types of robot applications.

- Identify discrete robotic applications used in this learning path
- Basic welding applications
- Spot welding path program
- Drilling and riveting applications

PREVIEW CHAPTER
 Identify basic robotics concepts

9 Chapters

LEARNING PATH
Develop Process Simulate object flow simulations

In this learning path, you manually and automatically develop part and resource object flow path simulations.

- Conduct Assembly Simulation for Virtual Process Verification
- Configure the assembly process simulation
- Manual and automatic object flow path simulation

PREVIEW CHAPTER
 Identify object flow path basics

10 Chapters

LEARNING PATH
Develop Process Simulate human simulations

In this learning path, you develop human reach studies, human simulations, assign time to operations, and perform ergonomic evaluations of worker tasks.

- Human overview
- Process Simulate you can also use it to create human motion capture simulation with capture tool
- Human motion capture simulation
- Human motion capture simulation

PREVIEW CHAPTER
 Identify human task simulation basics

11 Chapters

LEARNING PATH
Define Process Simulate study data, geometry, and kinematics

In this learning path, you define snapshots, markups, sections, cables, component geometry and component kinematics.

- Identify the snapshot editor commands
- Snapshot Editor toolbar
- Snapshot Editor right-click menu

PREVIEW CHAPTER
 Create and use snapshots and the Markup Editor

Xcelerator Academy Learning Maps

Your learning: At a Glance

Tecnomatix Process Simulate on Teamcenter

Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below



LEARN PROCESS SIMULATE ESSENTIALS

End user

New users are given the basic skills required to work with process simulation to digitalize manufacturing processes and layouts

LEARN ABOUT OBJECT FLOW SIMULATIONS

Digital Assembly Validation Engineer

Learn about performing Process Simulate object flow simulations to validate the assembly process of a product

LEARN ABOUT HUMAN REACH CHECKS, SIMULATIONS

Human Simulation Engineer or Ergonomist

Learn about performing Process Simulate Human reach checks, simulations, and reports to validate the assembly process of a product

LEARN ABOUT ROBOTICS REACH CHECKS, SIMULATIONS

Robot simulation Engineer

Learn about performing Process Simulate robotics reach checks, simulations, and off-line programming.

GET CERTIFIED

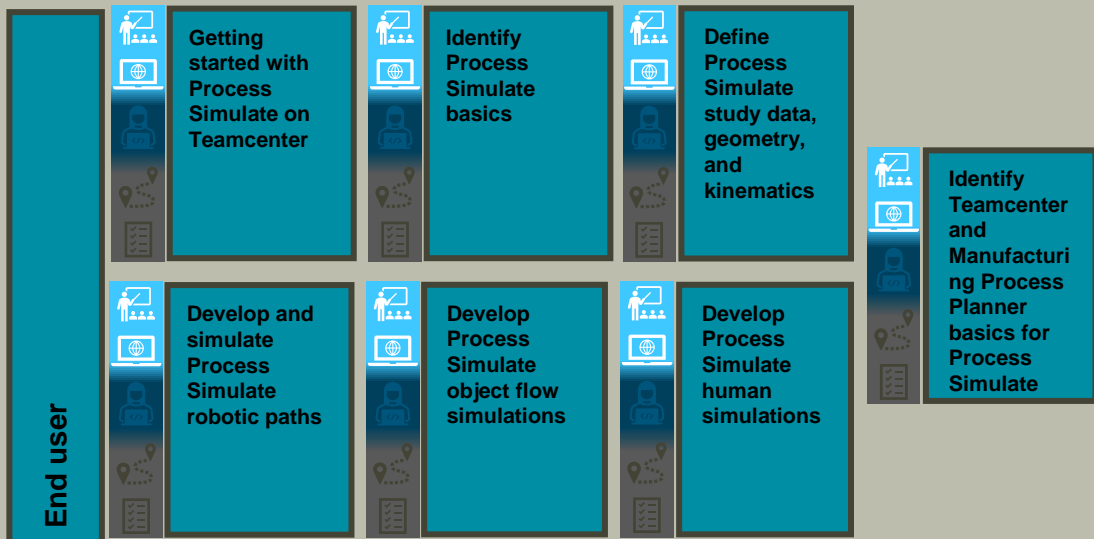
Tecnomatix Process Simulate on Teamcenter Associate Certification

Choose your learning and take your exam to complete the Process Simulate Standalone Associate certification.



SIEMENS

LEARN PROCESS SIMULATE ESSENTIALS



Process Simulate Associate Certification

Siemens Xcelerator Academy Certified

Process Simulate for Teamcenter Associate 2022

[Click for detailed certification course list](#)

LEARN ABOUT OBJECT FLOW SIMULATIONS

Digital Assembly Validation Engineer

- Process Simulate basics and object flow simulation

LEARN ABOUT HUMAN REACH CHECKS, SIMULATIONS

Human Simulation Engineer or Ergonomist

- Process Simulate basics and Human simulation

LEARN ABOUT ROBOTICS REACH CHECKS, SIMULATIONS

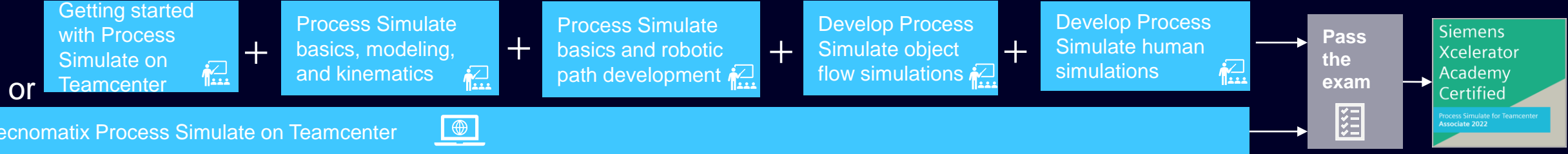
Robot simulation Engineer

- Develop Process Simulate robotic and automation event-based simulations (CEE)
- Perform Off-line programming for robots with Process Simulate
- Perform advanced customization of Process Simulate robot specific controllers
- Setup and perform Process Simulate virtual commissioning (VC)
- Process Simulate basics and robotic path development

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Complete Course List: Tecnomatix Process Simulate on Teamcenter Associate Certification



1 Chapters

LEARNING PATH

Getting started with Process Simulate on TC

In this learning path, you examine the basic use case for how to create and move data between Teamcenter and Process Simulate.

Identify Process Simulate basic Human simulation

PREVIEW CHAPTER Identify the Process Simulate basic methodology and purpose

2 Chapters

LEARNING PATH

Identify Teamcenter and Manufacturing Process Planner basics for Process Simulate users

In this learning path, you identify the Teamcenter environment, Manufacturing Process Planner environment, and create and use collaboration context objects.

Identify some Teamcenter perspectives

PREVIEW CHAPTER Identify basic portions of Teamcenter

3 Chapters

LEARNING PATH

Identify Process Simulate basics (PS on TC)

In this learning path, you identify the Process Simulate basic methodology and perform basic tasks in the Graphic Viewer and tree views

Identify the Object Tree Basics

PREVIEW CHAPTER Work with viewers

4 Chapters

LEARNING PATH

Develop and simulate Process Simulate robotic paths (PS on TC)

In this learning path, you develop robotic paths for spot welding, arc welding, painting, drilling/riveting, and other types of robot applications.

Identify discrete robotic applications used in this learning path

PREVIEW CHAPTER Identify basic robotics concepts

5 Chapters

LEARNING PATH

Develop Process Simulate object flow simulations (PS on TC)

In this learning path, you manually and automatically develop part and resource object flow path simulations.

Conduct Assembly Simulation for Virtual Process Verification

PREVIEW CHAPTER Identify object flow path basics

6 Chapters

LEARNING PATH

Develop Process Simulate human simulations

In this learning path, you develop human reach studies, human simulations, assign time to operations, and perform ergonomic evaluations of worker tasks.

Human overview

PREVIEW CHAPTER Identify human task simulation basics

7 Chapters

LEARNING PATH

Define Process Simulate study data, geometry, and kinematics (PS on TC)

In this learning path, you define snapshots, markups, sections, cables, component geometry and component kinematics.

Identify the snapshot editor commands

PREVIEW CHAPTER Create and use snapshots and the Markup Editor

Xcelerator Academy Learning Maps

Your learning: At a Glance

NX CAM Manufacturing

Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below 

LEARN THE BASICS

Administrator

Interrogate an NX part that has been manufactured and machine a simple prismatic part.

LEARN ABOUT MANUFACTURING PARTS

Manufacturing Engineer & Tooling Designer

Manufacture prismatic, multi-axis, lathe parts, use NX for turbomachinery, Post Process NX CAM parts.

LEARN ABOUT LINE PLANNER & ROBOTICS

Line Planner & Machine/Robotics Programmer

Manufacture parts, set up a manufacturing line based on NX Line Planner, and use NX for Robotics.

GET CERTIFIED

NX CAM Manufacturing Engineer Associate Certification

Choose your learning and take your exam to complete the NX CAM Manufacturing Engineer Associate certification.



SIEMENS

LEARN THE BASICS

Administrator

- NX Basic Design
- Managing NC Programming Data
- Machining a Prismatic Part

Manufacturing Engineer

- Fixed and Multi axis
- Turbomachinery and other Multi-axis options

NX CAM Manufacturing Engineer Associate Certification

Siemens Xcelerator Academy Certified

NX CAM Manufacturing Engineer Associate 2022

[Click for detailed certification course list](#)

LEARN ABOUT MANUFACTURING PARTS

Manufacturing Engineer & Tooling Designer

- Turning Manufacturing
- Turning - Other Options
- Post Configurator

LEARN ABOUT LINE PLANNER & ROBOTICS

Line Planner & Machine/Robotics Programmer

- Line Designer - Native
- Line Designer - Teamcenter
- Other Manufacturing Options

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Complete Course List: NX CAM Manufacturing Engineer Associate Certification

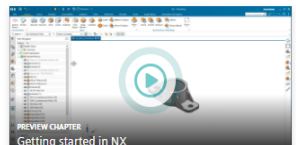


11 Chapters

LEARNING PATH

NX Basic Design (Current)

In this learning path, you will explore methods for developing and editing basic solid models, assembly models, and drawings.



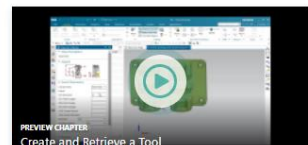
PREVIEW CHAPTER
Getting started in NX

9 Chapters

LEARNING PATH

Managing NC Programming Data

Review and change data and information used to manufacture parts. Also, begin milling a basic prismatic part.



PREVIEW CHAPTER
Create and Retrieve a Tool

10 Chapters

LEARNING PATH

Machining a Prismatic Part

Use varying prismatic machining methods in milling and turning operations.



PREVIEW CHAPTER
Define Coordinate Systems

7 Chapters

LEARNING PATH

Fixed-axis and Multi-axis Milling

You will learn the use of the NX Manufacturing application for creating fixed-axis and variable-axis tool paths.



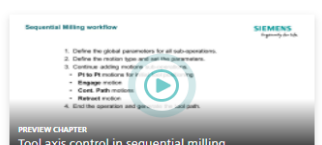
PREVIEW CHAPTER
Plunge milling

9 Chapters

LEARNING PATH

Turbomachinery and other Multi-axis options

Program turbomachinery parts and learn other multi-axis options: non-cutting moves, hole machining, in process workpiece transfer and probing & generic motion.






PREVIEW CHAPTER
Tool axis control in sequential milling

Xcelerator Academy Learning Maps

Your learning: At a Glance

Additive Manufacturing

Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.   

Select a role below 

LEARN THE ESSENTIALS

Additive Manufacturing Designer

Designed to provide additive manufacturers the foundation they need to model components intended to be additively manufactured

LEARN PLANAR ESSENTIALS

Planar (powder bed) Manufacturing Engineer

Learn how to organize build trays, provide supporting structures, develop and simulate programs for powder bed additive machines and other planar additive processes.

LEARN DEPOSITON OPERATIONS

Multi-axis Deposition Manufacturing Engineer

Provide manufacturers the foundation they need to program deposition operations in NX CAM to support additive manufacturing on various deposition machines

GET CERTIFIED

Additive Manufacturing Designer Associate Certification

Choose your learning and take your exam to complete the Additive Manufacturing Designer Associate certification.



Additive Manufacturing Designer → At a Glance

LEARN THE ESSENTIALS

Additive Manufacturing Designer

- Introduction to Additive Manufacturing
- Component Design for Additive Manufacturing
- Polygon Modeling and Reverse Engineering

Use Additive Manufacturing Designer!

LEARN PLANAR ESSENTIALS

Planar (powder bed) Mfg. Engineer

- NX Additive Manufacturing - Planar Additive
- Maximizing Your Build Success with AM Build Optimizer
- Additive Manufacturing Process Simulation

Learn how to simulate programs for powder bed additive machines

LEARN DEPOSITION OPERATIONS

Multi-axis Deposition Mfg. Engineer

- Managing NC Programming Data
- Multi-axis Additive Manufacturing

Support additive manufacturing on various deposition machines

Additive Mfg. Designer Associate Certification

Siemens Xcelerator Academy Certified

Additive Manufacturing Designer Associate 2022

[Click for detailed certification course list](#)

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Course List: Additive Manufacturing Designer Associate Certification



5 Chapters

LEARNING PATH

Introduction to Additive Manufacturing

Overview of the processes and strategies associated with additive manufacturing in the context of the product development lifecycle.



PREVIEW CHAPTER
Intro to Additive Manufacturing Processes

7 Chapters

LEARNING PATH

Component Design for Additive Manufacturing

This learning path will develop skills within NX design specifically for the design of components for additive manufacturing.




PREVIEW CHAPTER
Introduction to Component Design for Additive Manufacture

7 Chapters

LEARNING PATH

Polygon Modeling and Reverse Engineering (Current)

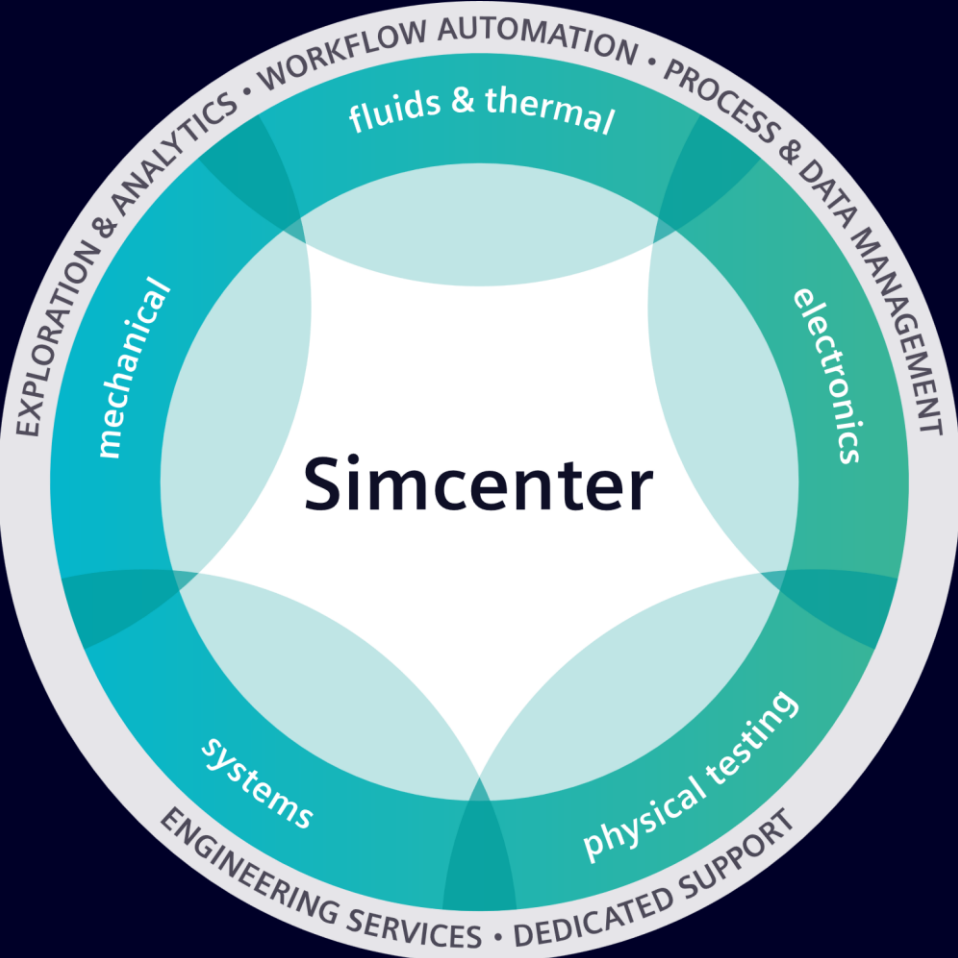
Learn to create, modify, and improve faceted models using the NX Polygon Modeling capabilities



PREVIEW CHAPTER
Introduction to Polygon Modeling

Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below



LEARN Simcenter STAR-CCM+ FUNDAMENTALS

End user

Teaches the basic skills for a CFD simulation in Simcenter STAR-CCM+.

LEARN PROCESS AUTOMATION

End user

Teaches different techniques to automate processes in Simcenter STAR-CCM+: Templates, tags and filters, design manager or macro scripting.

GET CERTIFIED

Simcenter STAR-CCM+ Associate CFD Analyst Certification

Choose your learning and take your exam to complete the Associate **certification**.



SIEMENS

LEARN THE ESSENTIALS

End user

- Fundamentals in Simcenter STAR-CCM+
- Data analysis in Simcenter STAR-CCM+
- Efficient workflows in Simcenter STAR-CCM+
- Heat transfer

Complete a CFD simulation in Simcenter STAR-CCM+!

LEARN TO AUTOMATE PROCESSES

End user

- Process automation using Java scripting
- Design Space Exploration
- Efficient workflows in Simcenter STAR-CCM+

Automate processes in Simcenter STAR-CCM+!

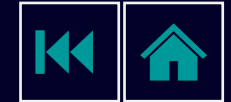
Simcenter STAR-CCM+ Certification Exam

Siemens Xcelerator Academy Certified

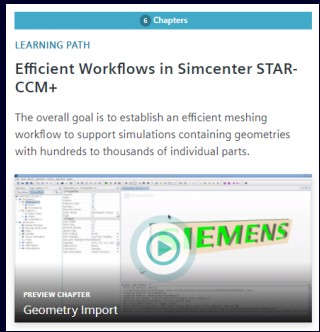
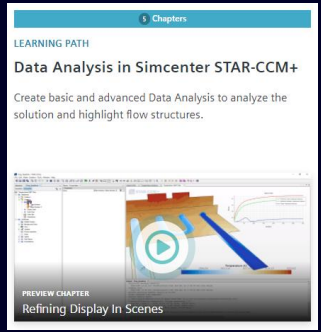
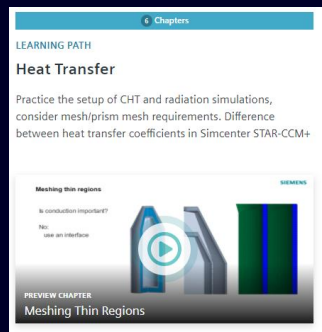
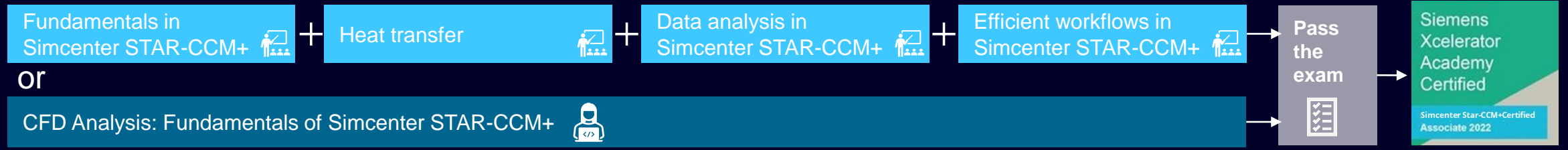
Simcenter Star-CCM+ Certified Associate 2022

[Click for detailed certification course list](#)

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer	

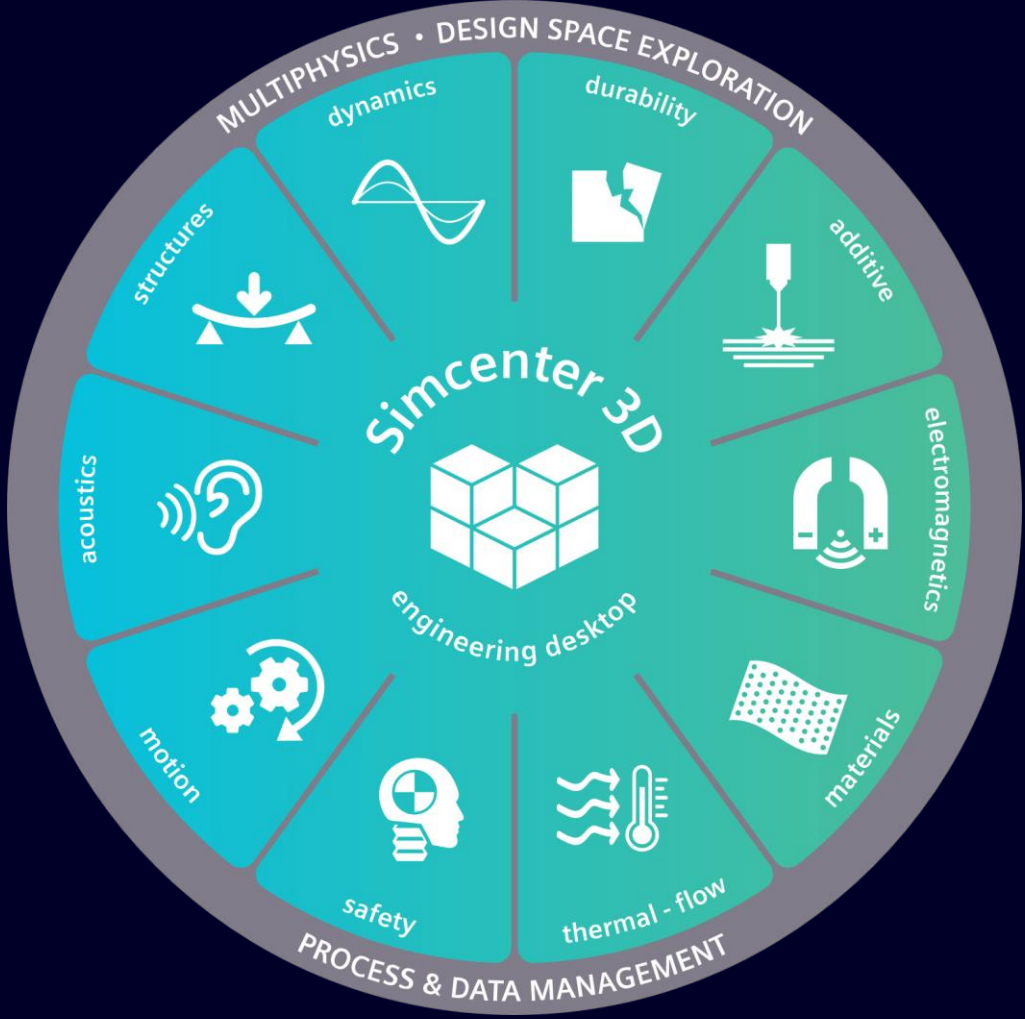


Complete Course List: Simcenter STAR-CCM+ Associate CFD Analyst Certification



Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.



Select a role below

- LEARN THE SIMCENTER 3D PLATFORM**

CAE Analyst Teaches CAE analysts the basics of using Simcenter 3D Pre/Post (Engineering Desktop) to model, perform, and evaluate all their simulations.
- LEARN SIMCENTER 3D ACOUSTICS**

Acoustics Analyst Teaches acoustics analysts how to use Simcenter 3D Acoustics to analyze acoustic models to optimize the sound quality of products.
- LEARN SIMCENTER 3D MOTION**

Motion Analyst Teaches analysts, engineers, and designers how to use Simcenter 3D Motion to animate and analyze kinematic and dynamic motion mechanisms.
- GET CERTIFIED**

Simcenter 3D Associate Certification Choose your learning and take your exam to complete the Associate certification.

Simcenter 3D Professional Certification Choose your learning and take your exam to complete the Simcenter 3D Professional certification.



LEARN THE ESSENTIALS

CAE Analyst

CAE Analyst

Simcenter 3D Pre/Post

Fundamentals of Using Pre/Post	Preparing the Model for Analysis	Solving the Model	Reviewing Analysis Results
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Processes and Solutions

Simcenter 3D Certification Exam

Capital Logic Associate 2022

Click for detailed certification course list

Use Simcenter 3D Platform!

LEARN SIMCENTER 3D ACOUSTICS

Acoustics Analyst

Acoustics Analyst

Simcenter 3D Acoustics

Working with Acoustics Models	Acoustics Analysis Applications
-------------------------------	---------------------------------

Optimize sound quality of products!

LEARN SIMCENTER 3D MOTION

Motion Analyst

Motion Analyst

Motion Fundamentals

Motion Analyst

Flexible Body Analysis

Motion Analyst

Discrete Drivetrain

Motion Analyst

Controls and Mechatronics Co-simulation

Analyze kinematic and dynamic motion mechanisms!

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey
Standalone Certification Exam		Add-on vLab hours available for purchase	**Virtual lab environment included in offer



Complete Course List: Simcenter 3D Associate



5 Chapters

LEARNING PATH

Fundamentals of using Pre/Post

Learn how to analyze a model and work with analysis data in Simcenter 3D.

- Simulation Modeling
- Multi-discipline Integration
- Openness and usability
- Communication with the enterprise
- Knowledge capture and automation

PREVIEW CHAPTER
What Can You Do with Pre/Post?

9 Chapters

LEARNING PATH

Preparing the Model for Analysis

Learn how to prepare a model for analysis by working with geometry, meshes, connections, assemblies, loads, and boundary conditions.

PREVIEW CHAPTER
Loading a Model into Simcenter 3D

4 Chapters

LEARNING PATH

Solving the Model

Learn how to solve a model with the Simcenter Nastran solver using structural analysis types.

PREVIEW CHAPTER
Using Solutions and Subcases

6 Chapters

LEARNING PATH

Reviewing Analysis Results

Learn how to display analysis results using post views, graphs, and reports.

PREVIEW CHAPTER
Displaying Results Overview

7 Chapters

LEARNING PATH

Processes and Solutions

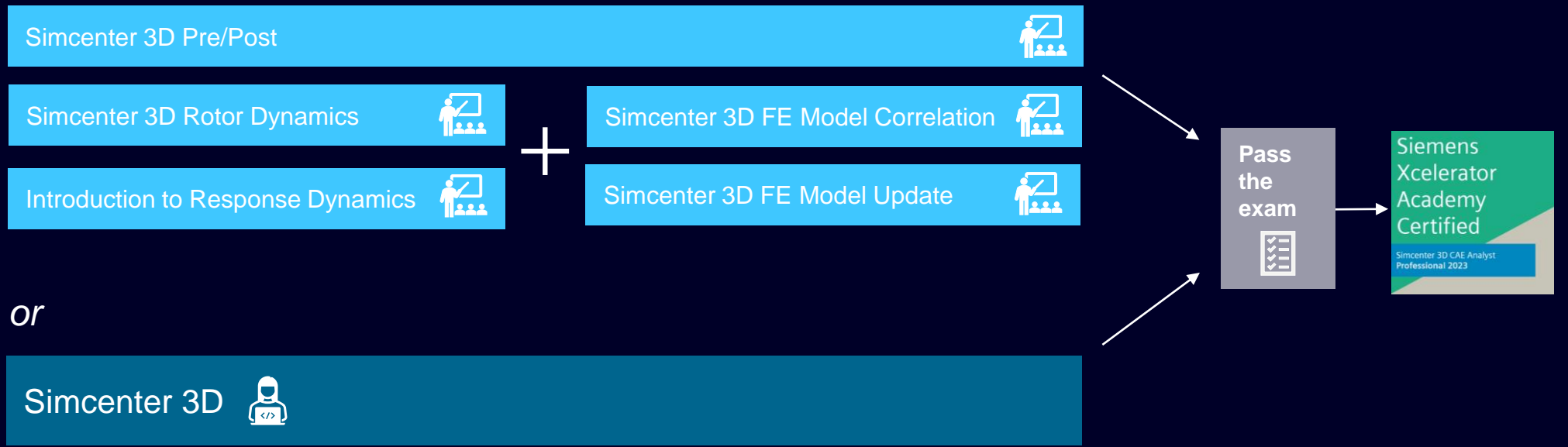
Learn how to analyze models using specialized Simcenter 3D tools.

PREVIEW CHAPTER
Refining a Mesh with Adaptive Meshing

Complete Course List: Simcenter 3D CAE Analyst Professional Certification




Pass the mandatory prerequisite Simcenter 3D CAE Analyst Associate exam



- Processes and Solutions - 2212**
 07 CHAPTERS estimated 4.5 hours
 Learn how to analyze models using specialized Simcenter 3D tools.
 Simcenter 3D 2212 English
- Introduction to Response Dynamics - 2212**
 01 CHAPTERS estimated 2.0 hours
 Learn how to use response dynamics to analyze a model's response to an excitation.
 Simcenter 3D 2212 English
- FE Model Correlation - 2212**
 07 CHAPTERS estimated 7.0 hours
 Learn how to prepare physical tests using the pre-test planning tools and how to correlate modal finite element results with experimental data in Simcenter 3D.
 Simcenter 3D 2212 English
- Simcenter 3D Rotor Dynamics - 2206**
 07 CHAPTERS estimated 4.0 hours
 Learn how to model rotors and analyze the model with Complex Modal Analysis, Harmonic Response, Transient Response, and using Superelements.
 Simcenter 3D 2206 English
- FE Model Update - 2212**
 05 CHAPTERS estimated 3.8 hours
 You will learn the key steps of the test-simulation interaction and understand the model update solution process. You will also learn about design variables.
 Simcenter 3D 2212 English

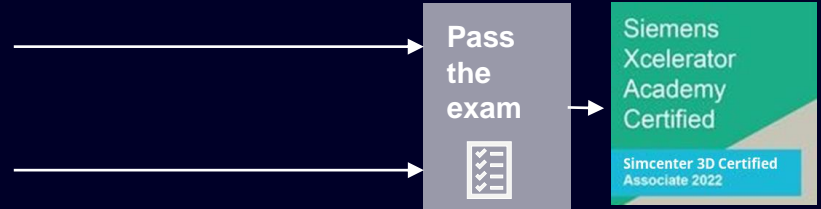


Complete Course List: Simcenter Amesim

Simcenter Amesim Getting Started + Hydraulic System Simulation 

or

Simcenter Amesim 



3 Chapters

LEARNING PATH

Getting Started with Simcenter Amesim

Introduction to the Simcenter Amesim, use of the software as well as the modeling and simulation process

What is Simcenter Amesim?

Siemens Amesim is a mechatronics system simulation platform. System simulation allows to characterize the dynamic open-loop behavior of a system or a component. Mathematical representation uses time domain methods based on the ODE and the algebraic equations. The application (e.g. thermal management, ...)

PREVIEW CHAPTER
Simcenter Amesim Overview

6 Chapters

LEARNING PATH

Introduction to Hydraulic System Simulation

Learn important basic hydraulic concepts, get a global view on hydraulic libraries and components, and learn how to build hydraulic models in Simcenter Amesim.

Hydraulic Libraries in Simcenter Amesim

Why 3 libraries? Each library is specific and answers different needs:

- HTF (Hydraulic Transfer Functions):** The components are defined by their hydraulic characteristics.
- MC (Mechanical Components):** The model is built around mechanical parts.
- MC (Mechanical Components):** The model is built around mechanical parts.

PREVIEW CHAPTER
Libraries and components for hydraulic modeling

5 Chapters

LEARNING PATH

Design and Simulate Thermal Fluid Systems

Introduction to the basics of thermal systems modeling and overview of component libraries. Work through examples to understand the modeling process.

General introduction to thermal fluid system modeling

Thermal fluid system is every where...

- Large industrial fan
- Engine cooling system, lubrication system, oil
- of a passenger car
- Thermally expansion of construction oil
- Power before cooling, steam, waste to sea
- etc.
- Also small systems
- Cooling system designed for smart phone, medical device, CPU, LED etc.

PREVIEW CHAPTER
Introduction to Thermal Fluid system modeling

Complete Course List: Simcenter FLOTHERM & FLOTHERM XT

 Instructor-led training	 On-demand training library	 Xcelerator Academy Membership
**Virtual lab environment included in offer		 Add-on vLab hours available for purchase



12 Chapters

Simcenter Flotherm XT

FloTHERM Introduction

This learning path will introduce you to FloTHERM by guiding you through model building, importing MCAD and EDA data, post-processing and optimization.

version 2020 English [View Chapters](#)

10 Chapters **XL Lab**

Simcenter Flotherm XT

Simcenter FLOTHERM XT Introduction


This learning path will teach you how to design, build and simulate simple, to complicated electronics cooling and related models, and drawings.


version 2021 English [View Chapters](#)

Please note these are two different available certifications

Complete Course List: Simcenter FloEFD

Simcenter FloEFD

Pass the exam
 



Siemens Xcelerator Academy Certified
 Simcenter 3D Certified Associate 2022

7 Chapters
X-LAB

FloEFD Standalone

This course will provide new users of FloEFD Standalone with a background sufficient for tackling a wide range of flow and thermal analysis problems.

version 2020 English
View Chapters

8 Chapters
X-LAB

FloEFD for Solid Edge

This course will provide new users of FloEFD for Solid Edge with a background sufficient for tackling a wide range of flow and thermal analysis problems.

version 2021 English
View Chapters

8 Chapters
X-LAB

FloEFD for NX

This course will provide new users of FloEFD for NX with a background sufficient for tackling a wide range of flow and thermal analysis problems.

version 2020 English
View Chapters

8 Chapters
X-LAB

FLOEFD for Creo - 2022.1

This course will provide new users of FloEFD for Creo with a background sufficient for tackling a wide range of flow and thermal analysis problems.

version 2022 English
View Chapters

8 Chapters
X-LAB

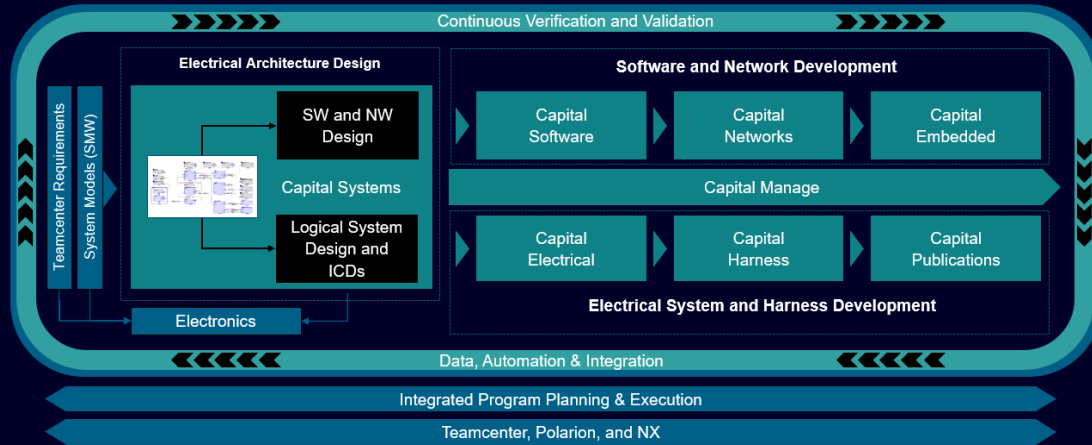
FLOEFD for CATIA - 2022.1

This course will provide new users of FloEFD for CATIA with a background sufficient for tackling a wide range of flow and thermal analysis problems.

version 2022 English
View Chapters

Xcelerator Academy Learning Maps

Your learning: At a Glance



Use our interactive learning maps as a guide to navigate through your content based upon your role then click on the icons throughout to learn more about your delivery options.

Select a role below

LEARN CAPITAL LOGIC DESIGNER ESSENTIALS

Schematic & Wiring Designers

New users are given the basic skills required to create a systems design and a wiring diagram, followed with advanced functionality to create a more complex design.

LEARN ADVANCED CONNECTIVITY FUNCTIONALITY

Schematic or Wiring Designer, or Administrator

Extended learning for all designers, engineers & others, working with schematics and wiring diagrams, using Capital Logic and supporting applications..

LEARN ELECTRICAL OPTIMIZATION & VERIFICATION

Schematic & Wiring Designers

Learn how to use simulation and analysis tools to validate electrical design connectivity along with electrical load analysis.

LEARN TOPOLOGY DESIGN

Topology Designer

Engineers working with Capital Topology learn how to create a topological view and associate wiring designs to it, for wire routing scenarios using rules..

GET CERTIFIED

Capital Logic Designer Associate Certification

Choose your learning and take your exam to complete the Capital Logic Design Associate certification.



SIEMENS

LEARN THE ESSENTIALS

Schematic & Wiring End user

- Capital Logic Designer - Getting Started
- Capital Logic Designer - Advanced

Capital Logic Designer Associate Certification

Siemens Xcelerator Academy Certified

Capital Logic Associate 2022

[Click for detailed certification course list](#)

Use Capital Logic Designer!

LEARN EXTENDED CAPITAL LOGIC DESIGNER MCAD INTEGRATION AND SETUP CAPABILITIES

- Schematic & Wiring Designers or Admin**
- MCAD with Electrical Distribution**
- Styling for Electrical Distribution**
- Queries & Query Editor**

Integrate and support accurate & consistent design creation!

LEARN ELECTRICAL OPTIMIZATION & VERIFICATION

- Systems & Wiring Designers**
- Capital Analysis**
- Capital Load Analyzer**

Validate electrical design!

LEARN TOPOLOGY DESIGN

- Topology Designer**
- Capital Topology**
- Capital Topology & Capital Integrator MCAD Integration**
- Core Applications – Electrical Distribution**

Utilize Topological views for routing scenarios!

Instructor-led training	On-demand training library	Xcelerator Academy Membership	Learning Journey	Standalone Certification Exam	Optional
**Virtual lab environment included in offer		Add-on vLab hours available for purchase	**Virtual lab environment included in offer		



Course List: Capital Logic Designer Associate Certification



Chapters

LEARNING PATH

Capital Logic - Getting Started

Learn entry-level skills, for students new to Capital Logic; learn how to find your way around the basics of Capital Logic.



PREVIEW CHAPTER
Anatomy of a Schematic

Chapters

LEARNING PATH

Capital Logic - Advanced

Learn how to create design configuration, use more advanced wiring functionality, assign library parts, & test your knowledge by creating a more complex design.



PREVIEW CHAPTER
Options

Course List: Capital Harness Designer Associate Certification



12 Chapters

LEARNING PATH

Capital Harness Designer - 2207

This learning path is designed to support designers and engineers working on harness design using Capital Harness Designer.


5 Chapters

LEARNING PATH

Capital HarnessXC - Getting Started

This learning path is designed to support designers and engineers working on harness design using Capital HarnessXC.

Electrical systems engineering
Integrated tools modeling Ideation, realization & utilization



PREVIEW CHAPTER
Why Capital?

4 Chapters

LEARNING PATH

Capital HarnessXC - Synchronizing & Processing

This learning path teaches synchronization from Logic into HarnessXC, and how to process the data for instantaneous length information & part number selection.



PREVIEW CHAPTER
Synchronize Wires and Splices



Capital Essentials Associate Certification



Capital Component Manager Essentials - 2207

08 CHAPTERS estimated 4.9 hours

This learning path is designed to support parts librarians who are building and maintaining the component library using Capital Essentials.

Capital Essentials 2207 English

Capital Symbol Designer Essentials - 2207

05 CHAPTERS estimated 2.6 hours

Learn methods for creating and managing component symbols using Capital Essentials tools.

Capital 2207 English